MAPPA DEI REGISTRI MODBUS

EMT430 · EMT431 · EMT432

Analizzatori di rete trifase · 4 moduli DIN

Italiano · Revisione 0

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1 INTRODUZIONE

Questo documento elenca i registri Modbus degli analizzatori EMT430, EMT431, EMT432, accessibili via Modbus RTU sulla porta RS485 e via Modbus TCP su Ethernet e Wi-Fi. La mappa è comune a tutti i modelli della famiglia ed è generata dal foglio di riferimento usato anche per generare il firmware.

1.1 Versioni BASE e FULL

La colonna Ver. indica i registri disponibili in tutte le versioni (Tutte) e quelli della sola versione FULL (analisi armonica, qualità dell'energia, forme d'onda, logging e MQTT).

1.2 Serie di registri

Le serie di valori dello stesso tipo (ad esempio le 64 ampiezze armoniche di una fase o i 128 campioni di una forma d'onda) sono riportate in una sola riga, con il primo e l'ultimo registro della serie: l'elemento n si trova al registro iniziale più n volte il numero di registri del tipo.

1.3 Ruoli di lettura e scrittura

Le colonne Lettura e Scrittura indicano il livello minimo di accesso richiesto via Modbus: ALWAYS = sempre, NEVER = mai, WITH PASS = solo dopo lo sblocco con la password indicata.

2 TIPI DI DATO

I registri sono indicati con la numerazione Modbus classica degli holding register (40001 e successivi). Nella richiesta Modbus l'indirizzo da trasmettere è il numero del registro meno 40001 (ad esempio il registro 40001 corrisponde all'indirizzo 0).

Tipi di dato		
Tipo	**Registri**	**Valori**
char	1	-128 … 255
signed short	1	-32768 … 32767
unsigned short	1	0 … 65535
signed long	2	-2147483648 … 2147483647
unsigned long	2	0 … 4294967295
float	2	-3.4028235e+38 … 3.4028235e+38
signed long long	4	-9.223372e+18 … 9.223372e+18
unsigned long long	4	0 … 1.8446744e+19
double	4	-1.7976931348623157e+308 … 1.7976931348623157e+308

3 MAPPA DEI REGISTRI

3.1 Informazioni sul dispositivo

Informazioni sul dispositivo								
Registro	**Tipo**	**Nome**	**Descrizione**	**Default**	**Lettura**	**Scrittura**	**Min – Max**	**Ver.**
40001 – 40008	char × 8	**machine_id_1 … machine_id_8**	Machine ID, set by Chronos. 1 char per register … Machine ID, set by Chronos. 1 char per register		ALWAYS	WITH PASS C	0 – 255	Tutte
40009	unsigned short	**hw_version**	Hardware version, set by Chronos.	1	ALWAYS	WITH PASS C	0 – 65535	Tutte
40010	unsigned short	**fw_version**	Firmware version, set by Chronos.	1	ALWAYS	WITH PASS C	0 – 65535	Tutte
40011	unsigned short	**mounted_version**	0 -> 5A 1 -> Rogowski, 333 mV	0	ALWAYS	WITH PASS C	0 – 1	Tutte
40012	unsigned short	**year_month**	calibration year and month	2510	ALWAYS	WITH PASS C	0 – 65535	Tutte
40013	unsigned short	**day_Hour**	calibration day and hour	610	ALWAYS	WITH PASS C	0 – 65535	Tutte
40014	unsigned short	**minute_second**	calibration minute and second	835	ALWAYS	WITH PASS C	0 – 65535	Tutte
40015	unsigned short	**feature_version**	0 -> Base version 1 -> Full version	0	NEVER	WITH PASS C	0 – 65535	Tutte
40016	unsigned short	**Mac_address_Wifi_STA_1**	Mac address Wifi Station MSB	11	ALWAYS	WITH PASS C	0 – 65535	Tutte
40017	unsigned short	**Mac_address_Wifi_STA_2**	Mac address Wifi Station	22	ALWAYS	WITH PASS C	0 – 65535	Tutte
40018	unsigned short	**Mac_address_Wifi_STA_3**	Mac address Wifi Station	33	ALWAYS	WITH PASS C	0 – 65535	Tutte
40019	unsigned short	**Mac_address_Wifi_STA_4**	Mac address Wifi Station	44	ALWAYS	WITH PASS C	0 – 65535	Tutte
40020	unsigned short	**Mac_address_Wifi_STA_5**	Mac address Wifi Station	55	ALWAYS	WITH PASS C	0 – 65535	Tutte
40021	unsigned short	**Mac_address_Wifi_STA_6**	Mac address Wifi Station LSB	66	ALWAYS	WITH PASS C	0 – 65535	Tutte
40022	unsigned short	**Mac_address_Wifi_SOFT_AP_1**	Mac address Wifi software enabled access point MSB	11	ALWAYS	WITH PASS C	0 – 65535	Tutte
40023	unsigned short	**Mac_address_Wifi_SOFT_AP_2**	Mac address Wifi software enabled access point	22	ALWAYS	WITH PASS C	0 – 65535	Tutte
40024	unsigned short	**Mac_address_Wifi_SOFT_AP_3**	Mac address Wifi software enabled access point	33	ALWAYS	WITH PASS C	0 – 65535	Tutte
40025	unsigned short	**Mac_address_Wifi_SOFT_AP_4**	Mac address Wifi software enabled access point	44	ALWAYS	WITH PASS C	0 – 65535	Tutte
40026	unsigned short	**Mac_address_Wifi_SOFT_AP_5**	Mac address Wifi software enabled access point	55	ALWAYS	WITH PASS C	0 – 65535	Tutte
40027	unsigned short	**Mac_address_Wifi_SOFT_AP_6**	Mac address Wifi software enabled access point LSB	66	ALWAYS	WITH PASS C	0 – 65535	Tutte
40028	unsigned short	**Mac_address_Ethernet_1**	Mac address Ethernet MSB	31	ALWAYS	WITH PASS C	0 – 65535	Tutte

40029	unsigned short	**Mac_address_Ethernet_2**	Mac address Ethernet	32	ALWAYS	WITH PASS C	0 – 65535	Tutte
40030	unsigned short	**Mac_address_Ethernet_3**	Mac address Ethernet	33	ALWAYS	WITH PASS C	0 – 65535	Tutte
40031	unsigned short	**Mac_address_Ethernet_4**	Mac address Ethernet	34	ALWAYS	WITH PASS C	0 – 65535	Tutte
40032	unsigned short	**Mac_address_Ethernet_5**	Mac address Ethernet	35	ALWAYS	WITH PASS C	0 – 65535	Tutte
40033	unsigned short	**Mac_address_Ethernet_6**	Mac address Ethernet LSB	36	ALWAYS	WITH PASS C	0 – 65535	Tutte
40034	unsigned short	**Mac_address_Bluetooth_1**	Mac address Bluetooth MSB	96	ALWAYS	WITH PASS C	0 – 65535	Tutte
40035	unsigned short	**Mac_address_Bluetooth_2**	Mac address Bluetooth	95	ALWAYS	WITH PASS C	0 – 65535	Tutte
40036	unsigned short	**Mac_address_Bluetooth_3**	Mac address Bluetooth	94	ALWAYS	WITH PASS C	0 – 65535	Tutte
40037	unsigned short	**Mac_address_Bluetooth_4**	Mac address Bluetooth	93	ALWAYS	WITH PASS C	0 – 65535	Tutte
40038	unsigned short	**Mac_address_Bluetooth_5**	Mac address Bluetooth	92	ALWAYS	WITH PASS C	0 – 65535	Tutte
40039	unsigned short	**Mac_address_Bluetooth_6**	Mac address Bluetooth LSB	91	ALWAYS	WITH PASS C	0 – 65535	Tutte

3.2 Impostazioni

Impostazioni								
Registro	**Tipo**	**Nome**	**Descrizione**	**Default**	**Lettura**	**Scrittura**	**Min – Max**	**Ver.**
40227	unsigned short	**modbus_RTU_address**	Modbus address	1	ALWAYS	ALWAYS	0 – 65535	Tutte
40228	unsigned short	**modbus_RTU_delay**	Delay Modbus answer (in ms)	0	ALWAYS	ALWAYS	0 – 65535	Tutte
40229	unsigned short	**modbus_RTU_baudrate**	Baudrate 0 → 1200 1 → 2400 2 → 4800 3 → 9600 4 → 19200 5 → 38400 6 → 57600 7 → 115200	3	ALWAYS	ALWAYS	0 – 65535	Tutte
40230	unsigned short	**modbus_RTU_parity**	0 → NONE 1 → EVEN 2 → ODD	0	ALWAYS	ALWAYS	0 – 65535	Tutte
40231	unsigned short	**modbus_RTU_Stop_bit**	0 → 1 Bit 1 → 1,5 Bit 2 → 2 Bit	0	ALWAYS	ALWAYS	0 – 65535	Tutte

40232	unsigned short	**Measurement_Configuration_Register**	Bit 0: Don't care Bit 1..2: Connection 0 → Single phase 1 → Three phase: 3 wires, 2 TA (Aron) 2 → Three phase: 3 wires, 3 TA 3 → Three phase: 4 wires, 3 TA (with neutral) Bit 3: FFT representation 0 → Absolute 1 → Relative to the I_1 value Bit 4: HPF filter 0 → Enabled 1 → Disabled Bit 5: Reactive power calculation method 0 → Triangle method 1 → Budeanu Bit 6: Digital output behaviour 0 → Alarm 1 → Pulsed output for KWh Bit 7: Frequency detection Channel 0 → Voltage 1 → Current Bit 9: Energy saving 0 → Disabled 1 → Enabled Bit 10..11: Output switch condition 0 → Normally Opened condition 1 → Normally Closed condition 2 → Within Threshold 3 → Outside Threshold Bit 13: Integrator condition 0 → Integrator disabled 1 → Integrator enabled (Rogowski input) Bit 15: Filtered measurement 0 → Filtering disabled 1 → Filtering enabled	518	ALWAYS	ALWAYS	0 – 65535	Tutte

40233	unsigned short	**Machine_Configuration_Register**	Bit 0: Not Used 0 → Disabled 1 → Enabled Bit 1: Buzzer in touch pad 0 → Disabled 1 → Enabled Bit 2: Buzzer during alarm condition 0 → Disabled 1 → Enabled Bit 3: Wifi STA 0 → Disabled 1 → Enabled Bit 4: Wifi AP 0 → Disabled 1 → Enabled Bit 5: MQTT 0 → Disabled 1 → Enabled	59	ALWAYS	ALWAYS	0 – 65535	Tutte
40234	unsigned short	**TA_Chronos_register**	0 → Let user choose what Ratio and delay to choose 1 → Assigned to Chronos 100/5 2 → Assigned to …	0	ALWAYS	ALWAYS	0 – 65535	FULL
40235	float	**TA_Transducer_ratio**	If Input 1A/5A, 20mA/100 mA → Current transformer ratio M/N - Default 1.0 (Ex: 600:5 → transducer_ratio = 120) If Input Rogowski → Sensitivity [V/A]	1	ALWAYS	ALWAYS	-3.4028235e+38 – 3.4028235e+38	Tutte
40237	float	**TA_Transducer_delay**	Current transformer delay in [°] @ 50 Hz for accurate power calculation	0	ALWAYS	ALWAYS	-3.4028235e+38 – 3.4028235e+38	Tutte
40239	float	**TV_Transducer_ratio**	Voltage transformer ratio M/N - Default 1.0 (Ex: 1000:100 → transducer_ratio = 10)	1	ALWAYS	ALWAYS	-3.4028235e+38 – 3.4028235e+38	Tutte
40241	float	**TV_Transducer_delay**	Voltage transformer delay in [°] @ 50 Hz for accurate power calculation	0	ALWAYS	ALWAYS	-3.4028235e+38 – 3.4028235e+38	Tutte
40243	float	**minimum_voltage_ripple**	Minimum threshold under which the instrument reads 0 independent from the input value	0	ALWAYS	ALWAYS	-3.4028235e+38 – 3.4028235e+38	Tutte
40245	float	**minimum_current_ripple**	Minimum threshold under which the instrument reads 0 independent from the input value	0	ALWAYS	ALWAYS	-3.4028235e+38 – 3.4028235e+38	Tutte

40247	float	**minimum_power_ripple**	Minimum threshold under which the instrument reads 0 independent from the input value (P, Q, and S)	0	ALWAYS	ALWAYS	-3.4028235e+38 – 3.4028235e+38	Tutte
40249	unsigned short	**DC_Filter**	Update rate when no Zero crossing is detected [tenth of second]; lower => faster; higher => more accurate	10	ALWAYS	ALWAYS	0 – 65535	Tutte
40250	unsigned short	**AC_Filter**	Update rate when Zero crossing is detected [number of periods]; lower => faster; higher => more accurate	50	ALWAYS	ALWAYS	0 – 65535	Tutte
40251	unsigned short	**minute_for_Max_and_AVG_demand**	Minute for Max demand and Average power calculation (0..45)	15	ALWAYS	ALWAYS	0 – 45	Tutte
40253	unsigned short	**seconds_for_mean_RMS**	Register in seconds (0..60) for RMS average	15	ALWAYS	ALWAYS	0 – 60	Tutte
40254	unsigned short	**seconds_for_MAX_RMS**	Seconds 1..60 for MAX RMS value. If the register is 0, then the absolute MAX RMS is given	15	ALWAYS	ALWAYS	0 – 60	Tutte
40255	unsigned short	**seconds_for_min_RMS**	Seconds 1..60 for min RMS value. If the register is 0, then the absolute min RMS is given	15	ALWAYS	ALWAYS	0 – 60	Tutte
40256	unsigned short	**Energy_unit_factor**	Variable for changing Energy measurement unit: 0 -> [Wh/10] 1 -> [Wh] .. 4 -> [KWh] 7 -> [MWh] 10 -> [GWh]	4	ALWAYS	ALWAYS	0 – 65535	Tutte
40259	float	**Voltage_unbalance_setpoint**	Setpoint for Voltage Unbalance Alarm	0	ALWAYS	ALWAYS	-3.4028235e+38 – 3.4028235e+38	FULL
40271	unsigned short	**Alarm_Register_start_address**	DIGITAL OUTPUT 1: Modbus address address for alarm (starting from the modbus address of V_L1_N, V_L2_N, V_L3_N, ecc)	40000	ALWAYS	ALWAYS	0 – 65535	Tutte
40272	unsigned short	**Alarm_delay**	DIGITAL OUTPUT 1: Delay in ms for Alarm trigger	0	ALWAYS	ALWAYS	0 – 65535	Tutte
40273	float	**Alarm_trip_value**	DIGITAL OUTPUT 1: Alarm Threshold for "closed" and "open" condition OR first alarm Threshold for "within threshold" and "Outside threshold" condition	0	ALWAYS	ALWAYS	-3.4028235e+38 – 3.4028235e+38	Tutte

40275	float	**Alarm_hysteresis**	DIGITAL OUTPUT 1: Alarm Hysteresis	0	ALWAYS	ALWAYS	-3.4028235e+38 – 3.4028235e+38	Tutte
40277	float	**Alarm_trip_value_2**	DIGITAL OUTPUT 1: Second alarm Threshold for "within threshold" and "Outside threshold" condition	0	ALWAYS	ALWAYS	-3.4028235e+38 – 3.4028235e+38	Tutte
40281	float	**Nominal_Star_Voltage**	Nominal Star Voltage for Sag, Swell, Interruption monitoring [V]	230	ALWAYS	ALWAYS	-3.4028235e+38 – 3.4028235e+38	Tutte
40283	float	**Sag_percentage_level**	Percentage over Nominal_Star_Voltage under which a Sag event is generated (default 0.9 = 90 %); must be over Interruption_percentage_level	0.8	ALWAYS	ALWAYS	-3.4028235e+38 – 3.4028235e+38	Tutte
40285	float	**Swell_percentage_level**	Percentage over Nominal_Star_Voltage over which a Swell event is generated (default 1.1 = 110 %)	1.2	ALWAYS	ALWAYS	-3.4028235e+38 – 3.4028235e+38	Tutte
40287	float	**Interruption_percentage_level**	Percentage over Nominal_Star_Voltage under which an Interruption event is generated (default 0.1 = 10 %)	0.1	ALWAYS	ALWAYS	-3.4028235e+38 – 3.4028235e+38	Tutte
40291	unsigned short	**Minimum_duration_cutoff**	Sag, Swell or Interruption events must be above this cutoff to be displayed and saved [ms]	0	ALWAYS	ALWAYS	0 – 65535	Tutte
40292	unsigned short	**Modbus_TCP_port**	Porta server modbus TCP	502	ALWAYS	ALWAYS	0 – 65535	Tutte
40293 – 40324	char × 32	**Wifi_STA_SSID_target_0** **…** **Wifi_STA_SSID_target_31**	WI-FI STA Access point SSID 0 … WI-FI STA Access point SSID 31		ALWAYS	ALWAYS	-128 – 255	Tutte
40325 – 40356	char × 32	**Wifi_STA_PASSWORD_target_0** **…** **Wifi_STA_PASSWORD_target_31**	WI-FI STA Access point Password 0 … WI-FI STA Access point Password 31		NEVER	ALWAYS	-128 – 255	Tutte
40357 – 40388	char × 32	**Wifi_STA_HOSTNAME_0** **…** **Wifi_STA_HOSTNAME_31**	WI-FI STA HOSTNAME set 0 … WI-FI STA HOSTNAME set 31		ALWAYS	ALWAYS	-128 – 255	Tutte

