

Product data sheet

Specifications



M8800A energy meter - 10 MB - class A - 1 A input - 50 Hz

M8800A1E0B5D1D1A

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 Co-generation and IPP monitoring Tariff metering Demand and power factor control Load curtailment Equipment monitoring and control
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 1P + N 3P
Power consumption in VA	19 VA
Maximum power consumption in VA	32 VA

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 20...56 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 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 RTU, master/slave at 56 kbit/s maximum Modbus TCP, master/slave at 10/100 Mbit/s IEC 1107 at <= 19200 bauds
Communication port support	Screw terminal block: RS485 RJ45: ETHERNET Infrared RJ11: modem DB9: RS485/RS232 LC: fiber optic
Time synchronisation protocol	IRIG-B
Data recording	Alarms Min/max of instantaneous values Data logs Historical logs GPS synchronisation Time stamping Transient logs Waveform logs
Transmission rate	10/100 Mbit/s 56 kbit/s maximum <= 19200 bauds 300...57600 bauds 300...115200 bauds
Memory capacity	10 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

Contractual warranty

Warranty	18 months
----------	-----------

Recommended replacement(s)