



PRODUCT OVERVIEW

The PEM3100 series of Power Over Ethernet Powered Device (PD) power extraction modules, have complete compliance with the high power IEEE 802.3at Power-Over-Ethernet Plus (PoE+) standard, and are designed to extract power from CAT5 Ethernet cable when sourced by both IEEE 802.3at(POE+) and IEEE 802.3af (POE) compliant Power Sourcing Equipments (PSE).

The PEM3100 series modules provide full two event PoE+ and single event POE signature for layer 1 classification and supports layer 2 classification via an “AT Detect” pin.

Its high efficiency DC-DC converter provides up to 30 watts of power in a well regulated, low noise and low ripple output with in-built in-rush current, overload and output short-circuit protection.

The PEM3100 series provides a quick, easy, and cost effective method for manufacturers of Ethernet equipment like PTZ cameras, WiMAX[®] tower and access points, Wireless N, RFID readers, POS terminals, thin client terminals, and IP telephones to “PoE enable” their equipment.

PRODUCT FEATURES

- Fully IEEE[®] 802.3at and 802.3af compliant
- Up to 30Watt output load¹
- IEEE Power class 4
- High efficiency
- Compact package horizontal mounting
- Minimal external components required
- Cost effective
- “AT Detect” pin for layer 2 classification
- 1500 Volt DC isolation (Input to Output)
- Overload protection²
- Continuous short circuit protection
- Low output ripple and noise
- Adjustable output voltage
- Support for external aux. power supply
- RoHS 2002/95/EC compliant

¹ 30watt peak for maximum 30sec. at duty cycle of 10%. Please see section F.9. – Thermal profile on operating temperature.

² If maximum power is exceeded, the PEM3100 will operate in an over current mode and will auto recover when the over load condition is removed.