TITAN 4000 (Multiband LTE Cat 12/15 Outdoors CPE)

Global Telecom's *TITAN 4000* is an advanced LTE Cat 15 outdoors unit designed to meet the most challenging demands for high-speed wireless backhaul, fixed wireless and failover deployments. The *TITAN 4000* supports FDD & TDD band operations with multiple operator networks worldwide. It uses a Gigabit PoE connection between terminal devices, such as indoor routers or WiFi AP products. The PoE interface can also work with standard PoE switches or router products. The product comes with a PoE power adapter and mounting bracket accessories for quick self-installation.

High Performance & Lightning Speed Mobile Data

The *TITAN 4000* is designed to withstand the most difficult outdoors operations conditions and can safely operate in a wide temperature range from -50°C to 75°C. It meets industrial IP67 water and dustproof standard requirements with MTBF times expected to be above 80,000 hours. Depending on the network configuration and DL/UL split ratio configuration, the unit can provide up to 600 Mbps maximum throughput over the air. The typical coverage area can exceed 15 km with reasonably good throughput performance.

Easy and Quick Setup

The *TITAN 4000* is a user-friendly LTE CPE that's easy to install and maintain -– it's a fully integrated solution with all necessary device drivers pre-loaded. Simply connect the device to a computer or home switch/router and the device is ready for surfing the internet. LED indicators offer device operation information and IP addresses can be dynamically obtained via DHCP. Rich control features support local management access, Telnet, Http, Https and standard TR069 remote OTA management (including device configuration, monitoring and upgrades).

Technical Features

The design is based on LTE release 13 specifications with 4x4 MIMO, carrier aggregation and QAM64 modulation on the uplink. The *TITAN 4000*'s high-gain directional patch antenna enables an extended reception that yields more efficient use of the network, a larger cell reach, guaranteed carrier class service, and customer service availability. Advanced Orthogonal Frequency Division Multiplexing (OFDM) modulation enhances performance in non-line-of-sight (NLOS) conditions to significantly reduce interference and multi-path conflicts typical of deployments in densely populated urban areas. Sophisticated QoS capabilities ensure true end-to-end QoS and support high-quality data service.

- Cost effective & compact design with built-in high-gain antenna
- Compliant with 3GPP Release 13 standards
- 2T4R radio design
- DL 4x4 MIMO, CA (up to 4CC) and QAM256 support
- UL QAM64, UL CA and MIMO support
- Router and bridge operation mode support
- IPv4 & IPv6 and multiple PDN support
- PPT, L2TP and GRE VPN tunneling client support
- FTP, HTTP, OMA-DM and TR-069 management
- B38/B41/B42/B43/B48/B53
- CBRS Ready-near plug and play

TITAN 4000 Specifications

Physical

Dimensions	305 mm (L) x 275 mm (W) x 142 mm (H)
Weight	< 3 kg
Power Consumption	< 15 W
Power Supply	48 V / 0.5 A DC (Gigabit PoE)

Environmental

Operating Temperature	-50°C to 75°C
Humidity	95% max (non-condensing)

LTE Radio Interface

Radio Access	3GPP Release 13 Category 12/15
Operation Mode	DL 4x4 MIMO / QAM256 Inter & Intra Band CA (4CC)
Carrier Aggregation	CA across public networks and private networks
Frequency Band	FDD : B2 / 4 / 5 / 12 / 13 / 17 / 25 / 26 / 41 / 71 TDD : B41 / 48 (CBRS)
Output Power	23 dBm per Tx (2Tx), HPUE B41 (26 dBm)
Antenna Options	**B5 / 12 / 13 /17 / 26 / 71** 6.5 dBi (2 directional antennas) **B2 / 4 / 25 / 66** 8.5 dBi (4 directional antennas) **B41 (2x2)** **16** dBi (2 directional antennas) B48 (2x2) 18 dBi (2 directional antennas) **B41 (4x4)** **13** dBi (4 directional antennas) B48 (4x4) 15 dBi (4 directional antennas) B53 (4x4) 13 dBi (4 directional antennas)

User Interfaces

Data Interface	1 RJ45 10 / 100 / 1000 Mbps ETH
LED Indicators	PWR / SYS / NET / SIM / ETH / RF (5 signal intensity LEDs)
SIM Support	SIM card slot (2FF)

Networking Configuration

DHCP or static IP address assignment
Bridge and router operation support
Built-in DHCP server for LAN devices
IPv4 and IPv6 DS-Lite support
Multiple PDN interface support
NTP service support
SIM card locking
Network selection and cell locking provision

Data Networking Features

VPN pass-through support (PPTP, L2TP & IPsec)
Built-in L2TP & GRE tunneling clients
Firewall & access control
DMZ and virtual server support
IP and port filtering support
Local and remote management restriction
Application firewall support
LAN device access control

Device Management

CLI, Telnet, HTTP and HTTPS management interfaces
Standard-based OMA-DM or TR-069 management
FTP and HTTP OTA firmware upgrade
USIM and network PLMN locking support
Factory default settings

Industry Standards

ITU
3GPP   Release 13

IEEE
IEEE 802.3   10Base Ethernet
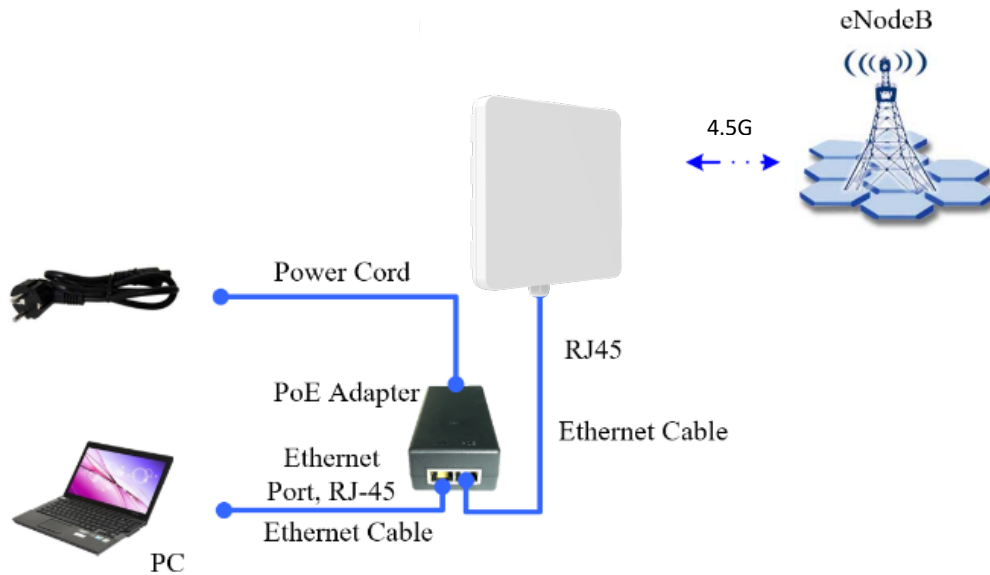IEEE 802.3u   Fast Ethernet
IEEE 802.3ab   Gigabit Ethernet

OTHERS
Water ResistanceIP67
Safety   FCC or CE

GLOBAL TELECOM
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