Tachyon Networks®

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TNA-301 | TNA-302 Datasheet

Outdoor 60 GHz PTP & PTMP Fixed Wireless Solutions

Learn more at www.tachyon-networks.com

Applications

Sub-6GHz offload

Because the sub-6GHz spectrum is scarce and prone to interference, the TNA-30x models are perfect for offloading clients within range, leaving the low bands for hard-to-reach customers.

Deploying fiber-like service

The TNA-30x product family can deliver multi-Gigabit speeds to up to 32 clients per sector at a fraction of the cost of deploying fiber.

High speed point-to-point

Use the TNA-302 to easily create point-to-point connections between buildings in urban environments.

High bandwidth video surveillance

The TNA-30x units feature a proprietary TDMA scheduling protocol which is perfect for video surveillance networks requiring high-capacity upload bandwidth.

Key Features

Fiber-like speeds using the 60GHz band

2+ Gbps can be achieved and distances of up to 1 km without trenching, permits, or licenses - all with quick and easy aiming using 3D beamforming.

Upper-band support

All models support the full 60GHz band, including channels 5 and 6 (57-71 GHz), enabling longer links and increased co-location opportunities.

3D beamforming makes installation easy

The TNA-301 and TNA-302's 3D beamforming antennas enable automatic alignment decreasing installation times from hours to minutes.

Best overall affordability

The low cost of the TNA-30x product family, combined with high subscriber density and quick installation, greatly decreases total cost of ownership for service providers.

MODEL COMPARISONS	TNA-301	TNA-302
Default operating mode	Access Point	Station
Beamforming Antenna	120° x 50°	40° x 40°

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60 GHZ SPECS

Operating modes	Station, Access Point (software configurable).
Max STA count per AP	Up to 32 stations
TX Power	40 EIRP
Link encryption	AES+GCMP
Frequency & supported channels	Full band: 57-71 GHz: channels: 1-6 Half channels: 1-11 (see notes on support site about half channel support)
Channel size options	Full (2 GHz), half (1 GHz) (see notes on support site about half channel support)
Station scheduling	TDMA: dynamic scheduling mechanism
TNA-301 Antenna	20 dBi 3D beamforming phased array with +/- 60° azimuth (120° total) and +/- 25° elevation (50° total). Beam size is: 23° azimuth x 12° elevation. Vertical polarization.
TNA-302 Antenna	22 dBi 3D beamforming phased array with +/- 20° azimuth (40° total) and +/- 20° elevation (40° total). Beam size is: 12° azimuth x 12° elevation. Vertical polarization.
Duplex	TDD

SOFTWARE SPECS

Max MTU size	7900 b
Networking mode	Transparent bridge
VLAN capabilities	Data VLAN (in station mode) & management VLAN
Other features	Traffic shaping (station mode), DHCP snooping, device discovery, speedtest, and more
IPv4/IPv6 support	Both are supported
Management	Web interface, SNMP v2 & v3, SNMP traps, & RESTful API (SSH available upon request).

HARDWARE SPECS

Interfaces	1 x 2.5G ethernet, 1 x 1G ethernet, & 1 DC input screw terminal
Mount	Pole or wall mountable via mounting backplate
Input power	Passive PoE 24-52V, included 48V .5A PoE adapter and cable
Output power	On 1G port: passive PoE out w/max .5A
Max power consumption	17W w/o PoE out in use, and 41W with it in use
Certifications	FCC: Z9W-TNA-301, Z9W-TNA-302; IC: 11468A-TNA301, 11468A-TNA302
Operating temperature	-30°C - 60°C
Unit dimensions & weight	Height: 11" / 28cm, Width: 4" / 10.2 cm, Depth: 2" / 5.1cm, 24.5 oz / 695 g
LEDs	Ethernet link status, wireless status, signal level, & power

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