



Main

Range	PowerLogic
Device short name	ION7650
Product or component type	Energy and power quality meter

Complementary

Power quality analysis	Waveform capture Disturbance direction detection Compliance monitoring Dip and swell, transient Harmonic distortion Programmability (logic and math functions) Setpoint learning Voltage sag and swell detection Up to the 63rd harmonic
Device application	Tariff metering Co-generation and IPP monitoring Demand and power factor control Load curtailment Equipment monitoring and control Energy pulsing and totalisation Instrument transformer correction
Type of measurement	Apparent power total Apparent power per phase Active power total Active power per phase Reactive power total Reactive power per phase Voltage Current Frequency Power factor total Power factor per phase
Supply voltage	85...240 V AC 47...63 Hz 110...300 V DC

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

Network frequency	60 Hz
[In] rated current	5 A
Type of network	1P + N 3P 3P + N
Power consumption in VA	20 VA <= 45 VA
Display resolution	320 x 240 pixels QVGA
Display type	Backlit LCD
Sampling rate	1024 samples/cycle
Measurement current	0...5 A
Input type	Current 0.005...20 A 0.002 Ohm
Measurement voltage	100...600 V AC phase to phase 57...347 V AC phase to neutral
Frequency measurement range	42...69 Hz
Number of inputs	8 digital 120 V DC
Measurement accuracy	0.2 % energy 0.1 % current 1...5 A 0.1 % voltage 57...288 V
Accuracy class	Class 0.2S energy conforming to IEC 62053-22
Number of outputs	3 relay 4 solid state
Communication port protocol	Telnet IEC 61850 DNP3 : <= 115.2 kbits/s, ION : <= 115.2 kbits/s, Modbus : <= 115.2 kbits/s, TCP/IP : 10/100 Mbit/s,
Communication port support	RS232 SUB-D 9 RS485 Ethernet RJ45 Modem RJ11 Infrared
Data recording	Data logs Event logs Min/max of instantaneous values Sequence of event recording Time stamping Trending/forecasting GPS synchronisation
Transmission rate	<= 115.2 kbits/s 10/100 Mbit/s <= 57.6 kbits/s
Memory capacity	10 MB
Web services	Web server
Tamperproof of settings	Protected by access code Hardware lock by jumper

Environment

Electromagnetic compatibility	<ul style="list-style-type: none"> • 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 • electrostatic discharge, conforming to IEC 61000-4-2 • conducted and radiated emissions class B, conforming to CISPR 22
Mounting mode	Flush-mounted
Mounting support	Enclosure door
Type of installation	Indoor installation
Overvoltage category	III
IP degree of protection	IP30 back IEC 60529 IP50 front face IEC 60529
Relative humidity	5...95 %

Pollution degree	2
Ambient air temperature for operation	-20...70 °C
Ambient air temperature for storage	-40...85 °C
Operating altitude	0...2000 m
Standards	IEC 61010-1
Width	192 mm
Depth	174 mm
Height	192 mm
Product weight	1.9 kg

Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0801 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold Reference not containing SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Available