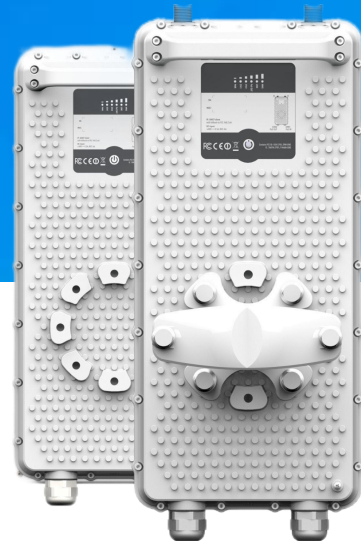# PTP 6-25/6-N

6GHz Outdoor PTP Bridge

The 6GHz Generation

The PTP 6-an extension of the time-tested PTP line of wireless data transfer devices -empowers users to deliver superb connectivity over 6GHz frequencies. The 6GHz band provides more leg room for all types of wireless networks, allowing users to find minimally crowded channels, experience less noise and interference, and achieve greater range and throughput.

Outstanding Capacity

PTP 6G Series delivers an extremely high 700Mbps throughput via its unique and powerful RF design that supports up to 256-QAM modulation and 30dBm output power. Our proprietary W-Jet V protocol, specifically engineered for high performing PTP scenarios, minimizes interference even across long distances and stabilizes latency within 2-4 ms.

Professional Design

In addition to achieving maximum performance, Alti-link focuses on delivering flexibility and ease-of-use in our PTP 6G Series series. The robust mounting bracket enables rapid deployment of the links and ensures survivability during high wind-load. The integrated antenna possesses a 45° rotation option which increases installation flexibility; especially advantageous in noisy spectrum areas. A GORE© membrane vent allows fast pressure equalization of the IP-67 rated cast aluminum enclosure to prevent condensation and to ensure seal performance . A detachable handle eases transporting the devices up towers and over rough terrains. Newly designed RGB LEDs indicate different device statuses and signal levels (in 1dBm steps) when aligning the antenna

Powerful All-in-One Hardware Platform

The PTP 6G Series delivers powerful performance with its new 1.2GHz CPU dedicated for data processing and high (200,000) packet per second delivery. Equipped with two Gigabit Ethernet ports, one with PoE passthrough, the unit allows for 1+1 (failover) or repeater links and is ideal for high-security video surveillance scenarios. PTP 6G Series incorporates integrated surge and ESD protection according to IEC standards and passes Class 4 requirements.

Wireless Configuration Interface

An internal 2.4GHz radio allows access into the PTP 6G Series GUI by wireless connection with any WIFI equipped device. This feature expedites the installation of links and alleviates the problem of troubleshooting in difficult-to-reach locations. Tests prove accessibility even when mounted on top of a 10-story building while standing 20 meters (65ft) away!

Powerful OS

The PTP operating system ensures easy and rapid deployment of point-to-point links with stable, fast performance. An intuitive and responsive user interface adjusts the layout based on the size of your screen. Essential tools including Setup Wizard, link test, antenna alignment, spectrum analyzer, and site survey are included to make set-up and troubleshooting more efficient. Automatic mechanisms such as auto-channel and automatic transmit power control optimize the link for maximum performance even in areas with high interference.

