

# Product data sheet

Specifications



ION7650, wDispl, 10MB 1024s, 1A  
240VAC/300VDC 60Hz -  
RS+T2+E+F - 8I+3R+4O T

M7650B1E0B6F1A0F

⚠ Discontinued on: Jun 1, 2021

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## Main

Range	PowerLogic
Device Short Name	ION7650
Product Or Component Type	Energy and power quality meter

## Complementary

Power Quality Analysis	harmonic distortion voltage sag and swell detection waveform capture compliance monitoring dip and swell, transient disturbance direction detection programmability (logic and math functions) setpoint learning up to the 63rd harmonic conforming to IEC 61000-4-30: class A power quality measurement conforming to EN 50160 compliance report
Device Application	Equipment monitoring and control Energy pulsing and totalisation Instrument transformer correction Co-generation and IPP monitoring Load curtailment Demand and power factor control Tariff metering
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	110...300 V DC 85...240 V AC 47...63 Hz
Network Frequency	60 Hz
[In] Rated Current	1 A
Type Of Network	3P + N 1P + N 3P
Power Consumption In Va	20 VA
Maximum Power Consumption In Va	45 VA
Display Resolution	320 x 240 pixels QVGA

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

Display Type	Backlit LCD
Sampling Rate	1024 samples/cycle
Measurement Current	0...1 A
Input Type	Current 0.005...20 A (impedance 0.015 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	Current 0.1 % 1...5 A Voltage 0.1 % 57...288 V Energy 0.2 %
Accuracy Class	Class 0.2S energy conforming to IEC 62053-22
Number Of Outputs	3 relay 4 solid state
Communication Port Protocol	Telnet DNP3 at <= 115.2 kbits/s ION at <= 115.2 kbits/s Modbus at <= 115.2 kbits/s IEC 61850 TCP/IP at 10/100 Mbit/s
Communication Port Support	RS485 Infrared SUB-D 9: RS232 SC: fiber optic
Data Recording	Min/max of instantaneous values Event logs Time stamping Trending/forecasting Sequence of event recording Data logs GPS synchronisation
Transmission Rate	<= 115.2 kbits/s 10/100 Mbit/s
Memory Capacity	10 MB
Web Services	Web server
Tamperproof Of Settings	Protected by access code
Compatibility Code	ION7650

## Environment

Electromagnetic Compatibility	Electrical fast transient/burst immunity test conforming to IEC 61000-4-4 Electrostatic discharge conforming to IEC 61000-4-2 Susceptibility to electromagnetic fields conforming to IEC 61000-4-3 1.2/50 µs shock waves immunity test conforming to IEC 61000-4-5 Conducted and radiated emissions 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: conforming to IEC 60529 IP50 front face: conforming to IEC 60529
Relative Humidity	5...95 %
Surface Finish	Coated
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
Net Weight	1.9 kg

# 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-CO<sub>2</sub> 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 >](#)

Eu Rohs Directive	Compliant <a href="#">EU RoHS Declaration</a>
China Rohs Regulation	<a href="#">China RoHS declaration</a>
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
California Proposition 65	WARNING: Cancer and Reproductive Harm - <a href="#">www.P65Warnings.ca.gov</a>