

# Product data sheet

Specifications



## ION8650 meter 128MB, FT21 cable, 277VAC/300VDC 60Hz, Modem 3I+4O

M8650A7C0J6M1B0A

⚠ Discontinued on: May 6, 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	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	Co-generation and IPP monitoring Tariff metering Load curtailment Equipment monitoring and control Instrument transformer correction Demand and power factor control 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 120...480 V AC 47...63 Hz 160...277 V AC 47...63 Hz 200...300 V DC
Network Frequency	60 Hz
Outlet Standard	American
Line Rated Current	5 A 2 A 1 A
Type Of Network	3P 3P + N 1P + N
Power Consumption In Va	24 VA

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

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	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 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 DLMS 300...115200 bauds Modbus 57600 bauds TCP/IP 300...57600 bauds Modbus RTU, master/slave 300...115200 bauds ModemGate
Communication Port Support	SUB-D 9 RS485/RS232 Terminal block RS485 infrared RJ11 modem
Time Synchronisation Protocol	IRIG-B GPS: Truetime/Datum
Data Recording	Data logs Time stamping GPS synchronisation Historical logs Revenue logs Alarms Transient logs Event logs Harmonics logs Sag and swell logs
Transmission Rate	300...115200 bauds <= 19200 bauds 300...57600 bauds 57600 bauds
Memory Capacity	128 MB
Web Services	Web server Robust security logs Port addressing user designed Alarm notification by e-mail
Ethernet Service	Enable/disable serial ports Enable/disable Ethernet protocols SNMP-Traps and SYSLOG
Tamperproof Of Settings	Protected by access code

Provided Equipment	Break out cable
Compatibility Code	ION8650A

## 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...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
Width	6.42 in (163 mm)
Depth	8.98 in (228 mm)
Height	11.22 in (285 mm)
Net Weight	15.43 lb(US) (7 kg)

## Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	10.24 in (26.0 cm)
Package 1 Width	11.02 in (28.0 cm)
Package 1 Length	17.32 in (44.0 cm)
Package 1 Weight	9.92 lb(US) (4.5 kg)

## Contractual warranty

Warranty	18 months
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# 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<sub>2</sub> 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

## Well-being performance

✓	Mercury Free	
✓	Rohs Exemption Information	Yes
Eu Rohs Directive	Compliant	<a href="#">EU RoHS Declaration</a>
China Rohs Regulation		<a href="#">China RoHS declaration</a>
Environmental Disclosure		<a href="#">Product Environmental Profile</a>
Circularity Profile		<a href="#">End of Life Information</a>
California Proposition 65	WARNING: Cancer and Reproductive Harm - <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>	