



MODBUS POWER METER

TAGS: PWS0306

DIRIS B-30 RS485-MODBUS-230VAC

48290000

Multifunction meter DIRIS B-30 RS485 MODBUS 230VAC

Strong Points

- + Plug & Play
- + Better than revenue grade
- + Multi-circuits
- + Versatile

Function

The DIRIS B is a DIN-rail mounted power monitoring device compatible with TE/TR/iTR/TF smart current sensors, suitable for new or existing electrical installations.

The 4 independent RJ12 current inputs allow the DIRIS B to monitor 1 three-phase circuit and use a dedicated current sensor for the neutral, or 4 single-phase loads.

The DIRIS B has 2 native digital input for additional versatility and includes Modbus RTU serial communication

to report measurements to external management systems.

Additional digital & analog input/output modules can extend the basic functional scope of the DIRIS B. An optional display can also be plugged to the meter for local visualization on panel doors.

CERTIFICATES AND DECLARATION

Conformity to standard #1	UL 61010-1 Guide PICQ File E257746
Conformity to standard #2	CSA-C22.2 No. 61010-1
Conformity to standard #3	CEC Compliant
Conformity to standard #4	ISO 14025
Proposition 65 California	WARNING This product can expose you to chemicals including bisphenol A (BPA), which is known to the State of California to cause birth defects or reproductive harm. For more information go to : www.P65Warnings.ca.gov

STANDARDS

Conformity to standards	<ul style="list-style-type: none">• IEC• UL
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CERTIFICATES AND DECLARATION - SAFETY

Safety standards	IEC/EN 61010-1 UL 61010-1 CAN/CSA C22.2 No. 61010-1
UL file number	E257746

GENERAL PRODUCT CHARACTERISTICS

Device type	Multifunction Power metering and monitoring device (PMD)
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Application	Analysis
Communication ports	RS485
Communication protocols	Modbus RTU
Model	B-30
Type	Power Monitoring Device

TECHNICAL CHARACTERISTICS - ELECTRICAL

Max voltage (Phase/neutral)	50-300 VAC (Ph/N)
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TECHNICAL CHARACTERISTICS - ENVIRONMENTAL

Maximum operating altitude	6560 feet / 2000 m
Operating temperature	+14 ... +158 °F / -10 ... +70 °C
PEP ecopassport - ISO 14025	SOCO-2014-01-v1-fr, SOCO-2014-01-v1-en
Relative humidity	131 °F / 55 °C / 97% relative humidity
Storage temperature	-13 ... +185 °F / -25 ... +85 °C

TECHNICAL CHARACTERISTICS - MEASUREMENT

Accuracy class	Class 0.2 DIRIS B alone, Class 0.5 with TE, iTR or TF current sensors, Class 1 with TR current sensors
Current measurement type	AC
Frequency rating	45 ... 65 Hz

etering: +/- kWh, +/- kvarh, kVAh, Multi-tariff (8 max) Load archy
Multi-measurement: V1, V2, V3, U12, U23, U31, f, I1, I2, I3, In, ΣP ,
 ΣQ , ΣS , ΣPF , P, Q, S, PF per phase, Predictive Power, Voltage Ph/N
unbalance, Voltage Ph/Ph unbalance, Current unbalance (Inba, Idi
r, Iinv, Ihom, Inb), Phi, cos Phi, tan Phi

Number of Digital inputs/outputs	2 Digital inputs
Power Quality measurements	THDv1, THDv2, THDv3, THDu12, THDu23, THDu31, THDi1, THDi2, THDi3, THDin, Individual harmonics U & V (up to 63rd), Individual harmonics I (up to 63rd), Crest factor I1, I2, I3, In, Crest factor V1, V2, V3, U12, U23, U31, Voltage sags, interruptions, swells (EN 501 60), Overcurrents
Voltage measurement type	AC
ETIM - ELECTRICAL CHARACTERISTICS	
Sampling frequency [Hz]	10000
Number of voltage measurement inputs	4
Number of current measurement inputs	4
Voltage type (supply voltage)	AC
Supply voltage AC 50 Hz [V]	110..230
Supply voltage AC 60 Hz [V]	110..230
Measuring range for frequency [Hz]	45..65
Number of digital inputs	2
Supporting protocol for IEC 61850 Ethernet	No
Supporting protocol for OPC UA PubSub	No
Supporting protocol for PROFIBUS	No
Supporting protocol for Modbus	Yes
Supporting protocol for PROFINET IO	No
Supporting protocol for other bus systems	No

With firmware signature

Yes

With logging of security events (security event log)

No

With Role Based Access Control (RBAC)

No

Web server with HTTPS transfer protocol

No

ETIM - MECHANICAL CHARACTERISTICS

Width [mm]

54

Height [mm]

90

Depth [mm]

65

Degree of protection (IP), front side

IP20

ETIM - TECHNICAL FEATURES

Ampere meter

Yes

Blind power meter

Yes

With rotational speed meter

No

Frequency meter

Yes

Pulse counter

No

Voltmeter

Yes

Effective power measurement device

Yes

Display

Optional

Remote display

Yes

LOGISTICS

GTIN/EAN

3596032773083

Customs number

9030320000

Weight of the packing unit [kg]

0.22

Length of the packing unit [m]

0.135

Width of the packing unit [m]

0.06

Depth of the packing unit [m]

0.08

PRODUCT DETAILS

Effective date

2013-11-12

Offer Life Cycle Code

40

Country of origin

FR

CLASSIFICATION

UNSPSC

83101808

IGCC

6042