

PowerLine Module

GE LAN | RS-485 | DI/DO | Industrial IoT | ITU-T G.hn

PM-1540, PM-1510

As per ITU-T standards, Comtrend's Power Module series utilizes G.hn technology to provide a wired, secure, bounded latency, high speed, and real-time connection. With Gigabit LAN port(s), RS-485 and DI/DO interfaces, Power Modules can collect and transfer data over power lines from power meters (or EVSE) and IoT devices to replace Ethernet cable wiring/unstable wireless connections of existing field applications. It enables significant cost savings on installation, maintenance and wiring materials.

The Power Module series works within an electric wire domain of up to 250 nodes; enabling large scale deployment, ideal for EV charging station (EVSE) backend communication, smart parking and data centers.

From an installation point of view, the Power Module design provides a terminal block (for power wire insert), mounting holes and a DIN rail mounting kit option.



KEY FEATURES

- Data and power on a single wire, reuses existing wiring
- Up to 250 nodes in one power group connection
- Up to 16 levels of repetition
- Reaches up to 600 meters in field tests
- Automatic Self-Healing - node to node will find the best path via software
- Plug and Play

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SPECIFICATIONS

| HARDWARE | | | | | |
|--|--|----------|-------------------------------------|---|--|
| Model | PM-1540 | PM-1510 | PM-1510PoE | PM-1510dc | PM-1510s |
| Ethernet Port | 4 | 1 | 1 | 1 | 1 |
| Data In / Data Out | 1 | 1 | 1 | 1 | Optional |
| RS-485 | 1 | 1 | 1 | 1 | Optional; |
| Others | NONE | NONE | PSE/802.3 at 15.4W for Surveillance | (i). SFP as WAN (ii) 12Vdc/1.5A powering gateway | PCB package for integration with 3 rd party |
| DIN Rail Kit | Optional | Optional | Optional | Optional | NONE |
| *GIGABIT ETHERNET | | | | | |
| IEEE 802.3bz 10/100/1000 BASE-T, auto-sense Support MDI/MDX | | | | | |
| POWER LINE COMMUNICATION | | | | | |
| ITU-T G.9960 & G.9961 compliant G.hn 50MHz MIMO Boost | | | | | |
| MANAGEMENT | | | | | |
| HTTP Web-based (optional) TR-069 over IPv4/v6 dual stack (Optional) | | | | | |
| MODULATIONS | | | | | |
| OFDM, FEC | | | | | |
| DIMENSIONS | | | | | |
| PM-1540, PM-1510, PM-1510PoE, PM-1510dc 115mm (H) x 65 mm (W) x 21 mm (PCB w/components) 120mm (H) x 70 mm (W) x 26.5 mm (with housing) PM-1510s 75mm (H) x 75 mm (W) x 21 mm (PCB w/components) | | | | | |
| ENVIRONMENT | | | | | |
| Temperature | Operating: 10°C ~ 70°C (-40°C ~ 70°C as an option) Storage: -25°C ~ 65°C (-13°F ~149°F) | | | | |
| Humidity (Non-condensing) | Operating: 10 ~ 90% RH, non-condensing Storage: 5 ~ 90% RH, non-condensing | | | | |
| ACCESSORY | | | | | |
| DIN Rail mounting kit (Optional) | | | | | |



Warning

- Disconnect the PLC from the power source before servicing
- Do NOT open the casing
- For indoor user only
- Do NOT use near water

COMTREND

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Maximum performance, actual data rates, and coverage will vary depending on network conditions and environmental factors. Product specifications and design are subject to change without notice.