

## TITAN 4000 - Multi-Band LTE Cat 12/15 Outdoor Router

Global Telecom's TITAN 4000 is an advanced multiband LTE Cat 12/15 outdoors router designed to meet the most challenging connectivity demands in rural areas, national parks, green energy farms, and other difficult-to-reach terrain without cellular coverage.



### Ruggedized with Extended Reception

Built for high-speed wireless backhaul, fixed wireless and failover deployments, it's designed to withstand harsh weather conditions and can safely operate in a wide temperature range, from -50°C to 75°C. The TITAN 4000 provides security, reliability, speed, and ease of use - ensuring a long-lasting, durable solution for uniquely challenging deployments. It meets industrial IP67 water and dustproof standard requirements with MTBF times expected to surpass 80,000 hours. It's a fully integrated, user-friendly, plug and play solution that's easy to install and maintain with all necessary device drivers pre-loaded - just connect the TITAN 4000 to a computer or router and it's ready to go.

#### Features

- The TITAN 4000 supports both FDD, TDD and CBRS bands operations, enabling compatibility with multiple operator networks worldwide.
- It utilizes a Gigabit power over ethernet (PoE) connection for seamless communication between terminal devices like indoor routers and Wi-Fi access point (AP) products.
- Advanced orthogonal frequency division multiplexing (OFDM) modulation is employed to enhance performance, particularly in non-line-of-sight (NLOS) scenarios.
- This modulation technique significantly reduces interference and conflicts caused by multi-path propagation, commonly encountered in densely populated urban deployments.
- The TITAN 4000 incorporates sophisticated quality of service (QoS) capabilities to ensure consistent end-to-end QoS and the delivery of high-quality data services.

#### Key Benefits

- Cost effective & compact design with built-in LTE MIMO antennas.
- VOLTE support
- Compliant to 3GPP LTE Release 13
- Advanced 4x4 MIMO, DL & UL CA, DL QAM256/UL QAM64 support (CAT15)
- Router, bridge and by-pass networking, IPv4 & IPv6 and multiple PDN support
- USIM card authentication support
- Secure Telnet, FTP, HTTP and TR069 OTA management support
- 48V Gigabit PoE power supply and pole or wall mounting support. Home gateway router with POE support optional

## Technical Specifications

Physical	
Dimensions	305 mm (L) x 275 mm (W) x 142 mm (H)
Weight	< 3 kg
Power consumptions	< 15 W
Power Supply	48 V / 0.5 A DC (Gigabit PoE)
Water Resistant	IP67
Environmental	
Operating Temperature	-50°C to 75°C
Humidity	95% max (non-condensing)
Wireless Radio Interface	
Radio Access	3GPP Release 13, Category 12/15
Operation Mode	DL 4x4 MIMO / QAM256 Inter & Intra Band CA (4CC)
Frequency Band	Bands: 38 / 40 / 48 (CBRS) / 53
CA Support	CA across public networks and private networks
Output Power	23 dBm per Tx (2Tx), HPUE B41 (26 dBm)
Antenna	B48 16.5 dBi B41 13.5 dBi B53 13.5 dBi, B38 13 dBi
Wi-Fi Interface	
Radio Access	IEEE 802.11 2GHz for management.
User Interface	
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)
Software Specifications	
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