

RMD



RMD | REMOTE METERING DEVICE

The Remote Metering Device (RMD) is specifically for use in Electricity Metering, either as a stand-alone configuration, or as part of a kiosk configuration.

A stand-alone configuration means that a meter is installed close to a consumer. The consumer is issued an accompanying Consumer Interface Unit (CIU), which interact with the meter.

Kiosk configuration refers to the meter being installed in a kiosk, with the possibility of other meters being installed with it. All the meters are connected through a wired connection to a concentrator. The concentrator interacts with a Meter Data Management System (MDMS). The consumer associated with each meter, is issued with a CIU for interaction with the meter.



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Technical Data

Connection type:	Single phase, Direct connect. 2-wire
Measurement accuracy:	Class 1 active energy
Measurement value:	Import and export energy
Load switch type:	Relay
Load switch status:	Red LED on when closed
Load switch open:	No credit available, Power limit, Current overload, Abnormal temperature, Tamper
Mounting:	DIN-rail
Rated voltage, frequency:	230VAC, 50Hz
Operating voltage range, frequency:	184VAC to 265VAC, 50Hz \pm 2.5%
Base current (I _b):	5A
Startup current:	0.004 I _b
Burden current:	2W, 10VA
Maximum current:	80A
Surge protection max:	6KV
Fault current survivability:	10KA for 40ms
Overload current max:	100A for 48h
Overload voltage max:	440VAC for 48h
Operating ambient temperature:	-40C to +70C
Storage temperature:	-40C to +70C
Humidity:	95% RH at +40C
Safety:	Protection Class II (double insulated)
Ingress protection:	IP51
Consumption pulse indication:	Red LED pulsing at 1Wh
No load indication:	Green LED on
Tamper detection:	Bypass; relay open configurable
Real Time Clock accuracy:	\pm 1s/day at 23C
Real Time Clock synchronization:	Concentrator interface, Optical interface
Real Time Clock power source:	Super capacitor, 1 week backup time
Token standard:	STS101-2
Concentrator interface physical:	RS485, isolated
Concentrator interface protocol:	DLMS/COSEM HDLC 3-layer connection oriented
Optical interface physical:	Infrared (wavelength 800nm to 1000nm)
Optical interface protocol:	IEC 62056-21 Mode E
CIU interface physical:	RF LoRa, 868MHz, internal antenna
Support for Time Of Use:	4 seasons, 4 day-types, 3 periods per day-type
Support for Block Tariffs:	Up to 5 blocks
Load profile:	Minimum 15min interval, 100 days, 1 channel
Event records:	8 event types, error codes, timestamped
Stored data retention time:	>10 years