

## ICG MT860 High precision modular meter

Active, Reactive and kWh kVAh kvarh Apparent Energy 4 Quadrant measurement IEC 0,2S Accuracy class Multiple connection types Transformer connection / VT NV Q Power quality according to EN 50160 Maximum demand Load profile Load control Event log Real-time clock tarifi 8 Multi-rate registration **IEC** IEC 62056 - 21 compliance Real time SCADA, SCAD/ ready Modbus communications protocol

PSTN 2G ETHERNET Communication RS232 RS485 RS232 interface RS485 interface CS (20 mA current loop) interface

Photovoltaic ready

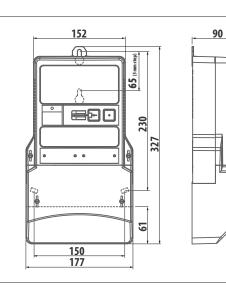
CS (20 mA current loop) interface IR (optical port) interface Proven technology, highest precision and communication modularity make the **MT860** the best solution for production and transmission applications. This multi-functional device meets modern market demands with extended functionalities:

- »No power reading« option via optical port
- Anti-tampering features
- Voltage cut, sag and swell detection
- Power quality monitoring
- Photovoltaic friendly design
- Recyclable casing material

Meter dimensions

- Exchangeable communication modules
- Exchangeable input/output modules





## ICG MT860 High precision modular meter

		MT860S-T1 CT connected	MT860S-T1 CT & VT connected
		Type overview	
	High voltage	ijje overheit	•
Network	Medium voltage	•	
	Low voltage		•
	-	•	•
Connection type	3P4W	•	•
	3P3W		
Communication type	on board	Optical probe + no power reading, RS-485	
modules		CS — RS485, RS485-RS485, RS232-RS485, MODBUS TCP/IP & RTU, Ethernet — RS485, GSM/GPRS-RS485 External power supply, Two impulse outputs, RS485	
Outputs – on board		external power supply, Iwo impuse outputs, אאמס 4 OPTOMOS outputs + 5A bistable relay + 1 input, 5 OPTOMOS outputs + 1 input, 8 OPTOMOS outputs + 4 inputs	
Input – output options	_		JMOS OUTPUTS + 1 INPUT, 8 OP IOMOS OUTPUTS + 4 INPUTS
Newinal valtage		Technical specifications 3 x 57.7/100 V 3 x 240/415 V	3 x 57.7/100 V 3 x 240/415 V
Nominal voltage Un			
Voltage range		0.8 – 1.15 Un 50 Hz ±2 % or 60 Hz ±2 %	
Reference frequency Nominal current In		1 A, 2 A, 5 A, 5//1 A	
Groundath		T K, 2 K, 3 K, 3/1 K	
Current		-	
	Maximal current Imax	6 A, 10 A	
Accuracy class	Active energy	Class 0.25 (IEC 62053 - 22)	
	Reactive energy	Class 2, 3 (IEC 62053-23), calibrated up to 0.5%	
	Apparent energy	According to the IEC 62053 - 22 standard	
Real-time clock	Accuracy	Crystal: $< 5 \text{ ppm} = \le \pm 3 \text{ min./year} (T = +25 \text{ °C})$	
	Back-up power supply	Li battery : 10 years	
External power supply	Value	100 – 240 V AC/DC	
	Tolerance	0.8 – 1.15 Un	
	Frequency (only for AC)	50 Hz or 60 Hz	
Temperature ranges	Operation	-40 °C +70 °C	
(IEC 62052 - 11) Storage		-40 °C +80 °C	
Ingress protection IEC 60529		IP 53	
Liquid Crystal Display		2013/12/04 15:10:17 1-0:32.7.0*255 227.6 U L123 A+R+ T2 MT	
		Basic functionality	
Measurement		Active (import/export) and Reactive energy (import/export), 4Q Reactive, Apparent energy & demand, Phase and three phase energy/demand measurements, Current average, maximum and cumulative demand measurement, Maximum demand can be calculated for all energies measured as tariff rated or cumulative	
Tariff functions		Complex time-of-use (TOU), Tariff control via RTC or external inputs	
Load profiles		Two independent Load profiles, Programmable and independent Load profiles period, Event log	
Communication		Independent communication channels, MODBUS RTU and MODBUS TCP/IP	
Power quality		Measurement of RMS phase current, RMS phase voltage, Power factor, Network frequency, Phase angles, Voltage interruptions, Short power outages	
		Specific	
Backlit LCD displa	ay, Detection of opening main and	terminal cover, Secured communication channels, Network anomali	es detection, Communication modules, Input/output modules
Enhance	d Dawar quality maacuramant faa	Specific	no case and swells) Load control DTC (Libettery)
Ennance	eu rower quality measurement tea	tures (Harmonic components, Total harmonic distortion factor, Volta	ye says dilu swelis), Lodu Colliloi, NIC (Li Ddllery)
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