



Main

Range	PowerLogic
Product name	PowerLogic ION8650
Device short name	ION8650C
Product or Component Type	Energy 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	Load curtailment Demand and power factor control Equipment monitoring and control Instrument transformer correction Co-generation and IPP monitoring Tariff metering 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	5 A 2 A 1 A
Poles description	3P 1P + N 3P + N
Power consumption in VA	24 VA
Maximum power consumption in VA	33 VA
Display Type	FSTN transreflective LCD
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	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 IEC 62053-22 Class 0.2S energy IEC 62053-23 Class 0.2 energy ANSI C12.20
Number of Outputs	2 pulse
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 EtherGate Modbus RTU, slave 300...115200 bauds Modbus TCP, slave 10/100 Mbit/s
Communication port support	RJ45 ETHERNET SUB-D 9 RS485/RS232 Infrared Terminal block RS485
Time synchronisation protocol	GPS: Truetime/Datum IRIG-B
Data recording	Revenue logs GPS synchronisation Event logs Historical logs Data logs Sag and swell logs Harmonics logs Alarms Time stamping
Transmission Rate	10/100 Mbit/s 300...115200 bauds 57600 bauds <= 19200 bauds
Memory capacity	32 MB
Web services	Port addressing user designed Robust security logs Web server Alarm notification by e-mail
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 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 emissionsB 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	09749-POWERLOGIC ION 8650C HARDWARE
Discount Schedule	PM1S
Returnability	Yes

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)

Offer Sustainability

Sustainable offer status	Green Premium product
California proposition 65	WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov
REACH Regulation	REACH Declaration
REACH free of SVHC	Yes
EU RoHS Directive	Compliant EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.