Product data sheet

Specifications

ION8650 meter 32MB, FT21 panel, 277VAC 60Hz, Ethernet 3I+4O, password

M8650C4C0E6E1B1A

ⓘ **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	Load curtailment Energy pulsing and totalisation Equipment monitoring and control Instrument transformer correction Demand and power factor control Tariff metering 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...277 V AC 47...63 Hz 120...480 V AC 47...63 Hz
Network Frequency	60 Hz
[In] Rated Current	5 A 2 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 transflective LCD
Form Designation	36S 2½-element 4 9 3-element 4 35 2-element 3 29 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	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 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 4 form C relay output
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 DNP3 at 10/100 Mbit/s ION at 10/100 Mbit/s 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
Time Synchronisation Protocol	IRIG-B GPS: Truetime/Datum
Data Recording	Revenue logs Event logs Alarms Historical logs Time stamping GPS synchronisation Sag and swell logs Harmonics logs Data logs
Transmission Rate	<= 19200 bauds 57600 bauds 10/100 Mbit/s 300...115200 bauds
Memory Capacity	32 MB
Web Services	Robust security logs Alarm notification by e-mail Web server Port addressing user designed
Ethernet Service	Enable/disable Ethernet protocols SNMP-Traps and SYSLOG Enable/disable serial ports
Tamperproof Of Settings	Hardware lock by jumper Protected by access code
Provided Equipment	Break out panel
Compatibility Code	ION8650C

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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	Flush-mounted
Enclosure Type	FT21 switchboard
Type Of Installation	Indoor installation
Overvoltage Category	III
Ip Degree Of Protection	IP50 front face: IP30 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	163 mm
Depth	228 mm
Height	285 mm
Net Weight	7 kg

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	29.0 cm
Package 1 Width	29.0 cm
Package 1 Length	41.0 cm
Package 1 Weight	7.0 kg

Sustainability

Green Premium^{TM} 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
California Proposition 65	WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov