E3METER™ Data Concentrator
RN1401 Datasheet

General Description

The E3METER® Data Concentrator stands at the center of our innovative monitoring system. It aggregates data from up to 400 E3METER® intelligent power strips (IPS), implements logging functionality and makes data available on its Fast Ethernet interface via HTTPS and SNMP.

Data transfers between E3METER® IPS and the E3METER® concentrator use reliable narrowband powerline communication (PLC) technology which avoids the need for extra cabling.

The E3METER® concentrator's small form factor facilitates installation in any 19" Rack (standard model) or power distribution panel (optional, on request).

Industrial grade components and the fact that there are no moving parts guarantee minimal maintenance effort.

E3METER® - A true plug-and-play metering solution, out of the box. Power management, reporting, billing, alarming and provisioning has never been easier for the Datacenter operator, technician and customer.

Features

- Control and monitor up to 400 E3METER® Intelligent Power Strips / Intelligent CEE Boxes on 2 x 3 phases
- Built-in data logging and visualization
- Pre-loaded with E3METER® Monitoring Software
- Free upgrades (no subscription, no recurring fees)
- Extended Features with simple, perpetual licensing model
- SNMP interface for 3rd-party monitoring systems
- Reliable Powerline Communication (Cenelec B, FCC or ARIB)
- 10/100 Mbps Fast Ethernet
- 19" Rack mountable, 1U (ultra-small panelboard version optional)
- Low power consumption (< 3 W)
- No moving parts (no fan, industrial grade flash storage)
- Serial port for maintenance
- OLED Display

Riedo Networks Ltd, Switzerland, www.riedonetworks.com, info@riedonetworks.com

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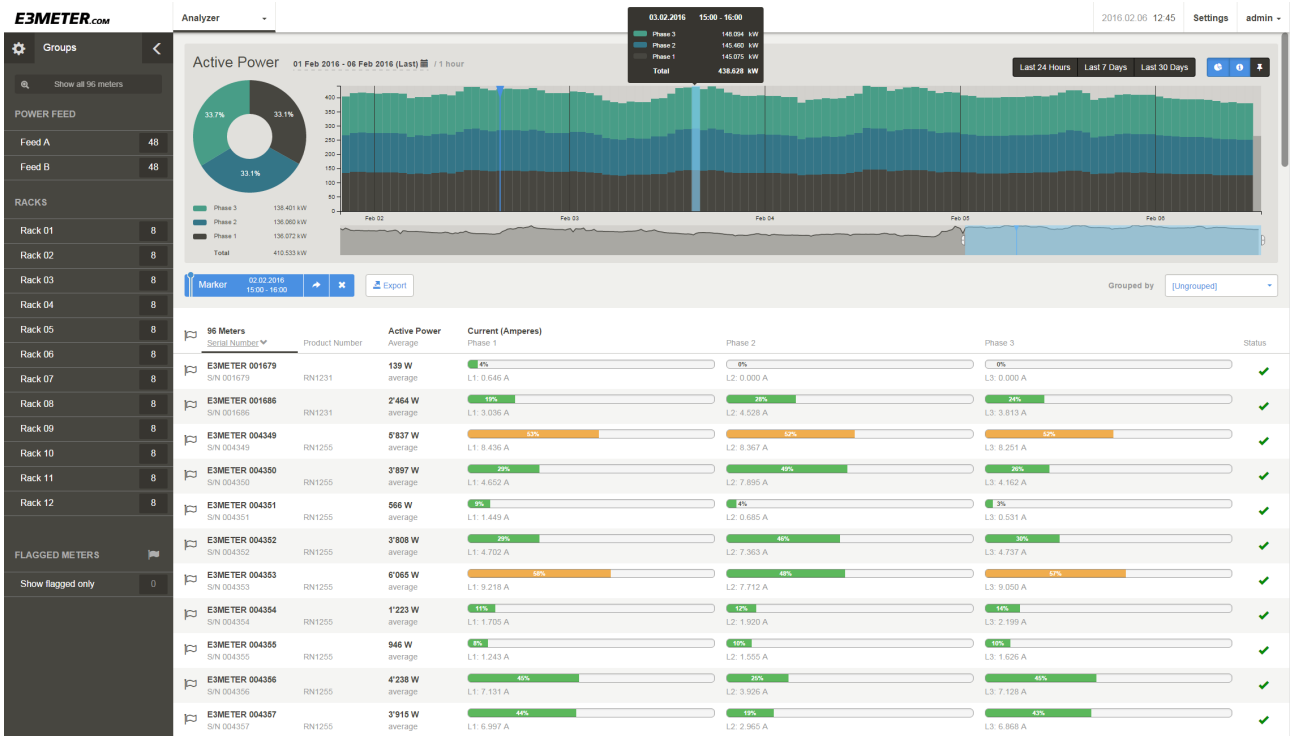

Logging / Alarms

The following measurements from all connected E3METER® intelligent power strips and sensors are logged in a local database and at the same time made available through HTTPS and SNMP:

P	[W]		Real power
Q	[VAR]		Reactive power
S	[VA]		Apparent power
Ep	[kWh]		Real energy
Eq	[kVARh]		Reactive energy
Es	[kVAh]		Apparent energy
Urms	[V]		Line voltage
Irms	[A]	Alarm	Output current
Upk	[V]	Alarm	Peak line voltage
f	[Hz]	Alarm	Line frequency
PF	N/A		Power factor
Ti, T1, T2	[°C]	Alarm	Internal temperature and values from external temperature sensors
H1, H2	[%]		Humidity values from external sensors

Physical (19” Version)

Width	483 mm
Depth	232 mm
Height	1U (44.5 mm)
Weight	2000 g
Mounting	19”, 1U

AC Supply (redundant)

Nominal Input Voltage	230 / 400 Vrms, 2x 3-phase
Input Socket Type	2x Wieland “GST18I5F”
Input Plug (included)	2x Wieland (92.953.4053.1)
Power Consumption	< 3 W (only on phase 1)

Communication

Powerline	Reliable narrowband Powerline Communication (Cenelec B, FCC or ARIB)
Ethernet	10/100 Mbps Fast Ethernet RJ-45 connector
Serial	Console, 115’200 bps, 8n1