



### Main

Range	PowerLogic
Product name	PowerLogic ION8650
Device short name	ION8650A
Product or Component Type	Energy and power quality meter

### Complementary

Power quality analysis	<ul style="list-style-type: none"> <li>Harmonic distortion</li> <li>Programmability (logic and math functions)</li> <li>Voltage sag and swell detection</li> <li>Waveform capture</li> <li>Up to the 63rd harmonic</li> <li>IEC 61000-4-30 class A power quality measurement</li> <li>IEC 61000-4-15 flicker</li> <li>Magnitude harmonic up to the 50th</li> <li>Transient capture</li> <li>EN 50160 compliance report</li> </ul>
Device Application	<ul style="list-style-type: none"> <li>Energy pulsing and totalisation</li> <li>Instrument transformer correction</li> <li>Co-generation and IPP monitoring</li> <li>Tariff metering</li> <li>Demand and power factor control</li> <li>Equipment monitoring and control</li> <li>Load curtailment</li> </ul>
Type of measurement	<ul style="list-style-type: none"> <li>Power factor total</li> <li>Power factor per phase</li> <li>Apparent power total</li> <li>Apparent power per phase</li> <li>Active power total</li> <li>Active power per phase</li> <li>Reactive power total</li> <li>Reactive power per phase</li> <li>Current</li> <li>Voltage</li> <li>Frequency</li> </ul>
Supply voltage	<ul style="list-style-type: none"> <li>120...277 V AC 47...63 Hz</li> <li>65...120 V AC 47...63 Hz</li> <li>80...160 V DC</li> </ul>
Network Frequency	60 Hz
Outlet standard	American
Line Rated Current	<ul style="list-style-type: none"> <li>5 A</li> <li>2 A</li> <li>1 A</li> </ul>
Poles description	<ul style="list-style-type: none"> <li>1P + N</li> <li>3P + N</li> <li>3P</li> </ul>
Power consumption in VA	24 VA
Maximum power consumption in VA	33 VA
Display Type	FSTN transfective LCD

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

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 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	TCP/IP 10/100 Mbit/s DNP3 300...115200 bauds ION 300...115200 bauds DLMS 300...115200 bauds Modbus 57600 bauds Ansi C12.18 <= 19200 bauds DNP3 10/100 Mbit/s ION 10/100 Mbit/s IEC 61850 ed. 2 10/100 Mbit/s Modbus RTU, master/slave 300...115200 bauds Modbus TCP, master/slave 10/100 Mbit/s EtherGate
Communication port support	RJ45 Ethernet SUB-D 9 RS485/RS232 Infrared Terminal block RS485
Time synchronisation protocol	GPS: Truetime/Datum IRIG-B
Data recording	Alarms Sag and swell logs Time stamping Transient logs Revenue logs Historical logs GPS synchronisation Data logs Event logs Harmonics logs
Transmission Rate	10/100 Mbit/s 57600 bauds <= 19200 bauds 300...115200 bauds
Memory capacity	128 MB
Web services	Web server Alarm notification by e-mail Port addressing user designed Robust security logs
Ethernet service	Enable/Disable serial ports SNMP-Traps and SYSLOG Enable/disable Ethernet protocols
Tamperproof of settings	Protected by access code
Compatibility code	ION8650A

## Environment

Electromagnetic compatibility	Electrostatic discharge immunity test IEC 61000-4-2 Susceptibility to electromagnetic fields IEC 61000-4-3 Electrical fast transient/burst immunity test IEC 61000-4-4 1.2/50 µs shock waves immunity test IEC 61000-4-5 Conducted and radiated emissions CISPR 22 Conducted RF disturbances IEC 61000-4-6 Immunity to impulse waves IEC 61000-4-12
Mounting Mode	Socket-mounted
Mounting support	Enclosure door
Type of Installation	Indoor installation
Overvoltage category	III
IP degree of protection	Front face IP65 Back IP51
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	09758-POWERLOGIC ION 8650A HARDWARE
Discount Schedule	PM1S
GTIN	NULL
Nbr. of units in pkg.	1
Package weight(Lbs)	9.92 lb(US) (4.5 kg)
Returnability	No

## Packing Units

Unit Type of Package 1	PCE
Package 1 Height	10.24 in (26 cm)
Package 1 width	11.02 in (28 cm)
Package 1 Length	17.32 in (44 cm)

## Offer Sustainability

Sustainable offer status	Green Premium product
California proposition 65	WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov
REACH Regulation	 <a href="#">REACH Declaration</a>
REACH free of SVHC	Yes
EU RoHS Directive	Compliant  <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	 <a href="#">Yes</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>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.