40389	unsigned short	**Wifi_STA_IP_0**	WI-FI STA IP static (DHCP off) 0	192	ALWAYS	ALWAYS	0 – 65535	Tutte
40390	unsigned short	**Wifi_STA_IP_1**	WI-FI STA IP static (DHCP off) 1	168	ALWAYS	ALWAYS	0 – 65535	Tutte
40391	unsigned short	**Wifi_STA_IP_2**	WI-FI STA IP static (DHCP off) 2	178	ALWAYS	ALWAYS	0 – 65535	Tutte
40392	unsigned short	**Wifi_STA_IP_3**	WI-FI STA IP static (DHCP off) 3	200	ALWAYS	ALWAYS	0 – 65535	Tutte
40393	unsigned short	**Wifi_STA_Netmask_0**	WI-FI STA NETMASK static (DHCP off) 0	255	ALWAYS	ALWAYS	0 – 65535	Tutte
40394	unsigned short	**Wifi_STA_Netmask_1**	WI-FI STA NETMASK static (DHCP off) 1	255	ALWAYS	ALWAYS	0 – 65535	Tutte
40395	unsigned short	**Wifi_STA_Netmask_2**	WI-FI STA NETMASK static (DHCP off) 2	255	ALWAYS	ALWAYS	0 – 65535	Tutte
40396	unsigned short	**Wifi_STA_Netmask_3**	WI-FI STA NETMASK static (DHCP off) 3	0	ALWAYS	ALWAYS	0 – 65535	Tutte
40397	unsigned short	**Wifi_STA_Gateway_0**	WI-FI STA GATEWAY static (DHCP off) 0	192	ALWAYS	ALWAYS	0 – 65535	Tutte
40398	unsigned short	**Wifi_STA_Gateway_1**	WI-FI STA GATEWAY static (DHCP off) 1	168	ALWAYS	ALWAYS	0 – 65535	Tutte
40399	unsigned short	**Wifi_STA_Gateway_2**	WI-FI STA GATEWAY static (DHCP off) 2	178	ALWAYS	ALWAYS	0 – 65535	Tutte
40400	unsigned short	**Wifi_STA_Gateway_3**	WI-FI STA GATEWAY static (DHCP off) 3	200	ALWAYS	ALWAYS	0 – 65535	Tutte
40401	unsigned short	**Wifi_STA_IP_assigned_by_dhcp_0**	WI-FI STA IP SET (DHCP on) 0	0	ALWAYS	ALWAYS	0 – 65535	Tutte
40402	unsigned short	**Wifi_STA_IP_assigned_by_dhcp_1**	WI-FI STA IP SET (DHCP on) 1	0	ALWAYS	ALWAYS	0 – 65535	Tutte
40403	unsigned short	**Wifi_STA_IP_assigned_by_dhcp_2**	WI-FI STA IP SET (DHCP on) 2	0	ALWAYS	ALWAYS	0 – 65535	Tutte
40404	unsigned short	**Wifi_STA_IP_assigned_by_dhcp_3**	WI-FI STA IP SET (DHCP on) 3	0	ALWAYS	ALWAYS	0 – 65535	Tutte
40405	unsigned short	**Wifi_STA_Netmask_assigned_by_dhcp_0**	WI-FI STA NETMASK SET (DHCP on) 0	0	ALWAYS	ALWAYS	0 – 65535	Tutte
40406	unsigned short	**Wifi_STA_Netmask_assigned_by_dhcp_1**	WI-FI STA NETMASK SET (DHCP on) 1	0	ALWAYS	ALWAYS	0 – 65535	Tutte
40407	unsigned short	**Wifi_STA_Netmask_assigned_by_dhcp_2**	WI-FI STA NETMASK SET (DHCP on) 2	0	ALWAYS	ALWAYS	0 – 65535	Tutte
40408	unsigned short	**Wifi_STA_Netmask_assigned_by_dhcp_3**	WI-FI STA NETMASK SET (DHCP on) 3	0	ALWAYS	ALWAYS	0 – 65535	Tutte
40409	unsigned short	**Wifi_STA_Gateway_assigned_by_dhcp_0**	WI-FI STA GATEWAY SET (DHCP on) 0	0	ALWAYS	ALWAYS	0 – 65535	Tutte
40410	unsigned short	**Wifi_STA_Gateway_assigned_by_dhcp_1**	WI-FI STA GATEWAY SET (DHCP on) 1	0	ALWAYS	ALWAYS	0 – 65535	Tutte
40411	unsigned short	**Wifi_STA_Gateway_assigned_by_dhcp_2**	WI-FI STA GATEWAY SET (DHCP on) 2	0	ALWAYS	ALWAYS	0 – 65535	Tutte
40412	unsigned short	**Wifi_STA_Gateway_assigned_by_dhcp_3**	WI-FI STA GATEWAY SET (DHCP on) 3	0	ALWAYS	ALWAYS	0 – 65535	Tutte
40413 – 40444	char × 32	**Wifi_AP_SSID_0 … Wifi_AP_SSID_31**	WI-FI AP SSID 0 … WI-FI AP SSID 31		ALWAYS	ALWAYS	-128 – 255	Tutte

40445 – 40476	char × 32	**Wifi_AP_PASSWORD_0 … Wifi_AP_PASSWORD_31**	WI-FI AP PASSWORD 0 … WI-FI AP PASSWORD 31		NEVER	ALWAYS	-128 – 255	Tutte
40477 – 40508	char × 32	**Wifi_AP_HOSTNAME_0 … Wifi_AP_HOSTNAME_31**	WI-FI AP HOSTNAME set 0 … WI-FI AP HOSTNAME set 31		ALWAYS	ALWAYS	-128 – 255	Tutte
40509	unsigned short	**Wifi_AP_IP_0**	WI-FI AP IP 0	192	ALWAYS	ALWAYS	0 – 65535	Tutte
40510	unsigned short	**Wifi_AP_IP_1**	WI-FI AP IP 1	168	ALWAYS	ALWAYS	0 – 65535	Tutte
40511	unsigned short	**Wifi_AP_IP_2**	WI-FI AP IP 2	4	ALWAYS	ALWAYS	0 – 65535	Tutte
40512	unsigned short	**Wifi_AP_IP_3**	WI-FI AP IP 3	1	ALWAYS	ALWAYS	0 – 65535	Tutte
40513	unsigned short	**Wifi_AP_Netmask_0**	WI-FI AP NETMASK 0	255	ALWAYS	ALWAYS	0 – 65535	Tutte
40514	unsigned short	**Wifi_AP_Netmask_1**	WI-FI AP NETMASK 1	255	ALWAYS	ALWAYS	0 – 65535	Tutte
40515	unsigned short	**Wifi_AP_Netmask_2**	WI-FI AP NETMASK 2	255	ALWAYS	ALWAYS	0 – 65535	Tutte
40516	unsigned short	**Wifi_AP_Netmask_3**	WI-FI AP NETMASK 3	0	ALWAYS	ALWAYS	0 – 65535	Tutte
40517	unsigned short	**Wifi_AP_Gateway_0**	WI-FI AP GATEWAY 0	192	ALWAYS	ALWAYS	0 – 65535	Tutte
40518	unsigned short	**Wifi_AP_Gateway_1**	WI-FI AP GATEWAY 1	168	ALWAYS	ALWAYS	0 – 65535	Tutte
40519	unsigned short	**Wifi_AP_Gateway_2**	WI-FI AP GATEWAY 2	4	ALWAYS	ALWAYS	0 – 65535	Tutte
40520	unsigned short	**Wifi_AP_Gateway_3**	WI-FI AP GATEWAY 3	1	ALWAYS	ALWAYS	0 – 65535	Tutte
40521 – 40552	char × 32	**Ethernet_HOSTNAME_0 … Ethernet_HOSTNAME_31**	Ethernet_HOSTNAME_0 set 0 … Ethernet_HOSTNAME_0 set 31		ALWAYS	ALWAYS	-128 – 255	Tutte
40553	unsigned short	**Ethernet_IP_0**	ETHERNET IP static (DHCP off) 0	192	ALWAYS	ALWAYS	0 – 65535	Tutte
40554	unsigned short	**Ethernet_IP_1**	ETHERNET IP static (DHCP off) 1	168	ALWAYS	ALWAYS	0 – 65535	Tutte
40555	unsigned short	**Ethernet_IP_2**	ETHERNET IP static (DHCP off) 2	178	ALWAYS	ALWAYS	0 – 65535	Tutte
40556	unsigned short	**Ethernet_IP_3**	ETHERNET IP static (DHCP off) 3	250	ALWAYS	ALWAYS	0 – 65535	Tutte
40557	unsigned short	**Ethernet_Netmask_0**	ETHERNET NETMASK static (DHCP off) 0	255	ALWAYS	ALWAYS	0 – 65535	Tutte
40558	unsigned short	**Ethernet_Netmask_1**	ETHERNET NETMASK static (DHCP off) 1	255	ALWAYS	ALWAYS	0 – 65535	Tutte
40559	unsigned short	**Ethernet_Netmask_2**	ETHERNET NETMASK static (DHCP off) 2	255	ALWAYS	ALWAYS	0 – 65535	Tutte
40560	unsigned short	**Ethernet_Netmask_3**	ETHERNET NETMASK static (DHCP off) 3	0	ALWAYS	ALWAYS	0 – 65535	Tutte

40561	unsigned short	**Ethernet_Gateway_0**	ETHERNET GATEWAY static (DHCP off) 0	192	ALWAYS	ALWAYS	0 – 65535	Tutte
40562	unsigned short	**Ethernet_Gateway_1**	ETHERNET GATEWAY static (DHCP off) 1	168	ALWAYS	ALWAYS	0 – 65535	Tutte
40563	unsigned short	**Ethernet_Gateway_2**	ETHERNET GATEWAY static (DHCP off) 2	178	ALWAYS	ALWAYS	0 – 65535	Tutte
40564	unsigned short	**Ethernet_Gateway_3**	ETHERNET GATEWAY static (DHCP off) 3	250	ALWAYS	ALWAYS	0 – 65535	Tutte
40565	unsigned short	**Ethernet_IP_assigned_by_dhcp_0**	ETHERNET IP ASSEGNATO (DHCP on) 0	0	ALWAYS	ALWAYS	0 – 65535	Tutte
40566	unsigned short	**Ethernet_IP_assigned_by_dhcp_1**	ETHERNET IP ASSEGNATO (DHCP on) 1	0	ALWAYS	ALWAYS	0 – 65535	Tutte
40567	unsigned short	**Ethernet_IP_assigned_by_dhcp_2**	ETHERNET IP ASSEGNATO (DHCP on) 2	0	ALWAYS	ALWAYS	0 – 65535	Tutte
40568	unsigned short	**Ethernet_IP_assigned_by_dhcp_3**	ETHERNET IP ASSEGNATO (DHCP on) 3	0	ALWAYS	ALWAYS	0 – 65535	Tutte
40569	unsigned short	**Ethernet_Netmask_assigned_by_dhcp_0**	ETHERNET NETMASK ASSEGNATO (DHCP on) 0	0	ALWAYS	ALWAYS	0 – 65535	Tutte
40570	unsigned short	**Ethernet_Netmask_assigned_by_dhcp_1**	ETHERNET NETMASK ASSEGNATO (DHCP on) 1	0	ALWAYS	ALWAYS	0 – 65535	Tutte
40571	unsigned short	**Ethernet_Netmask_assigned_by_dhcp_2**	ETHERNET NETMASK ASSEGNATO (DHCP on) 2	0	ALWAYS	ALWAYS	0 – 65535	Tutte
40572	unsigned short	**Ethernet_Netmask_assigned_by_dhcp_3**	ETHERNET NETMASK ASSEGNATO (DHCP on) 3	0	ALWAYS	ALWAYS	0 – 65535	Tutte
40573	unsigned short	**Ethernet_Gateway_assigned_by_dhcp_0**	ETHERNET GATEWAY ASSEGNATO (DHCP on) 0	0	ALWAYS	ALWAYS	0 – 65535	Tutte
40574	unsigned short	**Ethernet_Gateway_assigned_by_dhcp_1**	ETHERNET GATEWAY ASSEGNATO (DHCP on) 1	0	ALWAYS	ALWAYS	0 – 65535	Tutte
40575	unsigned short	**Ethernet_Gateway_assigned_by_dhcp_2**	ETHERNET GATEWAY ASSEGNATO (DHCP on) 2	0	ALWAYS	ALWAYS	0 – 65535	Tutte
40576	unsigned short	**Ethernet_Gateway_assigned_by_dhcp_3**	ETHERNET GATEWAY ASSEGNATO (DHCP on) 3	0	ALWAYS	ALWAYS	0 – 65535	Tutte
40577	unsigned long	**Communications_settings**	Bit 0: Ethernet DHCP 0 → Disabled (static address from registers) 1 → Enabled (default) Bit 1: Wi-Fi STA DHCP 0 → Disabled (static address from registers) 1 → Enabled (default)	3	ALWAYS	ALWAYS	0 – 4294967295	Tutte
40579	signed long	**UTC_Time_zone_value**	The value of this register sets the Time Zone out of a list of 461 elements. The entire list is in the documentation, the default value is 390 which is for 'Europe/Rome'	390	ALWAYS	ALWAYS	-2147483648 – 2147483647	Tutte
40631 – 40650	unsigned short × 20	**logging_register_address_1** **…** **logging_register_address_20**	Modbus Address to do logging in position 1 … Modbus Address to do logging in position 20		ALWAYS	ALWAYS	40000 – 49653	FULL
40651	unsigned short	**logging_period_s_flash**	logging period in seconds for internal flash	5	ALWAYS	ALWAYS	5 – 65535	FULL

40652 – 40671	unsigned short × 20	**mqtt_logging_register_address_1 … mqtt_logging_register_address_20**	Modbus Address used to log data with MQTT 1 … Modbus Address used to log data with MQTT 20		ALWAYS	ALWAYS	40000 – 49653	FULL
40672	unsigned short	**mqtt_logging_period_s**	mqtt publish period	20	ALWAYS	ALWAYS	20 – 65535	FULL
40674 – 40689	char × 16	**webserver_username_0 … webserver_username_15**	webserver authentication username char 0 … webserver authentication username char 15		ALWAYS	ALWAYS	-128 – 255	Tutte
40690 – 40705	char × 16	**webserver_password_0 … webserver_password_15**	webserver authentication password char 0 … webserver authentication password char 15		NEVER	ALWAYS	-128 – 255	Tutte
40715	signed short	**wifi_tx_power**	Wifi Strength of our antenna in dBm	20	ALWAYS	ALWAYS	-32768 – 32767	Tutte
40716	unsigned short	**Pulses_per_kWh**	Pulses per kWh impulsive digital output	1000	ALWAYS	ALWAYS	0 – 65535	Tutte

3.3 Energie

Energie								
Registro	**Tipo**	**Nome**	**Descrizione**	**Default**	**Lettura**	**Scrittura**	**Min – Max**	**Ver.**
40721	signed long long	**KWh1**	Active energy line 1 [Wh tenth]	0	ALWAYS	ALWAYS	-9.223372e+18 – 9.223372e+18	Tutte
40725	signed long long	**KWh2**	Active energy line 2 [Wh tenth]	0	ALWAYS	ALWAYS	-9.223372e+18 – 9.223372e+18	Tutte
40729	signed long long	**KWh3**	Active energy line 3 [Wh tenth]	0	ALWAYS	ALWAYS	-9.223372e+18 – 9.223372e+18	Tutte
40733	signed long long	**KWh_SUM**	Active energy three phase [Wh tenth]	0	ALWAYS	ALWAYS	-9.223372e+18 – 9.223372e+18	Tutte
40737	signed long long	**KWh1_Plus**	Positive Active energy line 1 [Wh tenth]	0	ALWAYS	ALWAYS	-9.223372e+18 – 9.223372e+18	Tutte

40741	signed long long	**KWh2_Plus**	Positive Active energy line 2 [Wh tenth]	0	ALWAYS	ALWAYS	-9.223372e+18 – 9.223372e+18	Tutte
40745	signed long long	**KWh3_Plus**	Positive Active energy line 3 [Wh tenth]	0	ALWAYS	ALWAYS	-9.223372e+18 – 9.223372e+18	Tutte
40749	signed long long	**KWh_SUM_Plus**	Positive Active energy three phase [Wh tenth]	0	ALWAYS	ALWAYS	-9.223372e+18 – 9.223372e+18	Tutte
40753	signed long long	**KWh1_Neg**	Negative Active energy line 1 [Wh tenth]	0	ALWAYS	ALWAYS	-9.223372e+18 – 9.223372e+18	Tutte
40757	signed long long	**KWh2_Neg**	Negative Active energy line 2 [Wh tenth]	0	ALWAYS	ALWAYS	-9.223372e+18 – 9.223372e+18	Tutte
40761	signed long long	**KWh3_Neg**	Negative Active energy line 3 [Wh tenth]	0	ALWAYS	ALWAYS	-9.223372e+18 – 9.223372e+18	Tutte
40765	signed long long	**KWh_SUM_Neg**	Negative Active energy three phase [Wh tenth]	0	ALWAYS	ALWAYS	-9.223372e+18 – 9.223372e+18	Tutte
40769	signed long long	**KVARh1**	Reactive energy line 1 [VARh tenth]	0	ALWAYS	ALWAYS	-9.223372e+18 – 9.223372e+18	Tutte
40773	signed long long	**KVARh2**	Reactive energy line 2 [VARh tenth]	0	ALWAYS	ALWAYS	-9.223372e+18 – 9.223372e+18	Tutte
40777	signed long long	**KVARh3**	Reactive energy line 3 [VARh tenth]	0	ALWAYS	ALWAYS	-9.223372e+18 – 9.223372e+18	Tutte
40781	signed long long	**KVARh_SUM**	Reactive energy three phase [VARh tenth]	0	ALWAYS	ALWAYS	-9.223372e+18 – 9.223372e+18	Tutte

