

Product data sheet

Specifications



ION8650 meter 32MB, 9S/29S/
36S, 277VAC 60Hz, standard
3I+4O

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⚠ Discontinued on: May 11, 2021

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Main

Range	PowerLogic
Product Name	PowerLogic ION8650
Device Short Name	ION8650C
Product Or Component Type	Revenue and power quality meter

Complementary

Power Quality Analysis	harmonic distortion programmability (logic and math functions) voltage sag and swell detection up to the 31st harmonic
Device Application	Demand and power factor control Co-generation and IPP monitoring Instrument transformer correction Tariff metering Equipment monitoring and control Load curtailment Energy pulsing and totalisation
Type Of Measurement	Power factor total Power factor per phase Apparent power total Apparent power per phase Active power total Active power per phase Reactive power total Reactive power per phase Current Voltage Frequency
Supply Voltage	120...277 V AC 47...63 Hz
Network Frequency	60 Hz
Line Rated Current	2 A 1 A 5 A
Poles Description	3P 3P + N 1P + 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

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

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 62053-22 Class 0.2S energy IEC 62053-23 Class 0.2 energy ANSI C12.20
Number Of Outputs	2 pulse 4 form C relay output
Communication Port Protocol	DNP3 300...115200 bauds ION 300...115200 bauds DLMS 300...115200 bauds Modbus 57600 bauds Ansi C12.18 <= 19200 bauds Modbus RTU, slave 300...115200 bauds
Communication Port Support	SUB-D 9 RS485/RS232 infrared Terminal block RS485
Time Synchronisation Protocol	IRIG-B GPS: Truetime/Datum
Data Recording	Historical logs Alarms Revenue logs Event logs GPS synchronisation Harmonics logs Data logs Sag and swell logs Time stamping
Transmission Rate	<= 19200 bauds 300...115200 bauds 57600 bauds
Memory Capacity	32 MB
Web Services	Robust security logs Port addressing user designed Web server Alarm notification by e-mail
Ethernet Service	Enable/disable Ethernet protocols Enable/disable serial ports SNMP-Traps and SYSLOG
Tamperproof Of Settings	Protected by access code
Compatibility Code	ION8650C

Environment

Electromagnetic Compatibility	Electrostatic discharge immunity test conforming to IEC 61000-4-2 Susceptibility to electromagnetic fields conforming to IEC 61000-4-3 Electrical fast transient/burst immunity test conforming to IEC 61000-4-4 1.2/50 µs shock waves immunity test conforming to IEC 61000-4-5 Conducted and radiated emissions B conforming to CISPR 22 Conducted RF disturbances conforming to IEC 61000-4-6 Immunity to impulse waves conforming to IEC 61000-4-12
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...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	7.01 in (178 mm)
Depth	9.33 in (237 mm)
Height	7.01 in (178 mm)
Net Weight	15.43 lb(US) (7 kg)

Ordering and shipping details

Category	09749-POWERLOGIC ION 8650C HARDWARE
Discount Schedule	PM1S
Returnability	No

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-CO₂ 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	EU RoHS Declaration
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	