













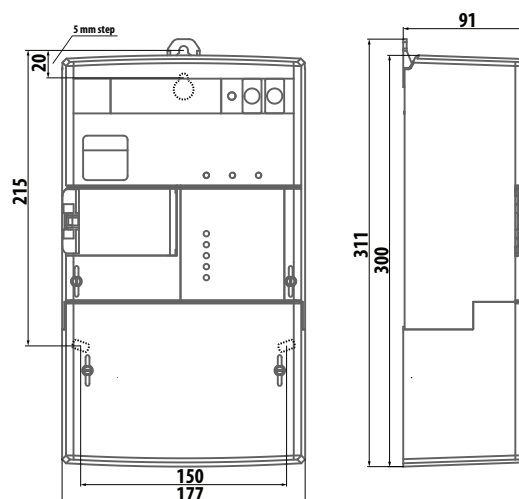


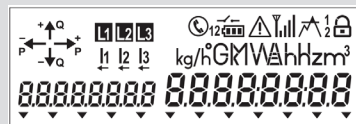
<b>kWh</b>	<b>kvarh</b>	<b>kVAh</b>	Active, Reactive and Apparent Energy
	4 Quadrant measurement		
<b>MID C</b>	<b>IEC 0.5S</b>	Accuracy class	
			Multiple connection types
<b>CT VT</b>	Direct or transformer connection		
	Power quality according to EN 50160		
	Maximum demand		
	Load profile		
	Load control		
	Event log		
	Real-time clock		
<b>tariff 8</b>	Multi-rate registration		
	<b>IEC 62056 - 21</b>	DLMS – COSEM compliance IEC 62056 - 21	
<b>SCADA ready</b>	<b>Modbus</b>	Real time SCADA, Modbus communications protocol	
<b>3G</b>	<b>2G</b>	<b>ETHERNET</b>	Communication
<b>RS232</b>	<b>RS485</b>	RS232 interface RS485 interface	
<b>CS</b>		CS (20 mA current loop) interface Optical port	
	Photovoltaic ready		

Iskraemeco MT880 is a precision multi-functional meter ideally suited for large and mid-size commercial and industrial applications. It is designed to provide its users a comprehensive functionality set:

- “No power reading” option via optical port
- Voltage cut, sag and swell detection
- Internal and external power supply
- Extensive anti-tampering features
- Integrated power quality monitoring
- Multiple log books
- Photovoltaic friendly design
- SCADA interface
- IEC 62056 - 21 and DLMS/COSEM protocol for easy integration
- Enhanced TOU structure

#### Meter dimensions



		MT880-D2..-M directly connected	MT880-T1..-M CT connected	MT880-T1..-M CT & VT connected
Type overview				
Network	High voltage		●	●
	Medium voltage	●	●	●
	Low voltage	●	●	
Connection type	3P4W	●	●	
	3P3W	●	●	
	3P3W (two systems)		●	●
Communication type – on board		RS232, RS485		
Communication type – module		CS – RS485, 2G modem – RS485, MODBUS TCP/IP & RTU – Analog output, Ethernet – RS485		
Input – output options		3 OPTOMOS outputs + 5A bistable relay		–
		5 inputs, 5 OPTOMOS outputs + 5A bistable relay, 5 inputs, 8 OPTOMOS outputs + 5A bistable relay		
Technical specifications				
Nominal voltage	Un	3 x 110/190 V ... 3 x 240/415 V	3 x 57.7/100 V ... 3 x 240/415 V	3 x 57.7/100 V ... 3 x 110/190 V
Voltage range		0.8 – 1.15 Un		
Reference frequency		50 Hz ±2 % or 60 Hz ±2 %		
Current	Nominal current In	–	1 A, 1.5 A, 2 A, 5 A, 5//1 A	
	Base current Ib	5 A, 10 A	–	–
	Maximal current Imax	120 A	Version 1: 6 A, 10 A Version 2: 20 A (In = 5 A)	6 A, 10 A
Accuracy class	Active energy	A, B or C (EN 50470 - 3, EN 50470-1) Class 1 (IEC 62053 - 21) Calibrated to 0,5%	A, B or C (EN 50470 - 3, EN 50470-1), Class 1 (IEC 62053 - 21), Class 0.5S (IEC 62053 - 22)	
	Reactive energy	Class 1 (IEC 62053 - 24), Class 2 (IEC 62053 - 23)		
	Apparent energy	Calibrated up to 1%		
Real-time clock	Accuracy	Better than ±3 min/year at 23 °C		
	Back-up power supply	Li battery: 5 years life time up to 20 years		
External power supply	Value	–	57.7 – 240 V AC/DC	
	Tolerance	–	0.8 – 1.15 Un	
	Frequency (only for AC)	–	50 Hz or 60 Hz	
Temperature ranges (IEC 62052 - 11)	Operation	-40 °C ... +70 °C		
	Storage	-40 °C ... +85 °C		
Ingress protection IEC 60529		IP 54		
Liquid Crystal Display				
Basic functionality				
Measurement	Active (import/export) and Reactive energy (import/export), 4Q Reactive, Apparent energy & demand, Phase and three phase energy/demand measurements, Maximum demand with programmable integration period			
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, Eight separate Event logs			
Communication	IEC 62056 - 46 (DLMS) and IEC 62056 - 21 on all communication interfaces, MODBUS RTU and MODBUS TCP/IP, Independent communication channels			
Power quality	Measurement of RMS phase current, RMS phase voltage, Power factor, Network frequency, Phase angles, Voltage interruptions			
Specific				
Backlit LCD display, Detection of opening main and terminal cover, External magnetic field detector, Secured communication channels, Network anomalies detection				
Optional				
Enhanced Power quality measurement features (Harmonic components, Total harmonic distortion factor, Voltage sags and swells), Communication modules (see Type overview table), Load control, RTC (Li battery)				



Iskraemeco, Energy Measurement and Management  
 4000 Kranj, Savska loka 4, Slovenia  
 Telephone: +386 4 206 40 00  
<http://www.iskraemeco.com>, e-mail: [info@iskraemeco.com](mailto:info@iskraemeco.com)