

Product data sheet

Specifications



M8800A energy meter - 5 MB - class A - 1 A input - 50 Hz - RS+RJ45

M8800A2E0B5E0E1A

Main

Range	PowerLogic
Device short name	ION8800A
Product or component type	Energy and power quality meter

Complementary

Power quality analysis	conforming to IEC 61000-4-15 flicker magnitude harmonic up to the 50th conforming to IEEE 519: 1992 harmonic control conforming to IEEE 1159: 1995 power quality monitoring symmetrical component transient detection (20 µs) voltage sag and swell detection programmability (logic and math functions) up to the 63rd harmonic conforming to IEC 61000-4-30: class A power quality measurement conforming to EN 50160 compliance report
Device application	Instrument transformer correction Energy pulsing and totalisation Power monitoring Contract optimisation Demand and power factor control Equipment monitoring and control Co-generation and IPP monitoring Load curtailment Tariff metering
Type of measurement	Current Voltage Frequency Apparent power total Power factor total Apparent power per phase Power factor per phase Active power total Active power per phase Reactive power total Reactive power per phase
Supply voltage	85...240 V AC 47...63 Hz 110...270 V DC
Network frequency	50 Hz
[In] rated current	1 A
Type of network	3P + N 3P 1P + N
Power consumption in VA	19 VA
Maximum power consumption in VA	32 VA

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Display type	FSTN transfective LCD
Sampling rate	1024 samples/cycle
Measurement current	0...1 A
Input type	Current 0.001...10 A (impedance 0.01 Ohm)
Measurement voltage	57...288 V AC phase to neutral 99...500 V AC phase to phase
Frequency measurement range	47...63 Hz
Number of inputs	3 digital 80...280 V AC/DC
Measurement accuracy	Current 0.1 % Voltage 0.1 % Power 0.2 % Power factor 0.1 % Frequency 0.005 Hz Energy 0.2 %
Accuracy class	Class 0.2S active energy conforming to IEC 62053-22 Class 0.2S reactive energy conforming to IEC 62053-23
Number of outputs	1 alarm output 4 form C solid state output 2 IEC 1107 pulse
Communication port protocol	DLMS ION IEC 61850 TCP/IP at 10/100 Mbit/s DNP3 Modbus RTU, master/slave at <= 19200 bauds Modbus RTU, master/slave at 300...57600 bauds Modbus RTU, master/slave at 300...115200 bauds Modbus TCP, master/slave at 10/100 Mbit/s IEC 1107 at <= 19200 bauds
Communication port support	Screw terminal block: RS485 RJ45: ETHERNET Infrared DB9: RS485/RS232
Time synchronisation protocol	IRIG-B
Data recording	Time stamping Transient logs Data logs Waveform logs Min/max of instantaneous values Historical logs Alarms GPS synchronisation
Transmission rate	300...115200 bauds 10/100 Mbit/s <= 19200 bauds 300...57600 bauds
Memory capacity	5 MB
Web services	Web server
Tamperproof of settings	Protected by access code Hardware lock by jumper
Compatibility code	ION8800A

Environment

Electromagnetic compatibility	Conducted RF disturbances conforming to IEC 61000-4-6 Immunity to impulse waves conforming to IEC 61000-4-12 Electrical fast transient/burst immunity test conforming to IEC 61000-4-4 Electrostatic discharge conforming to IEC 61000-4-2 Susceptibility to electromagnetic fields conforming to IEC 61000-4-3 1.2/50 µs shock waves immunity test conforming to IEC 61000-4-5 Conducted and radiated emissions B conforming to CISPR 22
Mounting mode	Rack-mounted
Enclosure type	19" rack
Type of installation	Indoor installation
Overvoltage category	III

IP degree of protection	IP51 conforming to IEC 60529
Relative humidity	5...95 %
Pollution degree	2
Ambient air temperature for operation	-10...45 °C
Ambient air temperature for storage	-25...70 °C
Operating altitude	0...2000 m
Product certifications	EGR ESKOM GOST NMI
Standards	IEC 62052-11 IEC 60950
Width	202.1 mm
Depth	261.51 mm
Height	132.2 mm
Product weight	6 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	21.0 cm
Package 1 Width	53.0 cm
Package 1 Length	44.0 cm
Package 1 Weight	7.0 kg

Offer Sustainability

REACH Regulation	REACH Declaration
EU RoHS Directive	Compliant EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Recommended replacement(s)