Easy Pre-Configuration

Multiple options to pre-configure PTP devices are displayed in a scheme below. Devices can be connected with each other using wired or wireless connectivity. End-user device can also connect to the master device using 2.4GHz access radio or using wire to the Ethernet port of the master device. PTP devices can be discovered using bonjour and SSDP protocols as well.
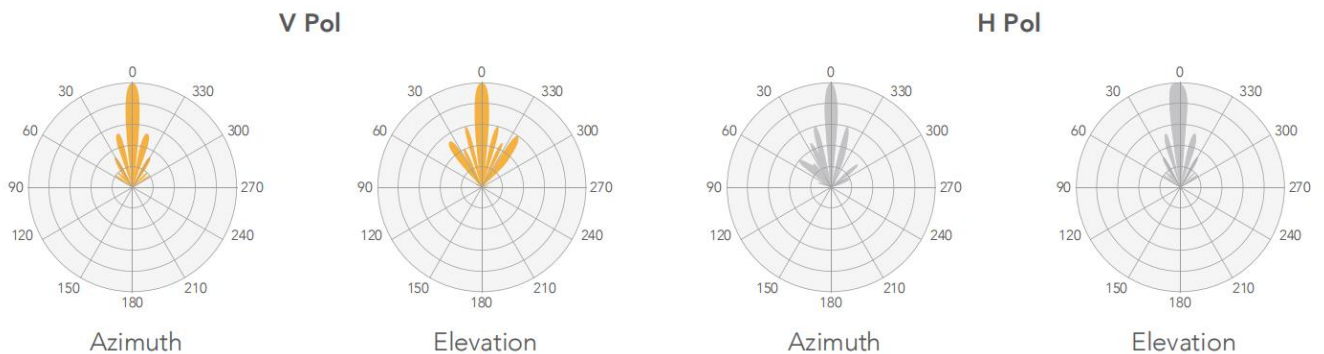
Specifications

Radio	
Wireless Protocol	W-Jet V
Radio Mode	MIMO 2×2
Frequency Range	5.900–6.400GHz
Channel Size	5, 10, 14, 15, 20, 30, 40, 60, 80MHz
Modulation Schemes	OFDM (256-QAM, 64-QAM, 16-QAM, QPSK, BPSK)
Data Rates @ 80MHz	866, 780, 650, 585, 520, 390, 260, 195, 130, 65Mbps
Duplexing Scheme	TDD
Error Correction	BCC, LDPC
Automatic TPC	Supported

Modulation, Mbps	866	780	650	585	520	390	260	195	130	65
Tx Power, dBm	24	25	26	27	28	30	30	30	30	30
Receive Sensitivity, dBm	-71	-73	-77	-79	-80	-84	-87	-92	-94	-97

Antenna	
PTP 6-25	Integrated Directional Dual-Pol 25dBi Panel
PTP 6-N	2 N-type Connectors
Wired	
First Interface	10/100/1000 Base-T with PoE IN (RJ45)
Second Interface	10/100/1000 Base-T with PoE OUT (RJ45)
Physical	
Dimensions without mount:	
PTP 6-25	Length 379mm (14.9''), Width 387mm (15.2''), Height 51mm (2'')
PTP 6-N	Length 399mm (15.7''), Width 174mm (6.8''), Height 47mm (1.8'')
Mount Length Till Pole	124mm (4.8'')
Weight including mount:	
PTP 6-25	3.9kg (8.5lb)
PTP 6-N	2.9kg (6.3lb)
Power	
Power Input Method	PoE 802.3at, Isolated 42–57VDC
Max Power Consumption	8.6W
Power Output Method	PoE 802.3af, 48VDC, 12.95W Maximum
Packing	PoE Inserter and AC/DC Adapter are Included
Environmental	
Operating Temperature	−40°C (−40°F) ~ +65°C (+149°F)