40785	signed long long	**KVARh1_Inductive_positive**	Inductive (positive P) Reactive energy line 1 [VARh tenth]	0	ALWAYS	ALWAYS	-9.223372e+18 – 9.223372e+18	Tutte
40789	signed long long	**KVARh2_Inductive_positive**	Inductive (positive P) Reactive energy line 2 [VARh tenth]	0	ALWAYS	ALWAYS	-9.223372e+18 – 9.223372e+18	Tutte
40793	signed long long	**KVARh3_Inductive_positive**	Inductive (positive P) Reactive energy line 3 [VARh tenth]	0	ALWAYS	ALWAYS	-9.223372e+18 – 9.223372e+18	Tutte
40797	signed long long	**KVARh_SUM_Inductive_positive**	Inductive (positive P) Reactive energy three phase [VARh tenth]	0	ALWAYS	ALWAYS	-9.223372e+18 – 9.223372e+18	Tutte
40801	signed long long	**KVARh1_Inductive_negative**	Inductive (negative P) Reactive energy line 1 [VARh tenth]	0	ALWAYS	ALWAYS	-9.223372e+18 – 9.223372e+18	Tutte
40805	signed long long	**KVARh2_Inductive_negative**	Inductive (negative P) Reactive energy line 2 [VARh tenth]	0	ALWAYS	ALWAYS	-9.223372e+18 – 9.223372e+18	Tutte
40809	signed long long	**KVARh3_Inductive_negative**	Inductive (negative P) Reactive energy line 3 [VARh tenth]	0	ALWAYS	ALWAYS	-9.223372e+18 – 9.223372e+18	Tutte
40813	signed long long	**KVARh_SUM_Inductive_negative**	Inductive (negative P) Reactive energy three phase [VARh tenth]	0	ALWAYS	ALWAYS	-9.223372e+18 – 9.223372e+18	Tutte
40817	signed long long	**KVARh1_Capacitive_positive**	Capacitive (positive P) Reactive energy line 1 [VARh tenth]	0	ALWAYS	ALWAYS	-9.223372e+18 – 9.223372e+18	Tutte
40821	signed long long	**KVARh2_Capacitive_positive**	Capacitive (positive P) Reactive energy line 2 [VARh tenth]	0	ALWAYS	ALWAYS	-9.223372e+18 – 9.223372e+18	Tutte
40825	signed long long	**KVARh3_Capacitive_positive**	Capacitive (positive P) Reactive energy line 3 [VARh tenth]	0	ALWAYS	ALWAYS	-9.223372e+18 – 9.223372e+18	Tutte

40829	signed long long	**KVARh_SUM_Capacitive_positive**	Capacitive (positive P) Reactive energy three phase [VARh tenth]	0	ALWAYS	ALWAYS	-9.223372e+18 – 9.223372e+18	Tutte
40833	signed long long	**KVARh1_Capacitive_negative**	Capacitive (negative P) Reactive energy line 1 [VARh tenth]	0	ALWAYS	ALWAYS	-9.223372e+18 – 9.223372e+18	Tutte
40837	signed long long	**KVARh2_Capacitive_negative**	Capacitive (negative P) Reactive energy line 2 [VARh tenth]	0	ALWAYS	ALWAYS	-9.223372e+18 – 9.223372e+18	Tutte
40841	signed long long	**KVARh3_Capacitive_negative**	Capacitive (negative P) Reactive energy line 3 [VARh tenth]	0	ALWAYS	ALWAYS	-9.223372e+18 – 9.223372e+18	Tutte
40845	signed long long	**KVARh_SUM_Capacitive_negative**	Capacitive (negative P) Reactive energy three phase [VARh tenth]	0	ALWAYS	ALWAYS	-9.223372e+18 – 9.223372e+18	Tutte
40849	signed long long	**KVAh1**	Apparent energy line 1 [VAh tenth]	0	ALWAYS	ALWAYS	-9.223372e+18 – 9.223372e+18	Tutte
40853	signed long long	**KVAh2**	Apparent energy line 2 [VAh tenth]	0	ALWAYS	ALWAYS	-9.223372e+18 – 9.223372e+18	Tutte
40857	signed long long	**KVAh3**	Apparent energy line 3 [VAh tenth]	0	ALWAYS	ALWAYS	-9.223372e+18 – 9.223372e+18	Tutte
40861	signed long long	**KVAh_SUM**	Apparent energy three phase [VAh tenth]	0	ALWAYS	ALWAYS	-9.223372e+18 – 9.223372e+18	Tutte
40865	signed long long	**Wh_storage_count**	Number of Wh flash savings (every 1 minute)	0	ALWAYS	NEVER	-9.223372e+18 – 9.223372e+18	Tutte
40869	unsigned long	**Working_time**	Working time of the device [mins]	0	ALWAYS	WITH PASS C	0 – 4294967295	Tutte

40891	unsigned long	**Communication_status**	Bit 0: Wifi Sta Connected 0 → Not Connected (default) 1 → Connected Bit 1: Ethernet Connected 0 → Not Connected (default) 1→ Connected Bit 2: Connected cloud service 0 → Not Connected (default) 1→ Connected Bit 3: SD Card Connected 0 → Not Connected (default) 1 → Connected Bit 4: USB Connected 0 → Not Connected (default) 1 → Connected Bit 5: SD Card Mounted 0 → Yes 1 → No Bit 6: USB Mounted 0 → Yes 1 → No	0	ALWAYS	NEVER	0 – 4294967295	Tutte

3.4 Misure in tempo reale

Misure in tempo reale								
Registro	**Tipo**	**Nome**	**Descrizione**	**Default**	**Lettura**	**Scrittura**	**Min – Max**	**Ver.**

40897	unsigned long	**Status_1**	//STATUS_1 bit #define FLASH_SETTINGS_ERROR 0x00000001 #define FLASH_CALIBRATION_ERROR 0x00000002 #define I1_OVER_RANGE 0x00000004 #define I1_UNDER_RANGE 0x00000008 #define I2_OVER_RANGE 0x00000010 #define I2_UNDER_RANGE 0x00000020 #define I3_OVER_RANGE 0x00000040 #define I3_UNDER_RANGE 0x00000080 #define V1_OVER_RANGE 0x00000100 #define V1_UNDER_RANGE 0x00000200 #define V2_OVER_RANGE 0x00000400 #define V2_UNDER_RANGE 0x00000800 #define V3_OVER_RANGE 0x00001000 #define V3_UNDER_RANGE 0x00002000 #define ZX_DETECTING 0x00004000 #define SWITCH_OPEN 0x00008000 #define WH_STORING_ERROR 0x00010000 #define BUZZER_ON 0x00020000 #define RTC_CLOCK_NOT_UPDATED 0x00040000 #define ALARM_TRIGGER_REQUEST 0x00080000 #define ZX_SIGNAL_ACQUIRED 0x00200000 #define LOW_IL1_MEASUREMENT 0x00400000 #define LOW_IL2_MEASUREMENT 0x00800000 #define LOW_IL3_MEASUREMENT 0x01000000 #define PF1_INDUCTIVE 0x10000000 #define PF2_INDUCTIVE 0x20000000 #define PF3_INDUCTIVE 0x40000000	0	ALWAYS	NEVER	0 – 4294967295	Tutte

40899	unsigned long	**Status_2**	//STATUS_2 bit #define EVENT_MONITORING_READY_L1N 0x00000020 #define EVENT_MONITORING_READY_L2N 0x00000040 #define EVENT_MONITORING_READY_L3N 0x00000080 #define EVENT_PRESENT 0x00000800 #define FREQ_COPIED 0x00001000 #define NTP_SET 0x00002000 #define SWITCH_OPEN_L1 0x00008000 #define SWITCH_OPEN_L2 0x00010000 #define SWITCH_OPEN_L3 0x00020000 #define TOUCH_BOTTON_PRESSED 0x00040000 #define ERROR_TEMP_SENSOR 0x00080000 #define ERROR_TOUCH_SENSOR 0x00100000 #define REQUEST_RESET_SETTINGS 0x00200000 #define RTC_WRITING_IN_PROGRESS 0x00400000 #define REQUEST_RSSI 0x00800000 #define MAX_DEMAND_STORING_ERROR 0x01000000 #define POWER_QUALITY_BLANKING 0x02000000 #define POWER_QUALITY_FLASH_ERROR 0X04000000 #define REQUEST_CHANGE_ENERGY_UNIT 0x08000000	0	ALWAYS	NEVER	0 – 4294967295	Tutte

40906	unsigned short	**Command**	//comandi da scrivere sul registro COMMAND #define COMANDO_SALVATAGGIO_FLASH_TARATURE 0xC1B0U #define COMANDO_SALVATAGGIO_FLASH_SOLO_SETTAGGI 0xF1C0U #define COMANDO_SALVATAGGIO_FLASH_SETTAGGI_E_NFC 0xC1C0U #define COMANDO_RESET_SETTINGS_DEFAULT 0XD1C0U #define COMANDO_LEGGI_DIP 0xD166U #define COMANDO_RESET 0xC1A0U #define COMANDO_SAVE_ENERGY 0xBABAU #define GET_ADC_MEDIA_VALUE 0xBABDU #define COMANDO_BOOTLOADER 0xB000U #define COMANDO_DISATTIVA_SS 0xC000U #define COMANDO_TARATURA_PWM 0xCACAU #define COMANDO_CLOSE_SWITCH 0xDAAAU #define COMANDO_OPEN_SWITCH 0xDAABU #define COMANDO_BUZZER_ON 0xDABAU #define COMANDO_BUZZER_OFF 0xDABBU #define COMANDO_LEGGI_EVENTI_SAG 0xE000U #define COMANDO_LEGGI_EVENTI_SWELL 0xE100U #define COMANDO_LEGGI_EVENTI_INTERRUPTION 0xE200U #define COMANDO_RESET_EVENTI_SAG 0xE300U #define COMANDO_RESET_EVENTI_SWELL 0xE400U #define COMANDO_RESET_EVENTI_INTERRUPTION 0xE500U	0	ALWAYS	ALWAYS	0 – 65535	Tutte
			#define COMANDO_RESET_MAX_DEMAND 0xF000U #define					

40907	float	**V_L1_N**	RMS star voltage L1-N [V]	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
40909	float	**V_L2_N**	RMS star voltage L2-N [V]	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
40911	float	**V_L3_N**	RMS star voltage L3-N [V]	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
40913	float	**V_STAR_AVG**	RMS star avg value voltage [V]	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
40915	float	**V_L1_L2**	RMS line voltage L1-L2 [V]	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
40917	float	**V_L2_L3**	RMS line voltage L2-L3 [V]	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
40919	float	**V_L3_L1**	RMS line voltage L3-L1 [V]	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
40921	float	**V_LINE_AVG**	RMS line avg value voltage [V]	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
40923	float	**I_L1**	RMS line current L1	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
40925	float	**I_L2**	RMS line current L2	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte

40927	float	**I_L3**	RMS line current L3	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
40929	float	**I_N**	RMS line current N (if 1 or 2 TA connection, I_N = 0)	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
40931	float	**I_AVG**	RMS avg value current (excluding neutral current I_N)	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
40933	float	**P1**	RMS active power line 1 [W]	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
40935	float	**P2**	RMS active power line 2 [W]	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
40937	float	**P3**	RMS active power line 3 [W]	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
40939	float	**P_SUM**	RMS sum active power [W]	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
40941	float	**Q1**	RMS reactive power line 1 [VAR]	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
40943	float	**Q2**	RMS reactive power line 2 [VAR]	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
40945	float	**Q3**	RMS reactive power line 3 [VAR]	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte

40947	float	**Q_SUM**	RMS sum reactive power [VAR]	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
40949	float	**S1**	RMS apparent power line 1 [VAR]	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
40951	float	**S2**	RMS apparent power line 2 [VAR]	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
40953	float	**S3**	RMS apparent power line 3 [VAR]	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
40955	float	**S_SUM**	RMS sum apparent power [VAR]	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
40957	float	**PF1**	Power Factor line 1	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
40959	float	**PF2**	Power Factor line 2	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
40961	float	**PF3**	Power Factor line 3	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
40963	float	**PF_3PH**	Three Phase Power Factor	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
40965	float	**CF1**	Crest Factor line 1	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte

40967	float	**CF2**	Crest Factor line 2	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
40969	float	**CF3**	Crest Factor line 3	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
40971	float	**CF_N**	Crest Factor Neutral	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
40973	float	**Frequency**	Frequency [Hz]	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
40975	float	**V_L1_N_peak**	Star voltage L1-N peak [V]	0	ALWAYS	ALWAYS	-3.4028235e+38 – 3.4028235e+38	Tutte
40977	float	**V_L2_N_peak**	Star voltage L2-N peak [V]	0	ALWAYS	ALWAYS	-3.4028235e+38 – 3.4028235e+38	Tutte
40979	float	**V_L3_N_peak**	Star voltage L3-N peak [V]	0	ALWAYS	ALWAYS	-3.4028235e+38 – 3.4028235e+38	Tutte
40981	float	**V_L1_L2_peak**	Line voltage L1-L2 peak [V]	0	ALWAYS	ALWAYS	-3.4028235e+38 – 3.4028235e+38	Tutte
40983	float	**V_L2_L3_peak**	Line voltage L2-L3 peak [V]	0	ALWAYS	ALWAYS	-3.4028235e+38 – 3.4028235e+38	Tutte
40985	float	**V_L3_L1_peak**	Line voltage L3-L1 peak [V]	0	ALWAYS	ALWAYS	-3.4028235e+38 – 3.4028235e+38	Tutte

40987	float	**I_L1_peak**	L1 current peak	0	ALWAYS	ALWAYS	-3.4028235e+38 – 3.4028235e+38	Tutte
40989	float	**I_L2_peak**	L2 current peak	0	ALWAYS	ALWAYS	-3.4028235e+38 – 3.4028235e+38	Tutte
40991	float	**I_L3_peak**	L3 current peak	0	ALWAYS	ALWAYS	-3.4028235e+38 – 3.4028235e+38	Tutte
40993	float	**I_N_peak**	N current peak	0	ALWAYS	ALWAYS	-3.4028235e+38 – 3.4028235e+38	Tutte
41057	float	**TAN_FI_1**	Tangentθline 1 (+ inductive, - capacitive)	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41059	float	**TAN_FI_2**	Tangentθline 2 (+ inductive, - capacitive)	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41061	float	**TAN_FI_3**	Tangentθline 3 (+ inductive, - capacitive)	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41063	float	**TAN_FI_AVG**	Average Tangentθ(+ inductive, - capacitive)	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41065	float	**Phase_Order**	L1, L2, L3 = 0; L1, L3, L2 = 1	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41067	float	**Internal_temperature**	Internal Temperature [°C]	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte

3.5 Valori medi, massimi e minimi

Valori medi, massimi e minimi								
Registro	**Tipo**	**Nome**	**Descrizione**	**Default**	**Lettura**	**Scrittura**	**Min – Max**	**Ver.**
41069	float	**V_L1_N_RMS_AVG**	Star voltage L1_N RMS average [V] over “seconds_for_mean_RMS”	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41071	float	**V_L1_N_RMS_MAX**	Star voltage L1_N MAX RMS [V] over last “seconds_for_MAX_RMS”	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41073	float	**V_L1_N_RMS_min**	Star voltage L1_N Min RMS [V] over last“seconds_for_min_RMS”	100000	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41075	float	**V_L2_N_RMS_AVG**	Star voltage L2_N RMS average [V] over “seconds_for_mean_RMS”	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41077	float	**V_L2_N_RMS_MAX**	Star voltage L2_N MAX RMS [V] over last “seconds_for_MAX_RMS”	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41079	float	**V_L2_N_RMS_min**	Star voltage L2_N Min RMS [V] over last“seconds_for_min_RMS”	100000	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41081	float	**V_L3_N_RMS_AVG**	Star voltage L3_N RMS average [V] over “seconds_for_mean_RMS”	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41083	float	**V_L3_N_RMS_MAX**	Star voltage L3_N MAX RMS [V] over last “seconds_for_MAX_RMS”	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte

41085	float	**V_L3_N_RMS_min**	Star voltage L3_N Min RMS [V] over last“seconds_for_min_RMS”	100000	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41087	float	**V_STAR_AVG_RMS_AVG**	Star voltage AVG RMS average [V] over “seconds_for_mean_RMS”	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41089	float	**V_STAR_AVG_RMS_MAX**	Star voltage AVG MAX RMS [V] over last “seconds_for_MAX_RMS”	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41091	float	**V_STAR_AVG_RMS_min**	Star voltage AVG Min RMS [V] over last“seconds_for_min_RMS”	100000	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41093	float	**V_L1_L2_RMS_AVG**	Line voltage L1-Line voltage L2-Line voltage L3-L1 RMS average [V] over “seconds_for_mean_RMS”	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41095	float	**V_L1_L2_RMS_MAX**	Line voltage L1-Line voltage L2-Line voltage L3-L1 MAX RMS [V] over last “seconds_for_MAX_RMS”	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41097	float	**V_L1_L2_RMS_min**	Line voltage L1-Line voltage L2-Line voltage L3-L1 Min RMS [V] over last“seconds_for_min_RMS”	100000	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41099	float	**V_L2_L3_RMS_AVG**	Line voltage L2-Line voltage L3-L1 RMS average [V] over “seconds_for_mean_RMS”	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41101	float	**V_L2_L3_RMS_MAX**	Line voltage L2-Line voltage L3-L1 MAX RMS [V] over last “seconds_for_MAX_RMS”	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41103	float	**V_L2_L3_RMS_min**	Line voltage L2-Line voltage L3-L1 Min RMS [V] over last“seconds_for_min_RMS”	100000	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte

41105	float	**V_L3_L1_RMS_AVG**	Line voltage L3-L1 RMS average [V] over "seconds_for_mean_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41107	float	**V_L3_L1_RMS_MAX**	Line voltage L3-L1 MAX RMS [V] over last "seconds_for_MAX_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41109	float	**V_L3_L1_RMS_min**	Line voltage L3-L1 Min RMS [V] over last"seconds_for_min_RMS"	100000	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41111	float	**V_LINE_AVG_RMS_AVG**	Line voltage AVG RMS average [V] over "seconds_for_mean_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41113	float	**V_LINE_AVG_RMS_MAX**	Line voltage AVG MAX RMS [V] over last "seconds_for_MAX_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41115	float	**V_LINE_AVG_RMS_min**	Line voltage AVG Min RMS [V] over last"seconds_for_min_RMS"	100000	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41117	float	**I_L1_RMS_AVG**	L1 RMS average over "seconds_for_mean_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41119	float	**I_L1_RMS_MAX**	L1 MAX RMS over last "seconds_for_MAX_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41121	float	**I_L1_RMS_min**	L1 Min RMS over last"seconds_for_min_RMS"	100000	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41123	float	**I_L2_RMS_AVG**	L2 RMS average over "seconds_for_mean_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte

41125	float	**I_L2_RMS_MAX**	L2 MAX RMS over last "seconds_for_MAX_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41127	float	**I_L2_RMS_min**	L2 Min RMS over last"seconds_for_min_RMS"	100000	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41129	float	**I_L3_RMS_AVG**	L3 RMS average over "seconds_for_mean_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41131	float	**I_L3_RMS_MAX**	L3 MAX RMS over last "seconds_for_MAX_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41133	float	**I_L3_RMS_min**	L3 Min RMS over last"seconds_for_min_RMS"	100000	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41135	float	**I_N_RMS_AVG**	N RMS average over "seconds_for_mean_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41137	float	**I_N_RMS_MAX**	N MAX RMS over last "seconds_for_MAX_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41139	float	**I_N_RMS_min**	N Min RMS over last"seconds_for_min_RMS"	100000	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41141	float	**I_AVG_RMS_AVG**	I_AVG RMS average over "seconds_for_mean_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41143	float	**I_AVG_RMS_MAX**	I_AVG MAX RMS over last "seconds_for_MAX_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte

