



General Description

The E3METER® Data Concentrator stands at the center of our innovative monitoring system. It aggregates data from up to 250 E3METER® intelligent power strips (IPS), implements logging functionality and makes data available on its Fast Ethernet interface via SNMP.

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

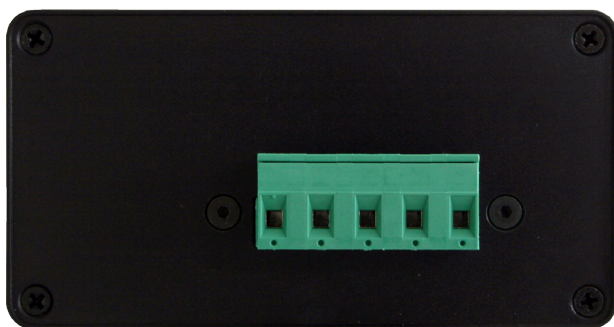
The E3METER® concentrator's small form factor facilitates installation in any power distribution panel.

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

Features

- Control and monitor up to 250 E3METER® Intelligent Power Strips on 3 phases
- Built-in data logging
- SNMP interface for 3rd-party monitoring systems
- Reliable Powerline Communication (Cenelec B, FCC or ARIB)
- 10/100 Mbps Fast Ethernet
- Small form factor (DIN rail mountable)
- Low power consumption (< 5 W)
- No moving parts (no fan, industrial grade flash storage)
- Serial port for maintenance
- Status LEDs





Physical

| | |
|----------|----------|
| Length | 168 mm |
| Width | 107 mm |
| Height | 57 mm |
| Weight | 640 g |
| Mounting | DIN rail |

AC Supply

| | |
|-----------------------|---|
| Nominal Input Voltage | 400 Vrms (3 phases) |
| Input | 3 phases, neutral, earth |
| Cable Cross-Section | > 1 mm ² , < 2.5 mm ² |
| Power Consumption | < 5 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, 38'400 bps, 8n1 |

Logging / Alarms

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