

AirRunner CPE 250 Series

Zcomax Technologies, Inc. has released its outdoor CPE Series. It is a weather resistant unit, designed with the wireless ISP in mind. The all-in-one design allows for quick and cost effective deployment of wireless networks without high installation and cable costs. The elimination of cabling also eliminates degradations associated with cable attenuation. The CPE can be mast-mounted or wall-mounted for added flexibility. The unit features a 50 foot Category-5E cable carrying both DC power and Ethernet signals.

The AirRunner CPE series internal router features Network Address Translation (NAT) support, perfect for applications requiring a private LAN configuration. The unit also features internal DHCP client and server, allowing the AirRunner CPE IP resources to be centrally managed. Enhanced Station Bridge mode is provided to connect multiple PCs via a single wireless link without any router.

Designed specifically for Wireless ISPs and IT professionals to provide wireless broadband network services, the AirRunner CPE series delivers outstanding network availability and radio performance.



CPE Series at a Glance

- All-in-one outdoor design
- Built in router
- Removable Ethernet Cable
- External LED Display
- On-board flash firmware allows for rapid field upgrades.
- Mast mounting kit included
- Optional feature set includes AP and Point to multi point modes.
- Windows Utility, Web management and Telnet configuration methods.

Physical Specification:

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|------------------------|--|
| Dimensions (L x W x H) | 32.8cm x 25.4cm x 9.3cm |
| Gross Shipping Weight | 8.0 lbs. Shipping carton + Accessories |
| CPE Weight | 4.0 lbs. CPE + Ethernet cable |

RF Specification:

| | |
|--------------------------|---|
| Frequency Range (GHz) | North America: |
| | FCC: 2.412 ~ 2.462GHz (CH1 ~ 11) |
| | TELEC: 2.412~2.4842GHz (CH1 ~ 14) |
| | ETSI: 2.412 ~ 2.472GHz (CH1 ~ CH 13) |
| Frequency Drift | <25KHz |
| Transmitter Output Power | |
| CPE 25(x) | 28 dBm (631mW) |
| CPE 25(x)H | 33 dBm (2000mW) |
| CPE-25(x)HP | 36 dBm (4000mW) |
| CPE-25(x)HP2 | 37.8 dBm (6000mW) |
| Antenna Impedance | 50 ohms |
| Media Access Protocol | CSMA/CA w/ACK |
| Modulation | DSS: CCK (11Mbps, 5.5 Mbps) DQPSK (2 mbps) DBPSK (1Mbps) |
| Receiver Sensitivity | 11 / 5.5 Mbps: ≤ -102 dBm / -104dBm |
| @ PER < 8% for 802.11b | 2 / 1 Mbps: ≤ -106 dBm / -107dBm |

Electrical Specification:

| | |
|-----------------------|-------------------|
| Supply Voltage | 15 Vdc, +/- 5% 1A |
| Supply Voltage Ripple | 120mV (pp) max. |
| Power-on startup time | <600 ms |

LED Display

| | |
|-------------------|---------------------------------------|
| Power | Indicates CPE powered up successfully |
| Wireless Activity | Flashing light indicates activity |
| Link | Confirms a successful wireless link |

Ethernet Connector Specification

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|-----------------|--------------|
| Connector Type | RJ 45 Jack |
| Wiring Standard | TIA/EIA 568B |

Environmental

| | |
|---------------------|--|
| Working Temperature | -15 ~ 55°C, 90% relative humidity (non-condensing) |
| Storage Temperature | -25 ~ 80°C, 90% relative humidity (non-condensing) |

Absolute Maximum Rating

Stress above those listed in Absolute Maximum Rating may cause permanent damage to the device. This is a stress only rating and operation of the device at these or any other conditions above those indicated in standard specifications is not implied.

| | |
|---------------------|---|
| Supply Voltage | 15.5V |
| Storage Temperature | -25 ~ +80°C, 95% relative humidity (non-condensing) |
| Barometric Pressure | 740 hPa ~ 1050 hPa |

Security

The AirRunner CPE Series product includes a high performance hardware WEP engine supporting 64-bit and 128-bit WEP. No driver-level coding for WEP operation is required to integrate the module. 64-bit WEP requires a 40-bit key plus a 24-bit initialization vector. 128-bit WEP utilizes a 104-bit key plus a 24-bit initialization vector.

Interoperability

The AirRunner CPE Series product interoperates with any IEEE 802.11b or 802.11 compliant devices.

Warranty

The CPE 250 series is supplied with a 12 month warranty

Ordering Information

Part Number: CPE-25[P][R]

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|---------------------|-----------------------------|
| [P] Package: | CPE-252 = AP, PXP, Station |
| | CPE-250 = Station |
| [R] Radio: | V = 15dBm Output Power |
| | H = 20dBm Output Power |
| | HP = 23dBm Output power |
| | HP2 = 24.8 dBm output power |