41145	float	**I_AVG_RMS_min**	I_AVG Min RMS over last“seconds_for_min_RMS”	100000	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41147	float	**P1_RMS_AVG**	P1 RMS average [W] over “seconds_for_mean_RMS”	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41149	float	**P1_RMS_MAX**	P1 MAX RMS [W] over last “seconds_for_MAX_RMS”	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41151	float	**P1_RMS_min**	P1 Min RMS [W] over last“seconds_for_min_RMS”	100000	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41153	float	**P2_RMS_AVG**	P2 RMS average [W] over “seconds_for_mean_RMS”	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41155	float	**P2_RMS_MAX**	P2 MAX RMS [W] over last “seconds_for_MAX_RMS”	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41157	float	**P2_RMS_min**	P2 Min RMS [W] over last“seconds_for_min_RMS”	100000	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41159	float	**P3_RMS_AVG**	P3 RMS average [W] over “seconds_for_mean_RMS”	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41161	float	**P3_RMS_MAX**	P3 MAX RMS [W] over last “seconds_for_MAX_RMS”	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41163	float	**P3_RMS_min**	P3 Min RMS [W] over last“seconds_for_min_RMS”	100000	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte

41165	float	**P_SUM_RMS_AVG**	P_SUM RMS average [W] over "seconds_for_mean_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41167	float	**P_SUM_RMS_MAX**	P_SUM MAX RMS [W] over last "seconds_for_MAX_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41169	float	**P_SUM_RMS_min**	P_SUM Min RMS [W] over last"seconds_for_min_RMS"	100000	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41171	float	**Q1_RMS_AVG**	Q1 RMS average [VAR] over "seconds_for_mean_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41173	float	**Q1_RMS_MAX**	Q1 MAX RMS [VAR] over last "seconds_for_MAX_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41175	float	**Q1_RMS_min**	Q1 Min RMS [VAR] over last"seconds_for_min_RMS"	100000	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41177	float	**Q2_RMS_AVG**	Q2 RMS average [VAR] over "seconds_for_mean_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41179	float	**Q2_RMS_MAX**	Q2 MAX RMS [VAR] over last "seconds_for_MAX_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41181	float	**Q2_RMS_min**	Q2 Min RMS [VAR] over last"seconds_for_min_RMS"	100000	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41183	float	**Q3_RMS_AVG**	Q3 RMS average [VAR] over "seconds_for_mean_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte

41185	float	**Q3_RMS_MAX**	Q3 MAX RMS [VAR] over last "seconds_for_MAX_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41187	float	**Q3_RMS_min**	Q3 Min RMS [VAR] over last"seconds_for_min_RMS"	100000	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41189	float	**Q_SUM_RMS_AVG**	Q_SUM RMS average [VAR] over "seconds_for_mean_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41191	float	**Q_SUM_RMS_MAX**	Q_SUM MAX RMS [VAR] over last "seconds_for_MAX_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41193	float	**Q_SUM_RMS_min**	Q_SUM Min RMS [VAR] over last"seconds_for_min_RMS"	100000	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41195	float	**S1_RMS_AVG**	S1 RMS average [VA] over "seconds_for_mean_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41197	float	**S1_RMS_MAX**	S1 MAX RMS [VA] over last "seconds_for_MAX_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41199	float	**S1_RMS_min**	S1 Min RMS [VA] over last"seconds_for_min_RMS"	100000	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41201	float	**S2_RMS_AVG**	S2 RMS average [VA] over "seconds_for_mean_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41203	float	**S2_RMS_MAX**	S2 MAX RMS [VA] over last "seconds_for_MAX_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte

41205	float	**S2_RMS_min**	S2 Min RMS [VA] over last“seconds_for_min_RMS”	100000	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41207	float	**S3_RMS_AVG**	S3 RMS average [VA] over “seconds_for_mean_RMS”	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41209	float	**S3_RMS_MAX**	S3 MAX RMS [VA] over last “seconds_for_MAX_RMS”	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41211	float	**S3_RMS_min**	S3 Min RMS [VA] over last“seconds_for_min_RMS”	100000	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41213	float	**S_SUM_RMS_AVG**	S_SUM RMS average [VA] over “seconds_for_mean_RMS”	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41215	float	**S_SUM_RMS_MAX**	S_SUM MAX RMS [VA] over last “seconds_for_MAX_RMS”	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41217	float	**S_SUM_RMS_min**	S_SUM Min RMS [VA] over last“seconds_for_min_RMS”	100000	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41219	float	**PF1_RMS_AVG**	PF1 RMS average over “seconds_for_mean_RMS”	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41221	float	**PF1_RMS_MAX**	PF1 MAX RMS over last “seconds_for_MAX_RMS”	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41223	float	**PF1_RMS_min**	PF1 Min RMS over last“seconds_for_min_RMS”	100000	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte

41225	float	**PF2_RMS_AVG**	PF2 RMS average over "seconds_for_mean_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41227	float	**PF2_RMS_MAX**	PF2 MAX RMS over last "seconds_for_MAX_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41229	float	**PF2_RMS_min**	PF2 Min RMS over last"seconds_for_min_RMS"	100000	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41231	float	**PF3_RMS_AVG**	PF3 RMS average over "seconds_for_mean_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41233	float	**PF3_RMS_MAX**	PF3 MAX RMS over last "seconds_for_MAX_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41235	float	**PF3_RMS_min**	PF3 Min RMS over last"seconds_for_min_RMS"	100000	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41237	float	**PF_SUM_RMS_AVG**	PF_SUM RMS average over "seconds_for_mean_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41239	float	**PF_SUM_RMS_MAX**	PF_SUM MAX RMS over last "seconds_for_MAX_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41241	float	**PF_SUM_RMS_min**	PF_SUM Min RMS over last"seconds_for_min_RMS"	100000	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41243	float	**CF1_RMS_AVG**	CF1 RMS average over "seconds_for_mean_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte

41245	float	**CF1_RMS_MAX**	CF1 MAX RMS over last "seconds_for_MAX_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41247	float	**CF1_RMS_min**	CF1 Min RMS over last"seconds_for_min_RMS"	100000	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41249	float	**CF2_RMS_AVG**	CF2 RMS average over "seconds_for_mean_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41251	float	**CF2_RMS_MAX**	CF2 MAX RMS over last "seconds_for_MAX_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41253	float	**CF2_RMS_min**	CF2 Min RMS over last"seconds_for_min_RMS"	100000	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41255	float	**CF3_RMS_AVG**	CF3 RMS average over "seconds_for_mean_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41257	float	**CF3_RMS_MAX**	CF3 MAX RMS over last "seconds_for_MAX_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41259	float	**CF3_RMS_min**	CF3 Min RMS over last"seconds_for_min_RMS"	100000	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41261	float	**CF_N_RMS_AVG**	CF_N RMS average over "seconds_for_mean_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41263	float	**CF_N_RMS_MAX**	CF_N MAX RMS over last "seconds_for_MAX_RMS"	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte

41265	float	**CF_N_RMS_min**	CF_N Min RMS over last“seconds_for_min_RMS”	100000	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41267	float	**Frequency_RMS_AVG**	Frequency average over “seconds_for_mean_RMS”	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41269	float	**Frequency_RMS_MAX**	Frequency MAX over last “seconds_for_MAX_RMS”	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41271	float	**Frequency_RMS_min**	Frequency Min over last“seconds_for_min_RMS”	100000	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41281	float	**P1_Tot_AVG**	Average total Power over "minute_for_Max_and_AVG_demand" for P1	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41283	float	**P2_Tot_AVG**	Average total Power over "minute_for_Max_and_AVG_demand" for P2	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41285	float	**P3_Tot_AVG**	Average total Power over "minute_for_Max_and_AVG_demand" for P3	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41287	float	**P_SUM_Tot_AVG**	Average total Power over "minute_for_Max_and_AVG_demand" for P three phase	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41289	float	**P1_Plus_AVG**	Average positive Power over "minute_for_Max_and_AVG_demand" for P1	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41291	float	**P2_Plus_AVG**	Average positive Power over "minute_for_Max_and_AVG_demand" for P2	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte

41293	float	**P3_Plus_AVG**	Average positive Power over "minute_for_Max_and_AVG_demand" for P3	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41295	float	**P_SUM_Plus_AVG**	Average positive Power over "minute_for_Max_and_AVG_demand" for P three phase	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41297	float	**P1_Neg_AVG**	Average Negative Power over "minute_for_Max_and_AVG_demand" for P1	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41299	float	**P2_Neg_AVG**	Average Negative Power over "minute_for_Max_and_AVG_demand" for P2	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41301	float	**P3_Neg_AVG**	Average Negative Power over "minute_for_Max_and_AVG_demand" for P3	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41303	float	**P_SUM_Neg_AVG**	Average Negative Power over "minute_for_Max_and_AVG_demand" for P three phase	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41305	float	**Q1_Plus_AVG_ind**	Average Reactive Inductive Power with positive active power over "minute_for_Max_and_AVG_demand" for Q1	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41307	float	**Q2_Plus_AVG_ind**	Average Reactive Inductive Power with positive active power over "minute_for_Max_and_AVG_demand" for Q2	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41309	float	**Q3_Plus_AVG_ind**	Average Reactive Inductive Power with positive active power over "minute_for_Max_and_AVG_demand" for Q3	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41311	float	**Q_SUM_Plus_AVG_ind**	Average Reactive Inductive Power with positive active power over "minute_for_Max_and_AVG_demand" for Q three phase	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte

41313	float	**Q1_Neg_AVG_ind**	Average Reactive Inductive Power with negative active power over "minute_for_Max_and_AVG_demand" for Q1	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41315	float	**Q2_Neg_AVG_ind**	Average Reactive Inductive Power with negative active power over "minute_for_Max_and_AVG_demand" for Q2	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41317	float	**Q3_Neg_AVG_ind**	Average Reactive Inductive Power with negative active power over "minute_for_Max_and_AVG_demand" for Q3	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41319	float	**Q_SUM_Neg_AVG_ind**	Average Reactive Inductive Power with negative active power over "minute_for_Max_and_AVG_demand" for Q three phase	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41321	float	**Q1_Plus_AVG_cap**	Average Reactive Capacitive Power with positive active power over "minute_for_Max_and_AVG_demand" for Q1	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41323	float	**Q2_Plus_AVG_cap**	Average Reactive Capacitive Power with positive active power over "minute_for_Max_and_AVG_demand" for Q2	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41325	float	**Q3_Plus_AVG_cap**	Average Reactive Capacitive Power with positive active power over "minute_for_Max_and_AVG_demand" for Q3	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41327	float	**Q_SUM_Plus_AVG_cap**	Average Reactive Capacitive Power with positive active power over "minute_for_Max_and_AVG_demand" for Q three phase	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41329	float	**Q1_Neg_AVG_cap**	Average Reactive Capacitive Power with negative active power over "minute_for_Max_and_AVG_demand" for Q1	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41331	float	**Q2_Neg_AVG_cap**	Average Reactive Capacitive Power with negative active power over "minute_for_Max_and_AVG_demand" for Q2	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte

41333	float	**Q3_Neg_AVG_cap**	Average Reactive Capacitive Power with negative active power over "minute_for_Max_and_AVG_demand" for Q3	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41335	float	**Q_SUM_Neg_AVG_cap**	Average Reactive Capacitive Power with negative active power over "minute_for_Max_and_AVG_demand" for Q three phase	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41337	float	**P1_MaxDemand**	MAX Demand over "minute_for_Max_and_AVG_demand" for P1	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41339	float	**P2_MaxDemand**	MAX Demand over "minute_for_Max_and_AVG_demand" for P2	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41341	float	**P3_MaxDemand**	MAX Demand over "minute_for_Max_and_AVG_demand" for P3	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41343	float	**P_SUM_MaxDemand**	MAX Demand over "minute_for_Max_and_AVG_demand" for P three phase	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	Tutte
41345	unsigned short	**Month_of_P1_MaxDemand**	Month at which arises Max Demand over "minute_for_Max_and_AVG_demand" for P1 for current month	0	ALWAYS	NEVER	0 – 65535	Tutte
41346	unsigned short	**Day_of_P1_MaxDemand**	Day at which arises Max Demand over "minute_for_Max_and_AVG_demand" for P1 for current month	0	ALWAYS	NEVER	0 – 65535	Tutte
41347	unsigned short	**Hour_of_P1_MaxDemand**	Hour at which arises Max Demand over "minute_for_Max_and_AVG_demand" for P1 for current month	0	ALWAYS	NEVER	0 – 65535	Tutte
41348	unsigned short	**Minute_of_P1_MaxDemand**	Minute at which arises Max Demand over "minute_for_Max_and_AVG_demand" for P1 for current month	0	ALWAYS	NEVER	0 – 65535	Tutte

41349	unsigned short	**Month_of_P2_MaxDemand**	Month at which arises Max Demand over "minute_for_Max_and_AVG_demand" for P2 for current month	0	ALWAYS	NEVER	0 – 65535	Tutte
41350	unsigned short	**Day_of_P2_MaxDemand**	Day at which arises Max Demand over "minute_for_Max_and_AVG_demand" for P2 for current month	0	ALWAYS	NEVER	0 – 65535	Tutte
41351	unsigned short	**Hour_of_P2_MaxDemand**	Hour at which arises Max Demand over "minute_for_Max_and_AVG_demand" for P2 for current month	0	ALWAYS	NEVER	0 – 65535	Tutte
41352	unsigned short	**Minute_of_P2_MaxDemand**	Minute at which arises Max Demand over "minute_for_Max_and_AVG_demand" for P2 for current month	0	ALWAYS	NEVER	0 – 65535	Tutte
41353	unsigned short	**Month_of_P3_MaxDemand**	Month at which arises Max Demand over "minute_for_Max_and_AVG_demand" for P3 for current month	0	ALWAYS	NEVER	0 – 65535	Tutte
41354	unsigned short	**Day_of_P3_MaxDemand**	Day at which arises Max Demand over "minute_for_Max_and_AVG_demand" for P3 for current month	0	ALWAYS	NEVER	0 – 65535	Tutte
41355	unsigned short	**Hour_of_P3_MaxDemand**	Hour at which arises Max Demand over "minute_for_Max_and_AVG_demand" for P3 for current month	0	ALWAYS	NEVER	0 – 65535	Tutte
41356	unsigned short	**Minute_of_P3_MaxDemand**	Minute at which arises Max Demand over "minute_for_Max_and_AVG_demand" for P3 for current month	0	ALWAYS	NEVER	0 – 65535	Tutte
41357	unsigned short	**Month_of_P_SUM_MaxDemand**	Month at which arises Max Demand over "minute_for_Max_and_AVG_demand" for P_SUM for current month	0	ALWAYS	NEVER	0 – 65535	Tutte
41358	unsigned short	**Day_of_P_SUM_Max Demand**	Day at which arises Max Demand over "minute_for_Max_and_AVG_demand" for P_SUM for current month	0	ALWAYS	NEVER	0 – 65535	Tutte
41359	unsigned short	**Hour_of_P_SUM_MaxDemand**	Hour at which arises Max Demand over "minute_for_Max_and_AVG_demand" for P_SUM for current month	0	ALWAYS	NEVER	0 – 65535	Tutte

41360	unsigned short	**Minute_of_P_SUM_MaxDemand**	Minute at which arises Max Demand over "minute_for_Max_and_AVG_demand" for P_SUM for current month	0	ALWAYS	NEVER	0 – 65535	Tutte
41361	unsigned short	**Year**	RTC : year (2000-2099)	2025	ALWAYS	ALWAYS	0 – 65535	Tutte
41362	unsigned short	**Month**	RTC : month (1-12)	10	ALWAYS	ALWAYS	0 – 65535	Tutte
41363	unsigned short	**Day**	RTC : day month (1-31)	6	ALWAYS	ALWAYS	0 – 65535	Tutte
41364	unsigned short	**Hour**	RTC : hour (0-23)	11	ALWAYS	ALWAYS	0 – 65535	Tutte
41365	unsigned short	**Minute**	RTC : minute (0-59)	7	ALWAYS	ALWAYS	0 – 65535	Tutte
41366	unsigned short	**Seconds**	RTC : second (0-59)	45	ALWAYS	ALWAYS	0 – 65535	Tutte
41367	signed short	**RSSI**	Wifi Strength (of the connected AP)	0	ALWAYS	NEVER	-32768 – 32767	Tutte

3.6 Armoniche e interarmoniche

Armoniche e interarmoniche								
Registro	**Tipo**	**Nome**	**Descrizione**	**Default**	**Lettura**	**Scrittura**	**Min – Max**	**Ver.**
41377	float	**Efficiency**	Calculate efficiency of Phase 1 compared to Phase 2	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
41379	float	**Voltage_unbalance**	Voltage Unbalance of the three phase system	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
41381	float	**K_factor_I1**	K-factor for I1, see IEEE Standard 1100-1992	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
41383	float	**K_factor_I2**	K-factor for I2, see IEEE Standard 1100-1992	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
41385	float	**K_factor_I3**	K-factor for I3, see IEEE Standard 1100-1992	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL

41387	float	**DPF1**	Distortion Power Factor line 1 (+ inductive, - capacitive)	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
41389	float	**DPF2**	Distortion Power Factor line 2 (+ inductive, - capacitive)	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
41391	float	**DPF3**	Distortion Power Factor line 3 (+ inductive, - capacitive)	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
41393	float	**DPF_N**	Neutral Distortion Power Factor (+ inductive, - capacitive)	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
41395	float	**THD_V_L1**	THD Star Voltage L1	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
41397	float	**THD_V_L2**	THD Star Voltage L2	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
41399	float	**THD_V_L3**	THD Star Voltage L3	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
41401	float	**THD_V_L12**	THD Line Voltage L1-L2	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
41403	float	**THD_V_L23**	THD Line Voltage L2-L3	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
41405	float	**THD_V_L31**	THD Line Voltage L3-L1	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL

