

Wire-free Environmental Monitor v3

Packet Power's **Wire-free Environmental Monitor (EM)** makes it easy and affordable to monitor vital environmental conditions (temperature, humidity, differential pressure) in your data centre facility. Each unit supports up to six external probes (temperature or dry contact) and is equipped with one internal temperature probe. Depending on model the EM module offers one additional humidity or differential pressure (to monitor airflow) probe. All collected data can be transferred via optional Packet Power EG3 Wire-free Gateway to the dedicated EMX management tool or third-party BMS and DCIM systems.



DETAILS

Wire-free Environmental Monitoring Modules

- PP-E300-A000 6 temperature or dry contact points
- PP-E30H-A000 6 temperature or dry contact points
+ 1 humidity sensor
- PP-E30P-A000 6 temperature or dry contact points
+ 1 differential pressure sensor (with 2.4m flexible tubing)

Temperature Probes

- PP-TPP3-001M 1m temperature probe
- PP-TPP3-002M 2m temperature probe
- PP-TPP3-003M 3m temperature probe

Extension Cables

- PP-TPP3-X02M 2m extension cable
- PP-TPP3-X04M 4m extension cable
- PP-TPP3-X09M 9m extension cable

Maximum length of
combined probe
& extension cable: 15m

EMX PORTAL



EG3 GATEWAY



All Environmental Monitor modules are managed by the EG3 Gateway that uses the SNMP or Modbus TCP/IP protocol to transfer all environmental data to the Packet Power EMX portal or other data centre management applications.

MEASUREMENT	
Temperature (°C or °F)	±1°C at 0.1°C resolution
Relative humidity	± 2% at 0.1% resolution
Dry contact	0.5 sec. state switch time, open > 500K Ohm, closed < 2,5K Ohm
Differential pressure	±500 Pa (±2"H ₂ O) 0.2Pa or ±3% accuracy
COMMUNICATIONS	
Operating frequency	From 860 to 920 MHz, 2.4 GHz (frequency used varies by region)
Wireless protocol	Frequency hopping, self- configuring, load-balancing mesh network, no WiFi
Data output (gateway)	SNMP or Modbus TCP/IP, one IP address per gateway, optional EMX management tool, BMS or DCIM system
Firmware updates	Wire-free
Typical transmission range	10 to 50m indoors from one monitoring device to any other, depending on structural conditions
Monitoring unit to gateway ratio	Up to 300 monitoring units depending on desired data collection rate and gateway model
Multi-site support	Yes
System status	Local LCD display (includes measurement readings)
OPERATING ENVIRONMENT	
Operating temperature	Monitoring unit: 0 to +40°C Temp. probes: -40 to +85°C
Operating humidity	10 to 90%, non-condensing
Water and dust resistance	IP20 (indoor use), NEMA 1
Module size and weight	65 x 65 x 28 mm, 90g
External AC power supply	100 - 240V, 50-60Hz, 5 VDC output; EN60950, UL60950, IEC60950; includes NEMA 5-15, CEE-7 Schuko, BS 1363A, C14, BS 546A plugs, 0.5W power consumption