

# Product data sheet

Specifications



## ION8650 meter 128MB, 9S/29S/36S, 120VAC/160VDC 60Hz, Eth. swb No I/O

M8650A0C0H6E0A0A

⚠ Discontinued on: Jan 11, 2021

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### Main

Range	PowerLogic
Device Short Name	ION8650A
Product Or Component Type	Revenue and power quality meter

### Complementary

Power Quality Analysis	conforming to IEC 61000-4-15 flicker magnitude harmonic up to the 50th transient capture conforming to 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 conforming to IEC 61000-4-30: class A power quality measurement
Device Application	Demand and power factor control Equipment monitoring and control Co-generation and IPP monitoring Instrument transformer correction Energy pulsing and totalisation Tariff metering Load curtailment
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 65...120 V AC 47...63 Hz 80...160 V DC
Network Frequency	60 Hz
Outlet Standard	American
[In] Rated Current	2 A 1 A 5 A
Type Of Network	1P + N 3P + N 3P
Power Consumption In Va	24 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

Maximum Power Consumption In Va	33 VA
Display Type	FSTN transreflective 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 (impedance 0.05 Ohm)
Measurement Voltage	57...277 V AC phase to neutral 100...480 V AC phase to phase
Number Of Inputs	0
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 conforming to IEC 62053-23 Class 0.2 energy conforming to ANSI C12.20 Class 0.2S energy conforming to IEC 62053-22
Number Of Outputs	2 pulse
Communication Port Protocol	DNP3 at 300...115200 bauds ION at 300...115200 bauds Ansi C12.18 at <= 19200 bauds TCP/IP at 10 Mbit/s DLMS at 300...115200 bauds Modbus at 57600 bauds DNP3 at 10 Mbit/s ION at 10 Mbit/s IEC 61850 ed. 2 at 10 Mbit/s Modbus RTU, master/slave at 300...115200 bauds Modbus TCP, master/slave at 10 Mbit/s EtherGate
Communication Port Support	RJ45: ETHERNET SUB-D 9: RS485/RS232 Terminal block: RS485 Infrared
Time Synchronisation Protocol	GPS: Truetime/Datum IRIG-B
Data Recording	Harmonics logs Time stamping GPS synchronisation Revenue logs Alarms Event logs Data logs Sag and swell logs Transient logs Historical logs
Transmission Rate	10 Mbit/s 300...115200 bauds <= 19200 bauds
Memory Capacity	128 MB
Web Services	Port addressing user designed Alarm notification by e-mail Web server Robust security logs
Ethernet Service	SNMP-Traps and SYSLOG Enable/disable Ethernet protocols Enable/disable serial ports
Tamperproof Of Settings	Protected by access code

Compatibility Code	ION8650A
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## Environment

Electromagnetic Compatibility	Electrostatic discharge immunity test conforming to IEC 61000-4-2 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 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	Socket-mounted
Mounting Support	Enclosure door
Type Of Installation	Indoor installation
Overvoltage Category	III
Ip Degree Of Protection	IP65 front face: IP51 back:
Relative Humidity	5...95 %
Pollution Degree	2
Ambient Air Temperature For Operation	-40...85 °C
Ambient Air Temperature For Storage	-40...85 °C
Operating Altitude	0...3000 m
Standards	ANSI C12.1 IEC 62052-11
Width	178 mm
Depth	237 mm
Height	178 mm
Net Weight	7 kg

## Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	26.0 cm
Package 1 Width	28.0 cm
Package 1 Length	44.0 cm
Package 1 Weight	4.5 kg

## Contractual warranty

Warranty	18 months
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