41407	float	**THD_I_L1**	THD Line Current L1	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
41409	float	**THD_I_L2**	THD Line Current L2	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
41411	float	**THD_I_L3**	THD Line Current L3	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
41413	float	**THD_I_N**	THD Neutral Current	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
41415	float	**TDD_I_L1**	TDD Line Current L1	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
41417	float	**TDD_I_L2**	TDD Line Current L2	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
41419	float	**TDD_I_L3**	TDD Line Current L3	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
41421 – 41548	float × 64	**V_L1N_H_AMPLITUDE_0 … V_L1N_H_AMPLITUDE_63**	Star Voltage L1-N Harmonic amplitude #0 … Star Voltage L1-N Harmonic amplitude #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
41549 – 41676	float × 64	**V_L1N_H_PHASE_0 … V_L1N_H_PHASE_63**	Star Voltage L1-N Harmonic phase #0 … Star Voltage L1-N Harmonic phase #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
41677 – 41804	float × 64	**V_L2N_H_AMPLITUDE_0 … V_L2N_H_AMPLITUDE_63**	Star Voltage L2-N Harmonic amplitude #0 … Star Voltage L2-N Harmonic amplitude #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL

41805 – 41932	float × 64	**V_L2N_H_PHASE_0 … V_L2N_H_PHASE_63**	Star Voltage L2-N Harmonic phase #0 … Star Voltage L2-N Harmonic phase #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
41933 – 42060	float × 64	**V_L3N_H_AMPLITUDE_0 … V_L3N_H_AMPLITUDE_63**	Star Voltage L3-N Harmonic amplitude #0 … Star Voltage L3-N Harmonic amplitude #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
42061 – 42188	float × 64	**V_L3N_H_PHASE_0 … V_L3N_H_PHASE_63**	Star Voltage L3-N Harmonic phase #0 … Star Voltage L3-N Harmonic phase #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
42189 – 42316	float × 64	**V_L12_H_AMPLITUDE_0 … V_L12_H_AMPLITUDE_63**	Line Voltage L1-L2 Harmonic amplitude #0 … Line Voltage L1-L2 Harmonic amplitude #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
42317 – 42444	float × 64	**V_L12_H_PHASE_0 … V_L12_H_PHASE_63**	Line Voltage L1-L2 Harmonic phase #0 … Line Voltage L1-L2 Harmonic phase #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
42445 – 42572	float × 64	**V_L23_H_AMPLITUDE_0 … V_L23_H_AMPLITUDE_63**	Line Voltage L2-L3 Harmonic amplitude #0 … Line Voltage L2-L3 Harmonic amplitude #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
42573 – 42700	float × 64	**V_L23_H_PHASE_0 … V_L23_H_PHASE_63**	Line Voltage L2-L3 Harmonic phase #0 … Line Voltage L2-L3 Harmonic phase #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
42701 – 42828	float × 64	**V_L31_H_AMPLITUDE_0 … V_L31_H_AMPLITUDE_63**	Line Voltage L3-L1 Harmonic amplitude #0 … Line Voltage L3-L1 Harmonic amplitude #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
42829 – 42956	float × 64	**V_L31_H_PHASE_0 … V_L31_H_PHASE_63**	Line Voltage L3-L1 Harmonic phase #0 … Line Voltage L3-L1 Harmonic phase #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
42957 – 43084	float × 64	**I_L1_H_AMPLITUDE_0 … I_L1_H_AMPLITUDE_63**	Line Current L1 Harmonic amplitude #0 … Line Current L1 Harmonic amplitude #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL

43085 – 43212	float × 64	**I_L1_H_PHASE_0 … I_L1_H_PHASE_63**	Line Current L1 Harmonic phase #0 … Line Current L1 Harmonic phase #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
43213 – 43340	float × 64	**I_L2_H_AMPLITUDE_0 … I_L2_H_AMPLITUDE_63**	Line Current L2 Harmonic amplitude #0 … Line Current L2 Harmonic amplitude #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
43341 – 43468	float × 64	**I_L2_H_PHASE_0 … I_L2_H_PHASE_63**	Line Current L2 Harmonic phase #0 … Line Current L2 Harmonic phase #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
43469 – 43596	float × 64	**I_L3_H_AMPLITUDE_0 … I_L3_H_AMPLITUDE_63**	Line Current L3 Harmonic amplitude #0 … Line Current L3 Harmonic amplitude #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
43597 – 43724	float × 64	**I_L3_H_PHASE_0 … I_L3_H_PHASE_63**	Line Current L3 Harmonic phase #0 … Line Current L3 Harmonic phase #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
43725 – 43852	float × 64	**I_N_H_AMPLITUDE_0 … I_N_H_AMPLITUDE_63**	Line Current N Harmonic amplitude #0 … Line Current N Harmonic amplitude #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
43853 – 43980	float × 64	**I_N_H_PHASE_0 … I_N_H_PHASE_63**	Line Current N Harmonic phase #0 … Line Current N Harmonic phase #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
43981 – 44108	float × 64	**V_L1N_IH_AMPLITUDE_0 … V_L1N_IH_AMPLITUDE_63**	Star Voltage L1-N InterHarmonic amplitude #0 … Star Voltage L1-N InterHarmonic amplitude #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
44109 – 44236	float × 64	**V_L1N_IH_PHASE_0 … V_L1N_IH_PHASE_63**	Star Voltage L1-N InterHarmonic phase #0 … Star Voltage L1-N InterHarmonic phase #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
44237 – 44364	float × 64	**V_L2N_IH_AMPLITUDE_0 … V_L2N_IH_AMPLITUDE_63**	Star Voltage L2-N InterHarmonic amplitude #0 … Star Voltage L2-N InterHarmonic amplitude #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL

44365 – 44492	float × 64	**V_L2N_IH_PHASE_0 … V_L2N_IH_PHASE_63**	Star Voltage L2-N InterHarmonic phase #0 … Star Voltage L2-N InterHarmonic phase #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
44493 – 44620	float × 64	**V_L3N_IH_AMPLITUDE_0 … V_L3N_IH_AMPLITUDE_63**	Star Voltage L3-N InterHarmonic amplitude #0 … Star Voltage L3-N InterHarmonic amplitude #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
44621 – 44748	float × 64	**V_L3N_IH_PHASE_0 … V_L3N_IH_PHASE_63**	Star Voltage L3-N InterHarmonic phase #0 … Star Voltage L3-N InterHarmonic phase #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
44749 – 44876	float × 64	**V_L12_IH_AMPLITUDE_0 … V_L12_IH_AMPLITUDE_63**	Line Voltage L1-L2 InterHarmonic amplitude #0 … Line Voltage L1-L2 InterHarmonic amplitude #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
44877 – 45004	float × 64	**V_L12_IH_PHASE_0 … V_L12_IH_PHASE_63**	Line Voltage L1-L2 InterHarmonic phase #0 … Line Voltage L1-L2 InterHarmonic phase #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
45005 – 45132	float × 64	**V_L23_IH_AMPLITUDE_0 … V_L23_IH_AMPLITUDE_63**	Line Voltage L2-L3 InterHarmonic amplitude #0 … Line Voltage L2-L3 InterHarmonic amplitude #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
45133 – 45260	float × 64	**V_L23_IH_PHASE_0 … V_L23_IH_PHASE_63**	Line Voltage L2-L3 InterHarmonic phase #0 … Line Voltage L2-L3 InterHarmonic phase #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
45261 – 45388	float × 64	**V_L31_IH_AMPLITUDE_0 … V_L31_IH_AMPLITUDE_63**	Line Voltage L3-L1 InterHarmonic amplitude #0 … Line Voltage L3-L1 InterHarmonic amplitude #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
45389 – 45516	float × 64	**V_L31_IH_PHASE_0 … V_L31_IH_PHASE_63**	Line Voltage L3-L1 InterHarmonic phase #0 … Line Voltage L3-L1 InterHarmonic phase #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
45517 – 45644	float × 64	**I_L1_IH_AMPLITUDE_0 … I_L1_IH_AMPLITUDE_63**	Line Current L1 InterHarmonic amplitude #0 … Line Current L1 InterHarmonic amplitude #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL

45645 – 45772	float × 64	**I_L1_IH_PHASE_0 … I_L1_IH_PHASE_63**	Line Current L1 InterHarmonic phase #0 … Line Current L1 InterHarmonic phase #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
45773 – 45900	float × 64	**I_L2_IH_AMPLITUDE_0 … I_L2_IH_AMPLITUDE_63**	Line Current L2 InterHarmonic amplitude #0 … Line Current L2 InterHarmonic amplitude #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
45901 – 46028	float × 64	**I_L2_IH_PHASE_0 … I_L2_IH_PHASE_63**	Line Current L2 InterHarmonic phase #0 … Line Current L2 InterHarmonic phase #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46029 – 46156	float × 64	**I_L3_IH_AMPLITUDE_0 … I_L3_IH_AMPLITUDE_63**	Line Current L3 InterHarmonic amplitude #0 … Line Current L3 InterHarmonic amplitude #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46157 – 46284	float × 64	**I_L3_IH_PHASE_0 … I_L3_IH_PHASE_63**	Line Current L3 InterHarmonic phase #0 … Line Current L3 InterHarmonic phase #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46285 – 46412	float × 64	**I_N_IH_AMPLITUDE_0 … I_N_IH_AMPLITUDE_63**	Line Current N InterHarmonic amplitude #0 … Line Current N InterHarmonic amplitude #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46413 – 46540	float × 64	**I_N_IH_PHASE_0 … I_N_IH_PHASE_63**	Line Current N InterHarmonic phase #0 … Line Current N InterHarmonic phase #63		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL

3.7 Qualità dell'energia

Qualità dell'energia								
Registro	**Tipo**	**Nome**	**Descrizione**	**Default**	**Lettura**	**Scrittura**	**Min – Max**	**Ver.**
46541	float	**V_SAG_VALUE_N_0**	Voltage Sag RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-0	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46543	unsigned short	**V_SAG_YEAR_N_0**	Voltage Sag Year @ n-0	0	ALWAYS	NEVER	0 – 65535	FULL

46544	unsigned short	**V_SAG_MONTH_N_0**	Voltage Sag Month @ n-0	0	ALWAYS	NEVER	0 – 65535	FULL
46545	unsigned short	**V_SAG_DAY_N_0**	Voltage Sag Day @ n-0	0	ALWAYS	NEVER	0 – 65535	FULL
46546	unsigned short	**V_SAG_HOUR_N_0**	Voltage Sag Hour @ n-0	0	ALWAYS	NEVER	0 – 65535	FULL
46547	unsigned short	**V_SAG_MINUTE_N_0**	Voltage Sag Minute @ n-0	0	ALWAYS	NEVER	0 – 65535	FULL
46548	unsigned short	**V_SAG_SECOND_N_0**	Voltage Sag Second @ n-0	0	ALWAYS	NEVER	0 – 65535	FULL
46549	unsigned short	**V_SAG_DURATION_N_0**	Voltage Sag Duration [ms] @ n-0	0	ALWAYS	NEVER	0 – 65535	FULL
46550	unsigned short	**V_SAG_QUERY_N_0**	// Voltage Sag Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46551	float	**V_SAG_VALUE_N_1**	Voltage Sag RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-1	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46553	unsigned short	**V_SAG_YEAR_N_1**	Voltage Sag Year @ n-1	0	ALWAYS	NEVER	0 – 65535	FULL
46554	unsigned short	**V_SAG_MONTH_N_1**	Voltage Sag Month @ n-1	0	ALWAYS	NEVER	0 – 65535	FULL
46555	unsigned short	**V_SAG_DAY_N_1**	Voltage Sag Day @ n-1	0	ALWAYS	NEVER	0 – 65535	FULL
46556	unsigned short	**V_SAG_HOUR_N_1**	Voltage Sag Hour @ n-1	0	ALWAYS	NEVER	0 – 65535	FULL
46557	unsigned short	**V_SAG_MINUTE_N_1**	Voltage Sag Minute @ n-1	0	ALWAYS	NEVER	0 – 65535	FULL
46558	unsigned short	**V_SAG_SECOND_N_1**	Voltage Sag Second @ n-1	0	ALWAYS	NEVER	0 – 65535	FULL
46559	unsigned short	**V_SAG_DURATION_N_1**	Voltage Sag Duration [ms] @ n-1	0	ALWAYS	NEVER	0 – 65535	FULL
46560	unsigned short	**V_SAG_QUERY_N_1**	// Voltage Sag Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46561	float	**V_SAG_VALUE_N_2**	Voltage Sag RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-2	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46563	unsigned short	**V_SAG_YEAR_N_2**	Voltage Sag Year @ n-2	0	ALWAYS	NEVER	0 – 65535	FULL
46564	unsigned short	**V_SAG_MONTH_N_2**	Voltage Sag Month @ n-2	0	ALWAYS	NEVER	0 – 65535	FULL

46565	unsigned short	**V_SAG_DAY_N_2**	Voltage Sag Day @ n-2	0	ALWAYS	NEVER	0 – 65535	FULL
46566	unsigned short	**V_SAG_HOUR_N_2**	Voltage Sag Hour @ n-2	0	ALWAYS	NEVER	0 – 65535	FULL
46567	unsigned short	**V_SAG_MINUTE_N_2**	Voltage Sag Minute @ n-2	0	ALWAYS	NEVER	0 – 65535	FULL
46568	unsigned short	**V_SAG_SECOND_N_2**	Voltage Sag Second @ n-2	0	ALWAYS	NEVER	0 – 65535	FULL
46569	unsigned short	**V_SAG_DURATION_N_2**	Voltage Sag Duration [ms] @ n-2	0	ALWAYS	NEVER	0 – 65535	FULL
46570	unsigned short	**V_SAG_QUERY_N_2**	// Voltage Sag Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46571	float	**V_SAG_VALUE_N_3**	Voltage Sag RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-3	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46573	unsigned short	**V_SAG_YEAR_N_3**	Voltage Sag Year @ n-3	0	ALWAYS	NEVER	0 – 65535	FULL
46574	unsigned short	**V_SAG_MONTH_N_3**	Voltage Sag Month @ n-3	0	ALWAYS	NEVER	0 – 65535	FULL
46575	unsigned short	**V_SAG_DAY_N_3**	Voltage Sag Day @ n-3	0	ALWAYS	NEVER	0 – 65535	FULL
46576	unsigned short	**V_SAG_HOUR_N_3**	Voltage Sag Hour @ n-3	0	ALWAYS	NEVER	0 – 65535	FULL
46577	unsigned short	**V_SAG_MINUTE_N_3**	Voltage Sag Minute @ n-3	0	ALWAYS	NEVER	0 – 65535	FULL
46578	unsigned short	**V_SAG_SECOND_N_3**	Voltage Sag Second @ n-3	0	ALWAYS	NEVER	0 – 65535	FULL
46579	unsigned short	**V_SAG_DURATION_N_3**	Voltage Sag Duration [ms] @ n-3	0	ALWAYS	NEVER	0 – 65535	FULL
46580	unsigned short	**V_SAG_QUERY_N_3**	// Voltage Sag Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46581	float	**V_SAG_VALUE_N_4**	Voltage Sag RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-4	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46583	unsigned short	**V_SAG_YEAR_N_4**	Voltage Sag Year @ n-4	0	ALWAYS	NEVER	0 – 65535	FULL
46584	unsigned short	**V_SAG_MONTH_N_4**	Voltage Sag Month @ n-4	0	ALWAYS	NEVER	0 – 65535	FULL
46585	unsigned short	**V_SAG_DAY_N_4**	Voltage Sag Day @ n-4	0	ALWAYS	NEVER	0 – 65535	FULL

46586	unsigned short	**V_SAG_HOUR_N_4**	Voltage Sag Hour @ n-4	0	ALWAYS	NEVER	0 – 65535	FULL
46587	unsigned short	**V_SAG_MINUTE_N_4**	Voltage Sag Minute @ n-4	0	ALWAYS	NEVER	0 – 65535	FULL
46588	unsigned short	**V_SAG_SECOND_N_4**	Voltage Sag Second @ n-4	0	ALWAYS	NEVER	0 – 65535	FULL
46589	unsigned short	**V_SAG_DURATION_N_4**	Voltage Sag Duration [ms] @ n-4	0	ALWAYS	NEVER	0 – 65535	FULL
46590	unsigned short	**V_SAG_QUERY_N_4**	// Voltage Sag Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46591	float	**V_SAG_VALUE_N_5**	Voltage Sag RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-5	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46593	unsigned short	**V_SAG_YEAR_N_5**	Voltage Sag Year @ n-5	0	ALWAYS	NEVER	0 – 65535	FULL
46594	unsigned short	**V_SAG_MONTH_N_5**	Voltage Sag Month @ n-5	0	ALWAYS	NEVER	0 – 65535	FULL
46595	unsigned short	**V_SAG_DAY_N_5**	Voltage Sag Day @ n-5	0	ALWAYS	NEVER	0 – 65535	FULL
46596	unsigned short	**V_SAG_HOUR_N_5**	Voltage Sag Hour @ n-5	0	ALWAYS	NEVER	0 – 65535	FULL
46597	unsigned short	**V_SAG_MINUTE_N_5**	Voltage Sag Minute @ n-5	0	ALWAYS	NEVER	0 – 65535	FULL
46598	unsigned short	**V_SAG_SECOND_N_5**	Voltage Sag Second @ n-5	0	ALWAYS	NEVER	0 – 65535	FULL
46599	unsigned short	**V_SAG_DURATION_N_5**	Voltage Sag Duration [ms] @ n-5	0	ALWAYS	NEVER	0 – 65535	FULL
46600	unsigned short	**V_SAG_QUERY_N_5**	// Voltage Sag Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46601	float	**V_SAG_VALUE_N_6**	Voltage Sag RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-6	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46603	unsigned short	**V_SAG_YEAR_N_6**	Voltage Sag Year @ n-6	0	ALWAYS	NEVER	0 – 65535	FULL
46604	unsigned short	**V_SAG_MONTH_N_6**	Voltage Sag Month @ n-6	0	ALWAYS	NEVER	0 – 65535	FULL
46605	unsigned short	**V_SAG_DAY_N_6**	Voltage Sag Day @ n-6	0	ALWAYS	NEVER	0 – 65535	FULL
46606	unsigned short	**V_SAG_HOUR_N_6**	Voltage Sag Hour @ n-6	0	ALWAYS	NEVER	0 – 65535	FULL

