

Product data sheet

Characteristics

M8650A0C0E5E1B1A

ION8650 meter 128MB, 9S/29S/36S, 277VAC
50Hz, Ethernet 3I+4O, password



Main

Range	PowerLogic
Device short name	ION8650A
Product or component type	Energy and power quality meter

Complementary

Power quality analysis	IEC 61000-4-15 flicker Magnitude harmonic up to the 50th Transient capture EN 50160 ed. 4 compliance report Harmonic distortion Voltage sag and swell detection Waveform capture Programmability (logic and math functions) Up to the 63rd harmonic IEC 61000-4-30 class A power quality measurement
Device application	Instrument transformer correction Co-generation and IPP monitoring Tariff metering Equipment monitoring and control Demand and power factor control Load curtailment Energy pulsing and totalisation
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	120...277 V AC 47...63 Hz
Network frequency	50 Hz
Line Rated Current	2 A 5 A 1 A
Type of network	1P + N 3P 3P + N
Power consumption in VA	24 VA
Maximum power consumption in VA	33 VA
Display type	FSTN transfective LCD
Form designation	9S 3-element 4 36S 2½-element 4 29S 2½-element 4
Sampling rate	1024 samples/cycle
Measurement current	0.001...24 A

Input type	Current 0.01...20 A 0.05 Ohm)
Measurement voltage	57...277 V AC phase to neutral 100...480 V AC phase to phase
Number of inputs	3 digital 0.001...100 mA 30 V DC
Measurement accuracy	Current 0.1 % Voltage 0.1 % Power 0.1 % Power factor 0.1 % Frequency 0.001 Hz Energy 0.1 %
Accuracy class	Class 0.2S energy IEC 62053-23 Class 0.2 energy ANSI C12.20 Class 0.2S energy IEC 62053-22
Number of outputs	2 pulse 4 form C relay output
Communication port protocol	DNP3 300...115200 bauds ION 300...115200 bauds Ansi C12.18 <= 19200 bauds IEC 61850 ed. 2 10/100 Mbit/s TCP/IP 10/100 Mbit/s DLMS 300...115200 bauds Modbus 57600 bauds DNP3 10/100 Mbit/s ION 10/100 Mbit/s Modbus RTU, master/slave 300...115200 bauds Modbus TCP, master/slave 10/100 Mbit/s EtherGate
Communication port support	RJ45 Ethernet SUB-D 9 RS485/RS232 Terminal block RS485 infrared
Time synchronisation protocol	IRIG-B GPS: Truetime/Datum
Data recording	Time stamping Data logs Sag and swell logs Revenue logs Transient logs GPS synchronisation Event logs Alarms Harmonics logs Historical logs
Transmission rate	300...115200 bauds <= 19200 bauds 57600 bauds 10/100 Mbit/s
Memory capacity	128 MB
Web services	Port addressing user designed Robust security logs Alarm notification by e-mail Web server
Ethernet service	SNMP-Traps and SYSLOG Enable/Disable Ethernet protocols Enable/disable serial ports
Tamperproof of settings	Hardware lock by jumper Protected by access code
Compatibility code	ION8650A

Environment

Electromagnetic compatibility	Electrostatic discharge immunity test IEC 61000-4-2 Conducted RF disturbances IEC 61000-4-6 Immunity to impulse waves IEC 61000-4-12 Electrical fast transient/burst immunity test IEC 61000-4-4 Susceptibility to electromagnetic fields IEC 61000-4-3 1.2/50 µs shock waves immunity test IEC 61000-4-5 Conducted and radiated emissionsB CISPR 22
Mounting mode	Socket-mounted
Mounting support	Enclosure door
Type of installation	Indoor installation
Overvoltage category	III
IP degree of protection	Front face IP65 Back IP51
Relative humidity	5...95 %
Pollution degree	2
Ambient air temperature for operation	-40...185 °F (-40...85 °C)
Ambient air temperature for storage	-40...185 °F (-40...85 °C)
Operating altitude	0...9842.52 ft (0...3000 m)
Standards	ANSI C12.1 IEC 62052-11
Maximum Width	7.01 in (178 mm)
Maximum Depth	9.33 in (237 mm)
Maximum Height	7.01 in (178 mm)
Net Weight	15.43 lb(US) (7 kg)

Ordering and shipping details

Package weight(Lbs)	9.92 lb(US) (4.500 kg)
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Packing Units

Package 1 Height	10.24 in (26.000 cm)
Package 1 width	11.02 in (28.000 cm)
Package 1 Length	17.32 in (44.000 cm)

Contractual warranty

Warranty	18 months
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