Product data sheet

Specifications

ION8650 meter 32MB, 35S, 120VAC/160VDC 60Hz, Full comm No I/O

M8650C1C0H6C7A0A

⚠ Discontinued on: Apr 1, 2024

⚠ To be end-of-service on: Mar 31, 2025

⚠ To be discontinued

Main

Range	PowerLogic
Device Short Name	ION8650C
Product Or Component Type	Revenue and power quality meter

Complementary

Power Quality Analysis	up to the 31st harmonic harmonic distortion voltage sag and swell detection programmablity (logic and math functions)
Device Application	Equipment monitoring and control Load curtailment Demand and power factor control Tariff metering Instrument transformer correction Energy pulsing and totalisation Co-generation and IPP monitoring
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...480 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 5 A 1 A
Type Of Network	3P 1P + N 3P + N
Power Consumption In Va	24 VA
Maximum Power Consumption In Va	33 VA
Display Type	FSTN transflective LCD
Form Designation	35S 2-element 3

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 IEC 61850 ed. 2 at 10/100 Mbit/s TCP/IP at 10/100 Mbit/s DLMS at 300...115200 bauds Modbus at 57600 bauds TCP/IP at 300...57600 bauds DNP3 at 10/100 Mbit/s ION at 10/100 Mbit/s ModemGate Modbus RTU, slave at 300...115200 bauds Modbus TCP, slave at 10/100 Mbit/s EtherGate
Communication Port Support	RJ45: ETHERNET SUB-D 9: RS485/RS232 Terminal block: RS485 Infrared RJ11: modem
Time Synchronisation Protocol	IRIG-B GPS: Truetime/Datum
Data Recording	Alarms Historical logs Revenue logs GPS synchronisation Sag and swell logs Data logs Harmonics logs Event logs Time stamping
Transmission Rate	<= 19200 bauds 57600 bauds 300...115200 bauds 300...57600 bauds 10/100 Mbit/s
Memory Capacity	32 MB
Web Services	Web server Alarm notification by e-mail Port addressing user designed 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	ION8650C

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

Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO_2 products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >

Transparency   RoHS/REACh

Well-being performance

✓ Rohs Exemption Information   Yes

Certifications & Standards

Reach Regulation   REACh Declaration

Eu Rohs Directive   Compliant with Exemptions

China Rohs Regulation   China RoHS declaration

Environmental Disclosure   Product Environmental Profile

Circularity Profile   End of Life Information