46607	unsigned short	**V_SAG_MINUTE_N_6**	Voltage Sag Minute @ n-6	0	ALWAYS	NEVER	0 – 65535	FULL
46608	unsigned short	**V_SAG_SECOND_N_6**	Voltage Sag Second @ n-6	0	ALWAYS	NEVER	0 – 65535	FULL
46609	unsigned short	**V_SAG_DURATION_N_6**	Voltage Sag Duration [ms] @ n-6	0	ALWAYS	NEVER	0 – 65535	FULL
46610	unsigned short	**V_SAG_QUERY_N_6**	// Voltage Sag Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46611	float	**V_SAG_VALUE_N_7**	Voltage Sag RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-7	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46613	unsigned short	**V_SAG_YEAR_N_7**	Voltage Sag Year @ n-7	0	ALWAYS	NEVER	0 – 65535	FULL
46614	unsigned short	**V_SAG_MONTH_N_7**	Voltage Sag Month @ n-7	0	ALWAYS	NEVER	0 – 65535	FULL
46615	unsigned short	**V_SAG_DAY_N_7**	Voltage Sag Day @ n-7	0	ALWAYS	NEVER	0 – 65535	FULL
46616	unsigned short	**V_SAG_HOUR_N_7**	Voltage Sag Hour @ n-7	0	ALWAYS	NEVER	0 – 65535	FULL
46617	unsigned short	**V_SAG_MINUTE_N_7**	Voltage Sag Minute @ n-7	0	ALWAYS	NEVER	0 – 65535	FULL
46618	unsigned short	**V_SAG_SECOND_N_7**	Voltage Sag Second @ n-7	0	ALWAYS	NEVER	0 – 65535	FULL
46619	unsigned short	**V_SAG_DURATION_N_7**	Voltage Sag Duration [ms] @ n-7	0	ALWAYS	NEVER	0 – 65535	FULL
46620	unsigned short	**V_SAG_QUERY_N_7**	// Voltage Sag Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46621	float	**V_SAG_VALUE_N_8**	Voltage Sag RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-8	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46623	unsigned short	**V_SAG_YEAR_N_8**	Voltage Sag Year @ n-8	0	ALWAYS	NEVER	0 – 65535	FULL
46624	unsigned short	**V_SAG_MONTH_N_8**	Voltage Sag Month @ n-8	0	ALWAYS	NEVER	0 – 65535	FULL
46625	unsigned short	**V_SAG_DAY_N_8**	Voltage Sag Day @ n-8	0	ALWAYS	NEVER	0 – 65535	FULL
46626	unsigned short	**V_SAG_HOUR_N_8**	Voltage Sag Hour @ n-8	0	ALWAYS	NEVER	0 – 65535	FULL
46627	unsigned short	**V_SAG_MINUTE_N_8**	Voltage Sag Minute @ n-8	0	ALWAYS	NEVER	0 – 65535	FULL

46628	unsigned short	**V_SAG_SECOND_N_8**	Voltage Sag Second @ n-8	0	ALWAYS	NEVER	0 – 65535	FULL
46629	unsigned short	**V_SAG_DURATION_N_8**	Voltage Sag Duration [ms] @ n-8	0	ALWAYS	NEVER	0 – 65535	FULL
46630	unsigned short	**V_SAG_QUERY_N_8**	// Voltage Sag Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46631	float	**V_SAG_VALUE_N_9**	Voltage Sag RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-9	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46633	unsigned short	**V_SAG_YEAR_N_9**	Voltage Sag Year @ n-9	0	ALWAYS	NEVER	0 – 65535	FULL
46634	unsigned short	**V_SAG_MONTH_N_9**	Voltage Sag Month @ n-9	0	ALWAYS	NEVER	0 – 65535	FULL
46635	unsigned short	**V_SAG_DAY_N_9**	Voltage Sag Day @ n-9	0	ALWAYS	NEVER	0 – 65535	FULL
46636	unsigned short	**V_SAG_HOUR_N_9**	Voltage Sag Hour @ n-9	0	ALWAYS	NEVER	0 – 65535	FULL
46637	unsigned short	**V_SAG_MINUTE_N_9**	Voltage Sag Minute @ n-9	0	ALWAYS	NEVER	0 – 65535	FULL
46638	unsigned short	**V_SAG_SECOND_N_9**	Voltage Sag Second @ n-9	0	ALWAYS	NEVER	0 – 65535	FULL
46639	unsigned short	**V_SAG_DURATION_N_9**	Voltage Sag Duration [ms] @ n-9	0	ALWAYS	NEVER	0 – 65535	FULL
46640	unsigned short	**V_SAG_QUERY_N_9**	// Voltage Sag Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46641	float	**V_SAG_VALUE_EEPROM**	Voltage Sag RMS Value (between 10% and 90% "Nominal_Star_Voltage") EEPROM data	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46643	unsigned short	**V_SAG_YEAR_EEPROM**	Voltage Sag Year EEPROM data	0	ALWAYS	NEVER	0 – 65535	FULL
46644	unsigned short	**V_SAG_MONTH_EEPROM**	Voltage Sag Month EEPROM data	0	ALWAYS	NEVER	0 – 65535	FULL
46645	unsigned short	**V_SAG_DAY_EEPROM**	Voltage Sag Day EEPROM data	0	ALWAYS	NEVER	0 – 65535	FULL
46646	unsigned short	**V_SAG_HOUR_EEPROM**	Voltage Sag Hour EEPROM data	0	ALWAYS	NEVER	0 – 65535	FULL
46647	unsigned short	**V_SAG_MINUTE_EEPROM**	Voltage Sag Minute EEPROM data	0	ALWAYS	NEVER	0 – 65535	FULL
46648	unsigned short	**V_SAG_SECOND_EEPROM**	Voltage Sag Second EEPROM data	0	ALWAYS	NEVER	0 – 65535	FULL

46649	unsigned short	**V_SAG_DURATION_EEPROM**	Voltage Sag Duration [ms] EEPROM data	0	ALWAYS	NEVER	0 – 65535	FULL
46650	unsigned short	**V_SAG_QUERY_EEPROM**	// Voltage Sag Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46651	float	**V_SWELL_VALUE_N_0**	Voltage Swell RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-0	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46653	unsigned short	**V_SWELL_YEAR_N_0**	Voltage Swell Year @ n-0	0	ALWAYS	NEVER	0 – 65535	FULL
46654	unsigned short	**V_SWELL_MONTH_N_0**	Voltage Swell Month @ n-0	0	ALWAYS	NEVER	0 – 65535	FULL
46655	unsigned short	**V_SWELL_DAY_N_0**	Voltage Swell Day @ n-0	0	ALWAYS	NEVER	0 – 65535	FULL
46656	unsigned short	**V_SWELL_HOUR_N_0**	Voltage Swell Hour @ n-0	0	ALWAYS	NEVER	0 – 65535	FULL
46657	unsigned short	**V_SWELL_MINUTE_N_0**	Voltage Swell Minute @ n-0	0	ALWAYS	NEVER	0 – 65535	FULL
46658	unsigned short	**V_SWELL_SECOND_N_0**	Voltage Swell Second @ n-0	0	ALWAYS	NEVER	0 – 65535	FULL
46659	unsigned short	**V_SWELL_DURATION_N_0**	Voltage Swell Duration [ms] @ n-0	0	ALWAYS	NEVER	0 – 65535	FULL
46660	unsigned short	**V_SWELL_QUERY_N_0**	// Voltage Swell Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46661	float	**V_SWELL_VALUE_N_1**	Voltage Swell RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-1	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46663	unsigned short	**V_SWELL_YEAR_N_1**	Voltage Swell Year @ n-1	0	ALWAYS	NEVER	0 – 65535	FULL
46664	unsigned short	**V_SWELL_MONTH_N_1**	Voltage Swell Month @ n-1	0	ALWAYS	NEVER	0 – 65535	FULL
46665	unsigned short	**V_SWELL_DAY_N_1**	Voltage Swell Day @ n-1	0	ALWAYS	NEVER	0 – 65535	FULL
46666	unsigned short	**V_SWELL_HOUR_N_1**	Voltage Swell Hour @ n-1	0	ALWAYS	NEVER	0 – 65535	FULL
46667	unsigned short	**V_SWELL_MINUTE_N_1**	Voltage Swell Minute @ n-1	0	ALWAYS	NEVER	0 – 65535	FULL
46668	unsigned short	**V_SWELL_SECOND_N_1**	Voltage Swell Second @ n-1	0	ALWAYS	NEVER	0 – 65535	FULL
46669	unsigned short	**V_SWELL_DURATION_N_1**	Voltage Swell Duration [ms] @ n-1	0	ALWAYS	NEVER	0 – 65535	FULL

46670	unsigned short	**V_SWELL_QUERY_N_1**	// Voltage Swell Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46671	float	**V_SWELL_VALUE_N_2**	Voltage Swell RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-2	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46673	unsigned short	**V_SWELL_YEAR_N_2**	Voltage Swell Year @ n-2	0	ALWAYS	NEVER	0 – 65535	FULL
46674	unsigned short	**V_SWELL_MONTH_N_2**	Voltage Swell Month @ n-2	0	ALWAYS	NEVER	0 – 65535	FULL
46675	unsigned short	**V_SWELL_DAY_N_2**	Voltage Swell Day @ n-2	0	ALWAYS	NEVER	0 – 65535	FULL
46676	unsigned short	**V_SWELL_HOUR_N_2**	Voltage Swell Hour @ n-2	0	ALWAYS	NEVER	0 – 65535	FULL
46677	unsigned short	**V_SWELL_MINUTE_N_2**	Voltage Swell Minute @ n-2	0	ALWAYS	NEVER	0 – 65535	FULL
46678	unsigned short	**V_SWELL_SECOND_N_2**	Voltage Swell Second @ n-2	0	ALWAYS	NEVER	0 – 65535	FULL
46679	unsigned short	**V_SWELL_DURATION_N_2**	Voltage Swell Duration [ms] @ n-2	0	ALWAYS	NEVER	0 – 65535	FULL
46680	unsigned short	**V_SWELL_QUERY_N_2**	// Voltage Swell Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46681	float	**V_SWELL_VALUE_N_3**	Voltage Swell RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-3	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46683	unsigned short	**V_SWELL_YEAR_N_3**	Voltage Swell Year @ n-3	0	ALWAYS	NEVER	0 – 65535	FULL
46684	unsigned short	**V_SWELL_MONTH_N_3**	Voltage Swell Month @ n-3	0	ALWAYS	NEVER	0 – 65535	FULL
46685	unsigned short	**V_SWELL_DAY_N_3**	Voltage Swell Day @ n-3	0	ALWAYS	NEVER	0 – 65535	FULL
46686	unsigned short	**V_SWELL_HOUR_N_3**	Voltage Swell Hour @ n-3	0	ALWAYS	NEVER	0 – 65535	FULL
46687	unsigned short	**V_SWELL_MINUTE_N_3**	Voltage Swell Minute @ n-3	0	ALWAYS	NEVER	0 – 65535	FULL
46688	unsigned short	**V_SWELL_SECOND_N_3**	Voltage Swell Second @ n-3	0	ALWAYS	NEVER	0 – 65535	FULL
46689	unsigned short	**V_SWELL_DURATION_N_3**	Voltage Swell Duration [ms] @ n-3	0	ALWAYS	NEVER	0 – 65535	FULL

46690	unsigned short	**V_SWELL_QUERY_N_3**	// Voltage Swell Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46691	float	**V_SWELL_VALUE_N_4**	Voltage Swell RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-4	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46693	unsigned short	**V_SWELL_YEAR_N_4**	Voltage Swell Year @ n-4	0	ALWAYS	NEVER	0 – 65535	FULL
46694	unsigned short	**V_SWELL_MONTH_N_4**	Voltage Swell Month @ n-4	0	ALWAYS	NEVER	0 – 65535	FULL
46695	unsigned short	**V_SWELL_DAY_N_4**	Voltage Swell Day @ n-4	0	ALWAYS	NEVER	0 – 65535	FULL
46696	unsigned short	**V_SWELL_HOUR_N_4**	Voltage Swell Hour @ n-4	0	ALWAYS	NEVER	0 – 65535	FULL
46697	unsigned short	**V_SWELL_MINUTE_N_4**	Voltage Swell Minute @ n-4	0	ALWAYS	NEVER	0 – 65535	FULL
46698	unsigned short	**V_SWELL_SECOND_N_4**	Voltage Swell Second @ n-4	0	ALWAYS	NEVER	0 – 65535	FULL
46699	unsigned short	**V_SWELL_DURATION_N_4**	Voltage Swell Duration [ms] @ n-4	0	ALWAYS	NEVER	0 – 65535	FULL
46700	unsigned short	**V_SWELL_QUERY_N_4**	// Voltage Swell Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46701	float	**V_SWELL_VALUE_N_5**	Voltage Swell RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-5	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46703	unsigned short	**V_SWELL_YEAR_N_5**	Voltage Swell Year @ n-5	0	ALWAYS	NEVER	0 – 65535	FULL
46704	unsigned short	**V_SWELL_MONTH_N_5**	Voltage Swell Month @ n-5	0	ALWAYS	NEVER	0 – 65535	FULL
46705	unsigned short	**V_SWELL_DAY_N_5**	Voltage Swell Day @ n-5	0	ALWAYS	NEVER	0 – 65535	FULL
46706	unsigned short	**V_SWELL_HOUR_N_5**	Voltage Swell Hour @ n-5	0	ALWAYS	NEVER	0 – 65535	FULL
46707	unsigned short	**V_SWELL_MINUTE_N_5**	Voltage Swell Minute @ n-5	0	ALWAYS	NEVER	0 – 65535	FULL
46708	unsigned short	**V_SWELL_SECOND_N_5**	Voltage Swell Second @ n-5	0	ALWAYS	NEVER	0 – 65535	FULL
46709	unsigned short	**V_SWELL_DURATION_N_5**	Voltage Swell Duration [ms] @ n-5	0	ALWAYS	NEVER	0 – 65535	FULL

46710	unsigned short	**V_SWELL_QUERY_N_5**	// Voltage Swell Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46711	float	**V_SWELL_VALUE_N_6**	Voltage Swell RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-6	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46713	unsigned short	**V_SWELL_YEAR_N_6**	Voltage Swell Year @ n-6	0	ALWAYS	NEVER	0 – 65535	FULL
46714	unsigned short	**V_SWELL_MONTH_N_6**	Voltage Swell Month @ n-6	0	ALWAYS	NEVER	0 – 65535	FULL
46715	unsigned short	**V_SWELL_DAY_N_6**	Voltage Swell Day @ n-6	0	ALWAYS	NEVER	0 – 65535	FULL
46716	unsigned short	**V_SWELL_HOUR_N_6**	Voltage Swell Hour @ n-6	0	ALWAYS	NEVER	0 – 65535	FULL
46717	unsigned short	**V_SWELL_MINUTE_N_6**	Voltage Swell Minute @ n-6	0	ALWAYS	NEVER	0 – 65535	FULL
46718	unsigned short	**V_SWELL_SECOND_N_6**	Voltage Swell Second @ n-6	0	ALWAYS	NEVER	0 – 65535	FULL
46719	unsigned short	**V_SWELL_DURATION_N_6**	Voltage Swell Duration [ms] @ n-6	0	ALWAYS	NEVER	0 – 65535	FULL
46720	unsigned short	**V_SWELL_QUERY_N_6**	// Voltage Swell Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46721	float	**V_SWELL_VALUE_N_7**	Voltage Swell RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-7	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46723	unsigned short	**V_SWELL_YEAR_N_7**	Voltage Swell Year @ n-7	0	ALWAYS	NEVER	0 – 65535	FULL
46724	unsigned short	**V_SWELL_MONTH_N_7**	Voltage Swell Month @ n-7	0	ALWAYS	NEVER	0 – 65535	FULL
46725	unsigned short	**V_SWELL_DAY_N_7**	Voltage Swell Day @ n-7	0	ALWAYS	NEVER	0 – 65535	FULL
46726	unsigned short	**V_SWELL_HOUR_N_7**	Voltage Swell Hour @ n-7	0	ALWAYS	NEVER	0 – 65535	FULL
46727	unsigned short	**V_SWELL_MINUTE_N_7**	Voltage Swell Minute @ n-7	0	ALWAYS	NEVER	0 – 65535	FULL
46728	unsigned short	**V_SWELL_SECOND_N_7**	Voltage Swell Second @ n-7	0	ALWAYS	NEVER	0 – 65535	FULL
46729	unsigned short	**V_SWELL_DURATION_N_7**	Voltage Swell Duration [ms] @ n-7	0	ALWAYS	NEVER	0 – 65535	FULL

46730	unsigned short	**V_SWELL_QUERY_N_7**	// Voltage Swell Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46731	float	**V_SWELL_VALUE_N_8**	Voltage Swell RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-8	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46733	unsigned short	**V_SWELL_YEAR_N_8**	Voltage Swell Year @ n-8	0	ALWAYS	NEVER	0 – 65535	FULL
46734	unsigned short	**V_SWELL_MONTH_N_8**	Voltage Swell Month @ n-8	0	ALWAYS	NEVER	0 – 65535	FULL
46735	unsigned short	**V_SWELL_DAY_N_8**	Voltage Swell Day @ n-8	0	ALWAYS	NEVER	0 – 65535	FULL
46736	unsigned short	**V_SWELL_HOUR_N_8**	Voltage Swell Hour @ n-8	0	ALWAYS	NEVER	0 – 65535	FULL
46737	unsigned short	**V_SWELL_MINUTE_N_8**	Voltage Swell Minute @ n-8	0	ALWAYS	NEVER	0 – 65535	FULL
46738	unsigned short	**V_SWELL_SECOND_N_8**	Voltage Swell Second @ n-8	0	ALWAYS	NEVER	0 – 65535	FULL
46739	unsigned short	**V_SWELL_DURATION_N_8**	Voltage Swell Duration [ms] @ n-8	0	ALWAYS	NEVER	0 – 65535	FULL
46740	unsigned short	**V_SWELL_QUERY_N_8**	// Voltage Swell Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46741	float	**V_SWELL_VALUE_N_9**	Voltage Swell RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-9	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46743	unsigned short	**V_SWELL_YEAR_N_9**	Voltage Swell Year @ n-9	0	ALWAYS	NEVER	0 – 65535	FULL
46744	unsigned short	**V_SWELL_MONTH_N_9**	Voltage Swell Month @ n-9	0	ALWAYS	NEVER	0 – 65535	FULL
46745	unsigned short	**V_SWELL_DAY_N_9**	Voltage Swell Day @ n-9	0	ALWAYS	NEVER	0 – 65535	FULL
46746	unsigned short	**V_SWELL_HOUR_N_9**	Voltage Swell Hour @ n-9	0	ALWAYS	NEVER	0 – 65535	FULL
46747	unsigned short	**V_SWELL_MINUTE_N_9**	Voltage Swell Minute @ n-9	0	ALWAYS	NEVER	0 – 65535	FULL
46748	unsigned short	**V_SWELL_SECOND_N_9**	Voltage Swell Second @ n-9	0	ALWAYS	NEVER	0 – 65535	FULL
46749	unsigned short	**V_SWELL_DURATION_N_9**	Voltage Swell Duration [ms] @ n-9	0	ALWAYS	NEVER	0 – 65535	FULL

