

Product data sheet

Characteristics

M8650C4C0H6E1B1A

ION8650 meter 32MB, FT21 panel, 120VAC/160VDC 60Hz, Ethernet 3I+4O, password



Main

Range	PowerLogic
Device short name	ION8650C
Product or component type	Energy and power quality meter

Complementary

Power quality analysis	up to the 31st harmonic harmonic distortion voltage sag and swell detection programmability (logic and math functions)
Device application	Co-generation and IPP monitoring Load curtailment Energy pulsing and totalisation Demand and power factor control Tariff metering Equipment monitoring and control Instrument transformer correction
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 65...120 V AC 47...63 Hz 80...160 V DC
Network frequency	60 Hz
Outlet standard	American
[In] rated current	5 A 1 A 2 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 transfective 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	GPS: Truetime/Datum IRIG-B
Data recording	Data logs Sag and swell logs Harmonics logs Revenue logs Event logs Alarms Time stamping GPS synchronisation Historical logs
Transmission rate	57600 bauds 300...115200 bauds <= 19200 bauds 10/100 Mbit/s
Memory capacity	32 MB
Web services	Robust security logs Port addressing user designed Alarm notification by e-mail Web server
Ethernet service	SNMP-Traps and SYSLOG Enable/disable serial ports Enable/disable Ethernet protocols
Tamperproof of settings	Hardware lock by jumper

Protected by access code

Provided equipment	Break out panel
Compatibility code	ION8650C

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 μ s 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

Package 1 Weight	7.000 kg
Package 1 Height	29.000 cm
Package 1 width	29.000 cm
Package 1 Length	41.000 cm

Offer Sustainability

EU RoHS Directive	Compliant EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration Pro-active China RoHS declaration (out of China RoHS legal scope)
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information