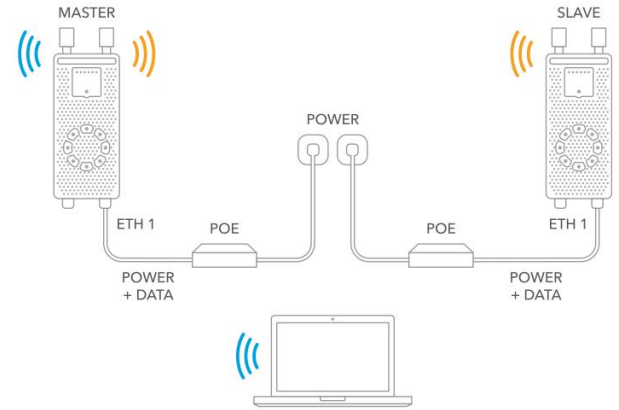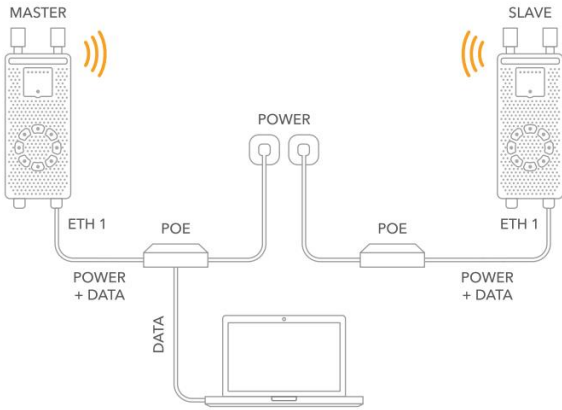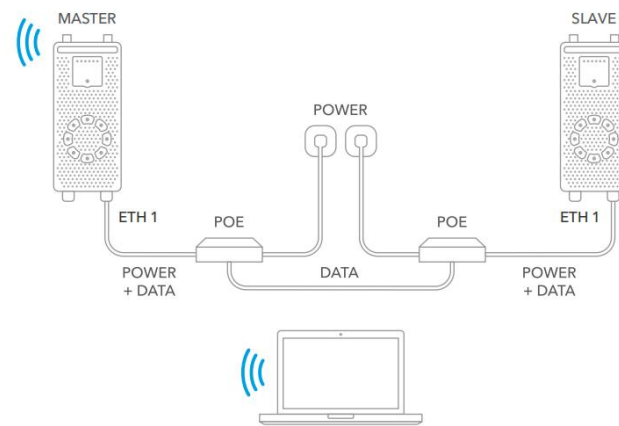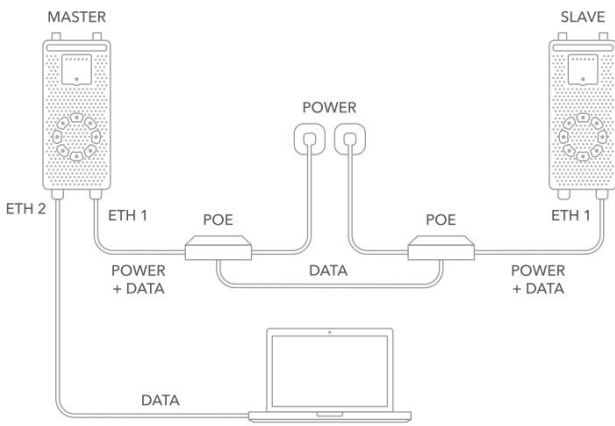| Humidity	0~90% (Non-Condensing)
Software features	
• Wizard for fast link setup	
• Centralized control from master:	
A) Common wireless link parameters; B) Individual slave parameters	
• Smart Auto-channel	
• Robust data security	
• QoS with hardware acceleration	
• Spectrum analyzer	
• Wireless signal and device state indication on RGB LEDs	
• Dual firmware image	
Management	
Dedicated 2.4GHz Radio for Management	
System Monitoring	STP/SNMP (V1), GUI/HTTP(S), Shell/SSH and Infinity Controller
System Configuration	GUI/HTTP(S)

Antenna Specification

V Pol — Azimuth V Pol — Elevation H Pol — Azimuth H Pol — Elevation

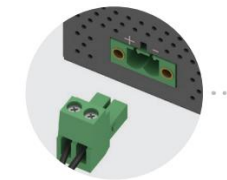| Antenna	
Frequency range	5.85–6.45GHz
Gain	25 dBi
Polarization	Dual linear
Cross-pol Isolation	27dBi
VSWR	<1.4
Azimuth beamwidth (H pol)	8°
Azimuth beamwidth (V pol)	8°
Elevation beamwidth	8°

Typical Application

Wireless

Wired

802.3af/at Inserter

DC input connector

Grounding pin

DIN rail mounting

Electrical specifications

DC input voltage range	44.0–57.0V	Physical specifications	
IEEE 802.3af/at compliant	POE output	DC input	
Output power	up to 28W	Data input +power jack	RJ45
Power output	RJ45 pins 1,2,4,5 (+) and 3,6,7,8 (-)	Dimensions	117×87×34mm
Data rate	10/100/1000Mbps	Weight	270g
Surge protection	2kV line to line,	Operating temperature	−40 to +65C
	6kV line to ground (output port)	UTP/FTP cable length	100m total (from switch to the device)

ΛLTI-LINK

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