46750	unsigned short	**V_SWELL_QUERY_N_9**	// Voltage Swell Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46751	float	**V_SWELL_VALUE_EEPROM**	Voltage Swell RMS Value (between 10% and 90% "Nominal_Star_Voltage") EEPROM data	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46753	unsigned short	**V_SWELL_YEAR_EEPROM**	Voltage Swell Year EEPROM data	0	ALWAYS	NEVER	0 – 65535	FULL
46754	unsigned short	**V_SWELL_MONTH_EEPROM**	Voltage Swell Month EEPROM data	0	ALWAYS	NEVER	0 – 65535	FULL
46755	unsigned short	**V_SWELL_DAY_EEPROM**	Voltage Swell Day EEPROM data	0	ALWAYS	NEVER	0 – 65535	FULL
46756	unsigned short	**V_SWELL_HOUR_EEPROM**	Voltage Swell Hour EEPROM data	0	ALWAYS	NEVER	0 – 65535	FULL
46757	unsigned short	**V_SWELL_MINUTE_EEPROM**	Voltage Swell Minute EEPROM data	0	ALWAYS	NEVER	0 – 65535	FULL
46758	unsigned short	**V_SWELL_SECOND_EEPROM**	Voltage Swell Second EEPROM data	0	ALWAYS	NEVER	0 – 65535	FULL
46759	unsigned short	**V_SWELL_DURATION_EEPROM**	Voltage Swell Duration [ms] EEPROM data	0	ALWAYS	NEVER	0 – 65535	FULL
46760	unsigned short	**V_SWELL_QUERY_EEPROM**	// Voltage Swell Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46761	float	**V_INTERRUPTION_VALUE_N_0**	Voltage Interruption RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-0	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46763	unsigned short	**V_INTERRUPTION_YEAR_N_0**	Voltage Interruption Year @ n-0	0	ALWAYS	NEVER	0 – 65535	FULL
46764	unsigned short	**V_INTERRUPTION_MONTH_N_0**	Voltage Interruption Month @ n-0	0	ALWAYS	NEVER	0 – 65535	FULL
46765	unsigned short	**V_INTERRUPTION_DAY_N_0**	Voltage Interruption Day @ n-0	0	ALWAYS	NEVER	0 – 65535	FULL
46766	unsigned short	**V_INTERRUPTION_HOUR_N_0**	Voltage Interruption Hour @ n-0	0	ALWAYS	NEVER	0 – 65535	FULL
46767	unsigned short	**V_INTERRUPTION_MINUTE_N_0**	Voltage Interruption Minute @ n-0	0	ALWAYS	NEVER	0 – 65535	FULL
46768	unsigned short	**V_INTERRUPTION_SECOND_N_0**	Voltage Interruption Second @ n-0	0	ALWAYS	NEVER	0 – 65535	FULL
46769	unsigned short	**V_INTERRUPTION_DURATION_N_0**	Voltage Interruption Duration [ms] @ n-0	0	ALWAYS	NEVER	0 – 65535	FULL

46770	unsigned short	**V_INTERRUPTION_QUERY_N_0**	// Voltage Swell Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46771	float	**V_INTERRUPTION_VALUE_N_1**	Voltage Interruption RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-1	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46773	unsigned short	**V_INTERRUPTION_YEAR_N_1**	Voltage Interruption Year @ n-1	0	ALWAYS	NEVER	0 – 65535	FULL
46774	unsigned short	**V_INTERRUPTION_MONTH_N_1**	Voltage Interruption Month @ n-1	0	ALWAYS	NEVER	0 – 65535	FULL
46775	unsigned short	**V_INTERRUPTION_DAY_N_1**	Voltage Interruption Day @ n-1	0	ALWAYS	NEVER	0 – 65535	FULL
46776	unsigned short	**V_INTERRUPTION_HOUR_N_1**	Voltage Interruption Hour @ n-1	0	ALWAYS	NEVER	0 – 65535	FULL
46777	unsigned short	**V_INTERRUPTION_MINUTE_N_1**	Voltage Interruption Minute @ n-1	0	ALWAYS	NEVER	0 – 65535	FULL
46778	unsigned short	**V_INTERRUPTION_SECOND_N_1**	Voltage Interruption Second @ n-1	0	ALWAYS	NEVER	0 – 65535	FULL
46779	unsigned short	**V_INTERRUPTION_DURATION_N_1**	Voltage Interruption Duration [ms] @ n-1	0	ALWAYS	NEVER	0 – 65535	FULL
46780	unsigned short	**V_INTERRUPTION_QUERY_N_1**	// Voltage Swell Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46781	float	**V_INTERRUPTION_VALUE_N_2**	Voltage Interruption RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-2	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46783	unsigned short	**V_INTERRUPTION_YEAR_N_2**	Voltage Interruption Year @ n-2	0	ALWAYS	NEVER	0 – 65535	FULL
46784	unsigned short	**V_INTERRUPTION_MONTH_N_2**	Voltage Interruption Month @ n-2	0	ALWAYS	NEVER	0 – 65535	FULL
46785	unsigned short	**V_INTERRUPTION_DAY_N_2**	Voltage Interruption Day @ n-2	0	ALWAYS	NEVER	0 – 65535	FULL
46786	unsigned short	**V_INTERRUPTION_HOUR_N_2**	Voltage Interruption Hour @ n-2	0	ALWAYS	NEVER	0 – 65535	FULL
46787	unsigned short	**V_INTERRUPTION_MINUTE_N_2**	Voltage Interruption Minute @ n-2	0	ALWAYS	NEVER	0 – 65535	FULL
46788	unsigned short	**V_INTERRUPTION_SECOND_N_2**	Voltage Interruption Second @ n-2	0	ALWAYS	NEVER	0 – 65535	FULL
46789	unsigned short	**V_INTERRUPTION_DURATION_N_2**	Voltage Interruption Duration [ms] @ n-2	0	ALWAYS	NEVER	0 – 65535	FULL

46790	unsigned short	**V_INTERRUPTION_QUERY_N_2**	// Voltage Swell Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46791	float	**V_INTERRUPTION_VALUE_N_3**	Voltage Interruption RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-3	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46793	unsigned short	**V_INTERRUPTION_YEAR_N_3**	Voltage Interruption Year @ n-3	0	ALWAYS	NEVER	0 – 65535	FULL
46794	unsigned short	**V_INTERRUPTION_MONTH_N_3**	Voltage Interruption Month @ n-3	0	ALWAYS	NEVER	0 – 65535	FULL
46795	unsigned short	**V_INTERRUPTION_DAY_N_3**	Voltage Interruption Day @ n-3	0	ALWAYS	NEVER	0 – 65535	FULL
46796	unsigned short	**V_INTERRUPTION_HOUR_N_3**	Voltage Interruption Hour @ n-3	0	ALWAYS	NEVER	0 – 65535	FULL
46797	unsigned short	**V_INTERRUPTION_MINUTE_N_3**	Voltage Interruption Minute @ n-3	0	ALWAYS	NEVER	0 – 65535	FULL
46798	unsigned short	**V_INTERRUPTION_SECOND_N_3**	Voltage Interruption Second @ n-3	0	ALWAYS	NEVER	0 – 65535	FULL
46799	unsigned short	**V_INTERRUPTION_DURATION_N_3**	Voltage Interruption Duration [ms] @ n-3	0	ALWAYS	NEVER	0 – 65535	FULL
46800	unsigned short	**V_INTERRUPTION_QUERY_N_3**	// Voltage Swell Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46801	float	**V_INTERRUPTION_VALUE_N_4**	Voltage Interruption RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-4	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46803	unsigned short	**V_INTERRUPTION_YEAR_N_4**	Voltage Interruption Year @ n-4	0	ALWAYS	NEVER	0 – 65535	FULL
46804	unsigned short	**V_INTERRUPTION_MONTH_N_4**	Voltage Interruption Month @ n-4	0	ALWAYS	NEVER	0 – 65535	FULL
46805	unsigned short	**V_INTERRUPTION_DAY_N_4**	Voltage Interruption Day @ n-4	0	ALWAYS	NEVER	0 – 65535	FULL
46806	unsigned short	**V_INTERRUPTION_HOUR_N_4**	Voltage Interruption Hour @ n-4	0	ALWAYS	NEVER	0 – 65535	FULL
46807	unsigned short	**V_INTERRUPTION_MINUTE_N_4**	Voltage Interruption Minute @ n-4	0	ALWAYS	NEVER	0 – 65535	FULL
46808	unsigned short	**V_INTERRUPTION_SECOND_N_4**	Voltage Interruption Second @ n-4	0	ALWAYS	NEVER	0 – 65535	FULL
46809	unsigned short	**V_INTERRUPTION_DURATION_N_4**	Voltage Interruption Duration [ms] @ n-4	0	ALWAYS	NEVER	0 – 65535	FULL

46810	unsigned short	**V_INTERRUPTION_QUERY_N_4**	// Voltage Swell Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46811	float	**V_INTERRUPTION_VALUE_N_5**	Voltage Interruption RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-5	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46813	unsigned short	**V_INTERRUPTION_YEAR_N_5**	Voltage Interruption Year @ n-5	0	ALWAYS	NEVER	0 – 65535	FULL
46814	unsigned short	**V_INTERRUPTION_MONTH_N_5**	Voltage Interruption Month @ n-5	0	ALWAYS	NEVER	0 – 65535	FULL
46815	unsigned short	**V_INTERRUPTION_DAY_N_5**	Voltage Interruption Day @ n-5	0	ALWAYS	NEVER	0 – 65535	FULL
46816	unsigned short	**V_INTERRUPTION_HOUR_N_5**	Voltage Interruption Hour @ n-5	0	ALWAYS	NEVER	0 – 65535	FULL
46817	unsigned short	**V_INTERRUPTION_MINUTE_N_5**	Voltage Interruption Minute @ n-5	0	ALWAYS	NEVER	0 – 65535	FULL
46818	unsigned short	**V_INTERRUPTION_SECOND_N_5**	Voltage Interruption Second @ n-5	0	ALWAYS	NEVER	0 – 65535	FULL
46819	unsigned short	**V_INTERRUPTION_DURATION_N_5**	Voltage Interruption Duration [ms] @ n-5	0	ALWAYS	NEVER	0 – 65535	FULL
46820	unsigned short	**V_INTERRUPTION_QUERY_N_5**	// Voltage Interruption Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46821	float	**V_INTERRUPTION_VALUE_N_6**	Voltage Interruption RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-6	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46823	unsigned short	**V_INTERRUPTION_YEAR_N_6**	Voltage Interruption Year @ n-6	0	ALWAYS	NEVER	0 – 65535	FULL
46824	unsigned short	**V_INTERRUPTION_MONTH_N_6**	Voltage Interruption Month @ n-6	0	ALWAYS	NEVER	0 – 65535	FULL
46825	unsigned short	**V_INTERRUPTION_DAY_N_6**	Voltage Interruption Day @ n-6	0	ALWAYS	NEVER	0 – 65535	FULL
46826	unsigned short	**V_INTERRUPTION_HOUR_N_6**	Voltage Interruption Hour @ n-6	0	ALWAYS	NEVER	0 – 65535	FULL
46827	unsigned short	**V_INTERRUPTION_MINUTE_N_6**	Voltage Interruption Minute @ n-6	0	ALWAYS	NEVER	0 – 65535	FULL
46828	unsigned short	**V_INTERRUPTION_SECOND_N_6**	Voltage Interruption Second @ n-6	0	ALWAYS	NEVER	0 – 65535	FULL
46829	unsigned short	**V_INTERRUPTION_DURATION_N_6**	Voltage Interruption Duration [ms] @ n-6	0	ALWAYS	NEVER	0 – 65535	FULL

46830	unsigned short	**V_INTERRUPTION_QUERY_N_6**	// Voltage Interruption Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46831	float	**V_INTERRUPTION_VALUE_N_7**	Voltage Interruption RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-7	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46833	unsigned short	**V_INTERRUPTION_YEAR_N_7**	Voltage Interruption Year @ n-7	0	ALWAYS	NEVER	0 – 65535	FULL
46834	unsigned short	**V_INTERRUPTION_MONTH_N_7**	Voltage Interruption Month @ n-7	0	ALWAYS	NEVER	0 – 65535	FULL
46835	unsigned short	**V_INTERRUPTION_DAY_N_7**	Voltage Interruption Day @ n-7	0	ALWAYS	NEVER	0 – 65535	FULL
46836	unsigned short	**V_INTERRUPTION_HOUR_N_7**	Voltage Interruption Hour @ n-7	0	ALWAYS	NEVER	0 – 65535	FULL
46837	unsigned short	**V_INTERRUPTION_MINUTE_N_7**	Voltage Interruption Minute @ n-7	0	ALWAYS	NEVER	0 – 65535	FULL
46838	unsigned short	**V_INTERRUPTION_SECOND_N_7**	Voltage Interruption Second @ n-7	0	ALWAYS	NEVER	0 – 65535	FULL
46839	unsigned short	**V_INTERRUPTION_DURATION_N_7**	Voltage Interruption Duration [ms] @ n-7	0	ALWAYS	NEVER	0 – 65535	FULL
46840	unsigned short	**V_INTERRUPTION_QUERY_N_7**	// Voltage Interruption Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46841	float	**V_INTERRUPTION_VALUE_N_8**	Voltage Interruption RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-8	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46843	unsigned short	**V_INTERRUPTION_YEAR_N_8**	Voltage Interruption Year @ n-8	0	ALWAYS	NEVER	0 – 65535	FULL
46844	unsigned short	**V_INTERRUPTION_MONTH_N_8**	Voltage Interruption Month @ n-8	0	ALWAYS	NEVER	0 – 65535	FULL
46845	unsigned short	**V_INTERRUPTION_DAY_N_8**	Voltage Interruption Day @ n-8	0	ALWAYS	NEVER	0 – 65535	FULL
46846	unsigned short	**V_INTERRUPTION_HOUR_N_8**	Voltage Interruption Hour @ n-8	0	ALWAYS	NEVER	0 – 65535	FULL
46847	unsigned short	**V_INTERRUPTION_MINUTE_N_8**	Voltage Interruption Minute @ n-8	0	ALWAYS	NEVER	0 – 65535	FULL
46848	unsigned short	**V_INTERRUPTION_SECOND_N_8**	Voltage Interruption Second @ n-8	0	ALWAYS	NEVER	0 – 65535	FULL
46849	unsigned short	**V_INTERRUPTION_DURATION_N_8**	Voltage Interruption Duration [ms] @ n-8	0	ALWAYS	NEVER	0 – 65535	FULL

46850	unsigned short	**V_INTERRUPTION_QUERY_N_8**	// Voltage Interruption Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46851	float	**V_INTERRUPTION_VALUE_N_9**	Voltage Interruption RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-9	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46853	unsigned short	**V_INTERRUPTION_YEAR_N_9**	Voltage Interruption Year @ n-9	0	ALWAYS	NEVER	0 – 65535	FULL
46854	unsigned short	**V_INTERRUPTION_MONTH_N_9**	Voltage Interruption Month @ n-9	0	ALWAYS	NEVER	0 – 65535	FULL
46855	unsigned short	**V_INTERRUPTION_DAY_N_9**	Voltage Interruption Day @ n-9	0	ALWAYS	NEVER	0 – 65535	FULL
46856	unsigned short	**V_INTERRUPTION_HOUR_N_9**	Voltage Interruption Hour @ n-9	0	ALWAYS	NEVER	0 – 65535	FULL
46857	unsigned short	**V_INTERRUPTION_MINUTE_N_9**	Voltage Interruption Minute @ n-9	0	ALWAYS	NEVER	0 – 65535	FULL
46858	unsigned short	**V_INTERRUPTION_SECOND_N_9**	Voltage Interruption Second @ n-9	0	ALWAYS	NEVER	0 – 65535	FULL
46859	unsigned short	**V_INTERRUPTION_DURATION_N_9**	Voltage Interruption Duration [ms] @ n-9	0	ALWAYS	NEVER	0 – 65535	FULL
46860	unsigned short	**V_INTERRUPTION_QUERY_N_9**	// Voltage Interruption Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46861	float	**V_INTERRUPTION_VALUE_EEPROM**	Voltage Interruption RMS Value (between 10% and 90% "Nominal_Star_Voltage") EEPROM data	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46863	unsigned short	**V_INTERRUPTION_YEAR_EEPROM**	Voltage Interruption Year EEPROM data	0	ALWAYS	NEVER	0 – 65535	FULL
46864	unsigned short	**V_INTERRUPTION_MONTH_EEPROM**	Voltage Interruption Month EEPROM data	0	ALWAYS	NEVER	0 – 65535	FULL
46865	unsigned short	**V_INTERRUPTION_DAY_EEPROM**	Voltage Interruption Day EEPROM data	0	ALWAYS	NEVER	0 – 65535	FULL
46866	unsigned short	**V_INTERRUPTION_HOUR_EEPROM**	Voltage Interruption Hour EEPROM data	0	ALWAYS	NEVER	0 – 65535	FULL
46867	unsigned short	**V_INTERRUPTION_MINUTE_EEPROM**	Voltage Interruption Minute EEPROM data	0	ALWAYS	NEVER	0 – 65535	FULL
46868	unsigned short	**V_INTERRUPTION_SECOND_EEPROM**	Voltage Interruption Second EEPROM data	0	ALWAYS	NEVER	0 – 65535	FULL
46869	unsigned short	**V_INTERRUPTION_DURATION_EEPROM**	Voltage Interruption Duration [ms] EEPROM data	0	ALWAYS	NEVER	0 – 65535	FULL

