

tConnect T100-RE Outdoor Mesh Unit



- **Dual radio for providing high power 802.11b for client service and 802.11a for backhaul**
- **Weather-proof NEMA-67 rated die-cast aluminium enclosures**
- **266Mhz National Geode SC1100 CPU with 64MB SDRAM and passive Power over Ethernet (PoE)**
- **Captive portal with RADIUS authentication**
- **Remote management via a web browser using a customized linux OS**
- **2 x 2.4GHz 5.5dBi Outdoor Omni Antenna**



The Expansive Networks tConnect T100-RE Outdoor Mesh Unit adds intelligence to a WiFi network to enable deployments that were previously difficult or impossible. The result: broader coverage, minimal installation and cabling costs, and rapid deployments.

The design is well suited for harsh outdoor environments, with a die-cast aluminium NEMA67 rated enclosure. The T100-RE receives power via cost-effective Power over Ethernet (PoE) and therefore can be deployed anywhere up to 100 metres from a power source using standard cat5 ethernet cable. Aside from traditional power sources, power can optionally be sourced via solar cells and batteries. Each Meshbox provides wireless connectivity to standard 802.11b clients and extends the coverage area of the WiFi network.

The Expansive Networks Outdoor Units communicate with each other wirelessly through a unique Linux based embedded mesh software.

The tConnect T100-RE provides up to 128-bit WEP encryption and supports the IEEE 802.1x port-based network access control with RADIUS servers for user authentication. It has MAC address-based access control and many other features for stronger security. The tConnect T100-RE can be managed with its web-based user interface and SSH.

The Outdoor Unit is used within a Mesh system and communicates with other Meshboxes with as few as 3 Meshboxes connected via a wire to the Internet. If deploying a simple 'Meshzone' the Outdoor Unit is not required. Refer to the tConnect-MZ Meshzone Unit for 'Meshzone' solutions.

Technical Specifications

PHYSICAL SPECIFICATIONS

Dimensions
6.25 x 8.50 x 2.25 in
(15.9 x 21.6 x 5.7 cm)

Weight
4.40 lbs (2.0 kg)

ENVIRONMENT SPECIFICATIONS

Operating Temperature
-40 C to + 60 C
(-40F to 150F)

Humidity
Up to 100% water-tight enclosure

HARDWARE SPECIFICATIONS

CPU
MIPS 4000 KC
220 MHz

Memory
RAM 16 MB (Upgradeable)
Flash 4 MB (Upgradeable)

RF PERFORMANCE

Output Power
400 mW high power (26dBm) 2.4GHz
400 mW high power (26dBm) 5.8GHz

Antennas
2.4/5.8 GHz 5.5 dBi Omni

RX Sensitivity
-98dBm / 1Mbps @2.4GHz
-93dBm / 6Mbps @5.8GHz

POWER SUPPLY

Type
Integrated hi-efficiency 802.3af Power over Ethernet

Expansive Networks Wireless Mesh Solution