46870	unsigned short	**V_INTERRUPTION_QUERY_EEPROM**	// Voltage Interruption Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46871	float	**V_FLICKER_VALUE_N_0**	Voltage Flicker RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-0	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46873	unsigned short	**V_FLICKER_YEAR_N_0**	Voltage Flicker Year @ n-0	0	ALWAYS	NEVER	0 – 65535	FULL
46874	unsigned short	**V_FLICKER_MONTH_N_0**	Voltage Flicker Month @ n-0	0	ALWAYS	NEVER	0 – 65535	FULL
46875	unsigned short	**V_FLICKER_DAY_N_0**	Voltage Flicker Day @ n-0	0	ALWAYS	NEVER	0 – 65535	FULL
46876	unsigned short	**V_FLICKER_HOUR_N_0**	Voltage Flicker Hour @ n-0	0	ALWAYS	NEVER	0 – 65535	FULL
46877	unsigned short	**V_FLICKER_MINUTE_N_0**	Voltage Flicker Minute @ n-0	0	ALWAYS	NEVER	0 – 65535	FULL
46878	unsigned short	**V_FLICKER_SECOND_N_0**	Voltage Flicker Second @ n-0	0	ALWAYS	NEVER	0 – 65535	FULL
46879	unsigned short	**V_FLICKER_REPETITION_N_0**	Voltage Flicker Repetition [ms] @ n-0	0	ALWAYS	NEVER	0 – 65535	FULL
46880	unsigned short	**V_FLICKER_QUERY_N_0**	// Voltage Interruption Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46881	float	**V_FLICKER_VALUE_N_1**	Voltage Flicker RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-1	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46883	unsigned short	**V_FLICKER_YEAR_N_1**	Voltage Flicker Year @ n-1	0	ALWAYS	NEVER	0 – 65535	FULL
46884	unsigned short	**V_FLICKER_MONTH_N_1**	Voltage Flicker Month @ n-1	0	ALWAYS	NEVER	0 – 65535	FULL
46885	unsigned short	**V_FLICKER_DAY_N_1**	Voltage Flicker Day @ n-1	0	ALWAYS	NEVER	0 – 65535	FULL
46886	unsigned short	**V_FLICKER_HOUR_N_1**	Voltage Flicker Hour @ n-1	0	ALWAYS	NEVER	0 – 65535	FULL
46887	unsigned short	**V_FLICKER_MINUTE_N_1**	Voltage Flicker Minute @ n-1	0	ALWAYS	NEVER	0 – 65535	FULL
46888	unsigned short	**V_FLICKER_SECOND_N_1**	Voltage Flicker Second @ n-1	0	ALWAYS	NEVER	0 – 65535	FULL
46889	unsigned short	**V_FLICKER_REPETITION_N_1**	Voltage Flicker Repetition [ms] @ n-1	0	ALWAYS	NEVER	0 – 65535	FULL

46890	unsigned short	**V_FLICKER_QUERY_N_1**	// Voltage Interruption Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46891	float	**V_FLICKER_VALUE_N_2**	Voltage Flicker RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-2	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46893	unsigned short	**V_FLICKER_YEAR_N_2**	Voltage Flicker Year @ n-2	0	ALWAYS	NEVER	0 – 65535	FULL
46894	unsigned short	**V_FLICKER_MONTH_N_2**	Voltage Flicker Month @ n-2	0	ALWAYS	NEVER	0 – 65535	FULL
46895	unsigned short	**V_FLICKER_DAY_N_2**	Voltage Flicker Day @ n-2	0	ALWAYS	NEVER	0 – 65535	FULL
46896	unsigned short	**V_FLICKER_HOUR_N_2**	Voltage Flicker Hour @ n-2	0	ALWAYS	NEVER	0 – 65535	FULL
46897	unsigned short	**V_FLICKER_MINUTE_N_2**	Voltage Flicker Minute @ n-2	0	ALWAYS	NEVER	0 – 65535	FULL
46898	unsigned short	**V_FLICKER_SECOND_N_2**	Voltage Flicker Second @ n-2	0	ALWAYS	NEVER	0 – 65535	FULL
46899	unsigned short	**V_FLICKER_REPETITION_N_2**	Voltage Flicker Repetition [ms] @ n-2	0	ALWAYS	NEVER	0 – 65535	FULL
46900	unsigned short	**V_FLICKER_QUERY_N_2**	// Voltage Flicker Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46901	float	**V_FLICKER_VALUE_N_3**	Voltage Flicker RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-3	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46903	unsigned short	**V_FLICKER_YEAR_N_3**	Voltage Flicker Year @ n-3	0	ALWAYS	NEVER	0 – 65535	FULL
46904	unsigned short	**V_FLICKER_MONTH_N_3**	Voltage Flicker Month @ n-3	0	ALWAYS	NEVER	0 – 65535	FULL
46905	unsigned short	**V_FLICKER_DAY_N_3**	Voltage Flicker Day @ n-3	0	ALWAYS	NEVER	0 – 65535	FULL
46906	unsigned short	**V_FLICKER_HOUR_N_3**	Voltage Flicker Hour @ n-3	0	ALWAYS	NEVER	0 – 65535	FULL
46907	unsigned short	**V_FLICKER_MINUTE_N_3**	Voltage Flicker Minute @ n-3	0	ALWAYS	NEVER	0 – 65535	FULL
46908	unsigned short	**V_FLICKER_SECOND_N_3**	Voltage Flicker Second @ n-3	0	ALWAYS	NEVER	0 – 65535	FULL
46909	unsigned short	**V_FLICKER_REPETITION_N_3**	Voltage Flicker Repetition [ms] @ n-3	0	ALWAYS	NEVER	0 – 65535	FULL

46910	unsigned short	**V_FLICKER_QUERY_N_3**	// Voltage Flicker Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46911	float	**V_FLICKER_VALUE_N_4**	Voltage Flicker RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-4	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46913	unsigned short	**V_FLICKER_YEAR_N_4**	Voltage Flicker Year @ n-4	0	ALWAYS	NEVER	0 – 65535	FULL
46914	unsigned short	**V_FLICKER_MONTH_N_4**	Voltage Flicker Month @ n-4	0	ALWAYS	NEVER	0 – 65535	FULL
46915	unsigned short	**V_FLICKER_DAY_N_4**	Voltage Flicker Day @ n-4	0	ALWAYS	NEVER	0 – 65535	FULL
46916	unsigned short	**V_FLICKER_HOUR_N_4**	Voltage Flicker Hour @ n-4	0	ALWAYS	NEVER	0 – 65535	FULL
46917	unsigned short	**V_FLICKER_MINUTE_N_4**	Voltage Flicker Minute @ n-4	0	ALWAYS	NEVER	0 – 65535	FULL
46918	unsigned short	**V_FLICKER_SECOND_N_4**	Voltage Flicker Second @ n-4	0	ALWAYS	NEVER	0 – 65535	FULL
46919	unsigned short	**V_FLICKER_REPETITION_N_4**	Voltage Flicker Repetition [ms] @ n-4	0	ALWAYS	NEVER	0 – 65535	FULL
46920	unsigned short	**V_FLICKER_QUERY_N_4**	// Voltage Flicker Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46921	float	**V_FLICKER_VALUE_N_5**	Voltage Flicker RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-5	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46923	unsigned short	**V_FLICKER_YEAR_N_5**	Voltage Flicker Year @ n-5	0	ALWAYS	NEVER	0 – 65535	FULL
46924	unsigned short	**V_FLICKER_MONTH_N_5**	Voltage Flicker Month @ n-5	0	ALWAYS	NEVER	0 – 65535	FULL
46925	unsigned short	**V_FLICKER_DAY_N_5**	Voltage Flicker Day @ n-5	0	ALWAYS	NEVER	0 – 65535	FULL
46926	unsigned short	**V_FLICKER_HOUR_N_5**	Voltage Flicker Hour @ n-5	0	ALWAYS	NEVER	0 – 65535	FULL
46927	unsigned short	**V_FLICKER_MINUTE_N_5**	Voltage Flicker Minute @ n-5	0	ALWAYS	NEVER	0 – 65535	FULL
46928	unsigned short	**V_FLICKER_SECOND_N_5**	Voltage Flicker Second @ n-5	0	ALWAYS	NEVER	0 – 65535	FULL
46929	unsigned short	**V_FLICKER_REPETITION_N_5**	Voltage Flicker Repetition [ms] @ n-5	0	ALWAYS	NEVER	0 – 65535	FULL

46930	unsigned short	**V_FLICKER_QUERY_N_5**	// Voltage Flicker Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46931	float	**V_FLICKER_VALUE_N_6**	Voltage Flicker RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-6	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46933	unsigned short	**V_FLICKER_YEAR_N_6**	Voltage Flicker Year @ n-6	0	ALWAYS	NEVER	0 – 65535	FULL
46934	unsigned short	**V_FLICKER_MONTH_N_6**	Voltage Flicker Month @ n-6	0	ALWAYS	NEVER	0 – 65535	FULL
46935	unsigned short	**V_FLICKER_DAY_N_6**	Voltage Flicker Day @ n-6	0	ALWAYS	NEVER	0 – 65535	FULL
46936	unsigned short	**V_FLICKER_HOUR_N_6**	Voltage Flicker Hour @ n-6	0	ALWAYS	NEVER	0 – 65535	FULL
46937	unsigned short	**V_FLICKER_MINUTE_N_6**	Voltage Flicker Minute @ n-6	0	ALWAYS	NEVER	0 – 65535	FULL
46938	unsigned short	**V_FLICKER_SECOND_N_6**	Voltage Flicker Second @ n-6	0	ALWAYS	NEVER	0 – 65535	FULL
46939	unsigned short	**V_FLICKER_REPETITION_N_6**	Voltage Flicker Repetition [ms] @ n-6	0	ALWAYS	NEVER	0 – 65535	FULL
46940	unsigned short	**V_FLICKER_QUERY_N_6**	// Voltage Flicker Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46941	float	**V_FLICKER_VALUE_N_7**	Voltage Flicker RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-7	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46943	unsigned short	**V_FLICKER_YEAR_N_7**	Voltage Flicker Year @ n-7	0	ALWAYS	NEVER	0 – 65535	FULL
46944	unsigned short	**V_FLICKER_MONTH_N_7**	Voltage Flicker Month @ n-7	0	ALWAYS	NEVER	0 – 65535	FULL
46945	unsigned short	**V_FLICKER_DAY_N_7**	Voltage Flicker Day @ n-7	0	ALWAYS	NEVER	0 – 65535	FULL
46946	unsigned short	**V_FLICKER_HOUR_N_7**	Voltage Flicker Hour @ n-7	0	ALWAYS	NEVER	0 – 65535	FULL
46947	unsigned short	**V_FLICKER_MINUTE_N_7**	Voltage Flicker Minute @ n-7	0	ALWAYS	NEVER	0 – 65535	FULL
46948	unsigned short	**V_FLICKER_SECOND_N_7**	Voltage Flicker Second @ n-7	0	ALWAYS	NEVER	0 – 65535	FULL
46949	unsigned short	**V_FLICKER_REPETITION_N_7**	Voltage Flicker Repetition [ms] @ n-7	0	ALWAYS	NEVER	0 – 65535	FULL

46950	unsigned short	**V_FLICKER_QUERY_N_7**	// Voltage Flicker Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46951	float	**V_FLICKER_VALUE_N_8**	Voltage Flicker RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-8	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46953	unsigned short	**V_FLICKER_YEAR_N_8**	Voltage Flicker Year @ n-8	0	ALWAYS	NEVER	0 – 65535	FULL
46954	unsigned short	**V_FLICKER_MONTH_N_8**	Voltage Flicker Month @ n-8	0	ALWAYS	NEVER	0 – 65535	FULL
46955	unsigned short	**V_FLICKER_DAY_N_8**	Voltage Flicker Day @ n-8	0	ALWAYS	NEVER	0 – 65535	FULL
46956	unsigned short	**V_FLICKER_HOUR_N_8**	Voltage Flicker Hour @ n-8	0	ALWAYS	NEVER	0 – 65535	FULL
46957	unsigned short	**V_FLICKER_MINUTE_N_8**	Voltage Flicker Minute @ n-8	0	ALWAYS	NEVER	0 – 65535	FULL
46958	unsigned short	**V_FLICKER_SECOND_N_8**	Voltage Flicker Second @ n-8	0	ALWAYS	NEVER	0 – 65535	FULL
46959	unsigned short	**V_FLICKER_REPETITION_N_8**	Voltage Flicker Repetition [ms] @ n-8	0	ALWAYS	NEVER	0 – 65535	FULL
46960	unsigned short	**V_FLICKER_QUERY_N_8**	// Voltage Flicker Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46961	float	**V_FLICKER_VALUE_N_9**	Voltage Flicker RMS Value (between 10% and 90% "Nominal_Star_Voltage") @ n-9	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46963	unsigned short	**V_FLICKER_YEAR_N_9**	Voltage Flicker Year @ n-9	0	ALWAYS	NEVER	0 – 65535	FULL
46964	unsigned short	**V_FLICKER_MONTH_N_9**	Voltage Flicker Month @ n-9	0	ALWAYS	NEVER	0 – 65535	FULL
46965	unsigned short	**V_FLICKER_DAY_N_9**	Voltage Flicker Day @ n-9	0	ALWAYS	NEVER	0 – 65535	FULL
46966	unsigned short	**V_FLICKER_HOUR_N_9**	Voltage Flicker Hour @ n-9	0	ALWAYS	NEVER	0 – 65535	FULL
46967	unsigned short	**V_FLICKER_MINUTE_N_9**	Voltage Flicker Minute @ n-9	0	ALWAYS	NEVER	0 – 65535	FULL
46968	unsigned short	**V_FLICKER_SECOND_N_9**	Voltage Flicker Second @ n-9	0	ALWAYS	NEVER	0 – 65535	FULL
46969	unsigned short	**V_FLICKER_REPETITION_N_9**	Voltage Flicker Repetition [ms] @ n-9	0	ALWAYS	NEVER	0 – 65535	FULL

46970	unsigned short	**V_FLICKER_QUERY_N_9**	// Voltage Flicker Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL
46971	float	**V_FLICKER_VALUE_EEPROM**	Voltage Flicker RMS Value (between 10% and 90% "Nominal_Star_Voltage") EEPROM data	0	ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
46973	unsigned short	**V_FLICKER_YEAR_EEPROM**	Voltage Flicker Year EEPROM data	0	ALWAYS	NEVER	0 – 65535	FULL
46974	unsigned short	**V_FLICKER_MONTH_EEPROM**	Voltage Flicker Month EEPROM data	0	ALWAYS	NEVER	0 – 65535	FULL
46975	unsigned short	**V_FLICKER_DAY_EEPROM**	Voltage Flicker Day EEPROM data	0	ALWAYS	NEVER	0 – 65535	FULL
46976	unsigned short	**V_FLICKER_HOUR_EEPROM**	Voltage Flicker Hour EEPROM data	0	ALWAYS	NEVER	0 – 65535	FULL
46977	unsigned short	**V_FLICKER_MINUTE_EEPROM**	Voltage Flicker Minute EEPROM data	0	ALWAYS	NEVER	0 – 65535	FULL
46978	unsigned short	**V_FLICKER_SECOND_EEPROM**	Voltage Flicker Second EEPROM data	0	ALWAYS	NEVER	0 – 65535	FULL
46979	unsigned short	**V_FLICKER_REPETITION_EEPROM**	Voltage Flicker Repetition [ms] EEPROM data	0	ALWAYS	NEVER	0 – 65535	FULL
46980	unsigned short	**V_FLICKER_QUERY_EEPROM**	// Voltage Flicker Type: // 0: V_L1N // 1: V_L2N // 2: V_L3N // 3: V_L1L2 // 4: V_L2L3 // 5: V_L3L1	0	ALWAYS	NEVER	0 – 65535	FULL

3.8 Forme d'onda (oscilloscopio)

Forme d'onda (oscilloscopio)								
Registro	**Tipo**	**Nome**	**Descrizione**	**Default**	**Lettura**	**Scrittura**	**Min – Max**	**Ver.**
46981 – 47236	float × 128	**V_L1N_Oscilloscope_0** **…** **V_L1N_Oscilloscope_127**	Star Voltage L1-N Sample #0 … Star Voltage L1-N Sample #127		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
47237 – 47492	float × 128	**V_L2N_Oscilloscope_0** **…** **V_L2N_Oscilloscope_127**	Star Voltage L2-N Sample #0 … Star Voltage L2-N Sample #127		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL

47493 – 47748	float × 128	**V_L3N_Oscilloscope_0 … V_L3N_Oscilloscope_127**	Star Voltage L3-N Sample #0 … Star Voltage L3-N Sample #127		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
47749 – 48004	float × 128	**V_L12_Oscilloscope_0 … V_L12_Oscilloscope_127**	Line Voltage L1-L2 Sample #0 … Line Voltage L1-L2 Sample #127		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
48005 – 48260	float × 128	**V_L23_Oscilloscope_0 … V_L23_Oscilloscope_127**	Line Voltage L2-L3 Sample #0 … Line Voltage L2-L3 Sample #127		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
48261 – 48516	float × 128	**V_L31_Oscilloscope_0 … V_L31_Oscilloscope_127**	Line Voltage L3-L1 Sample #0 … Line Voltage L3-L1 Sample #127		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
48517 – 48772	float × 128	**I_L1_Oscilloscope_0 … I_L1_Oscilloscope_127**	Line Current L1 Sample #0 … Line Current L1 Sample #127		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
48773 – 49028	float × 128	**I_L2_Oscilloscope_0 … I_L2_Oscilloscope_127**	Line Current L2 Sample #0 … Line Current L2 Sample #127		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
49029 – 49284	float × 128	**I_L3_Oscilloscope_0 … I_L3_Oscilloscope_127**	Line Current L3 Sample #0 … Line Current L3 Sample #127		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL
49285 – 49540	float × 128	**I_N_Oscilloscope_0 … I_N_Oscilloscope_127**	Line Current N Sample #0 … Line Current N Sample #127		ALWAYS	NEVER	-3.4028235e+38 – 3.4028235e+38	FULL

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