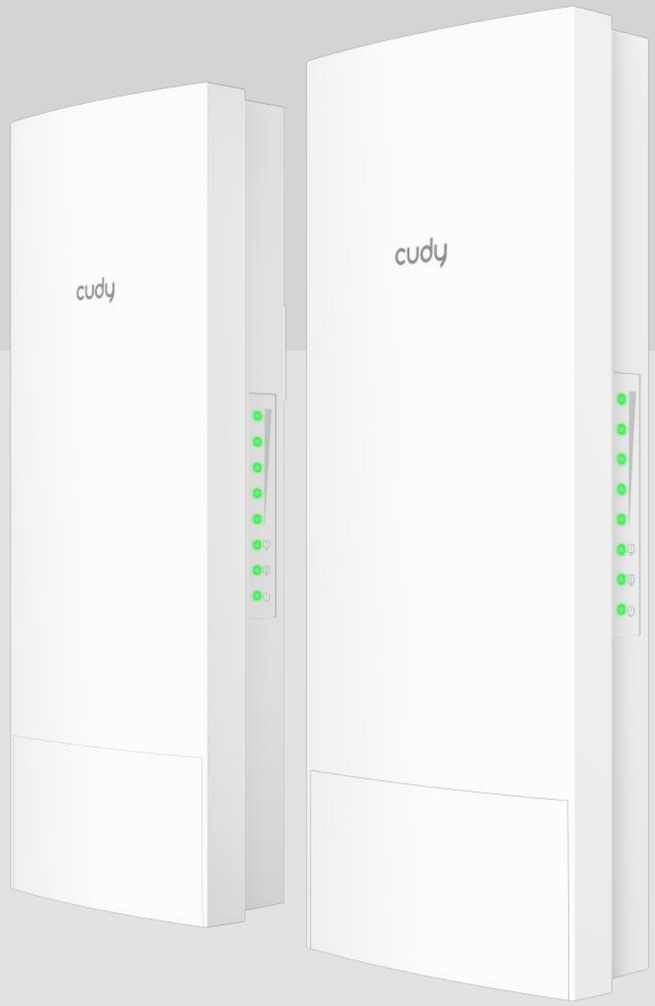
Model: WB10K Kit 1.0

10 KM Long-Range 5 GHz Wi-Fi 6 Wireless Bridge

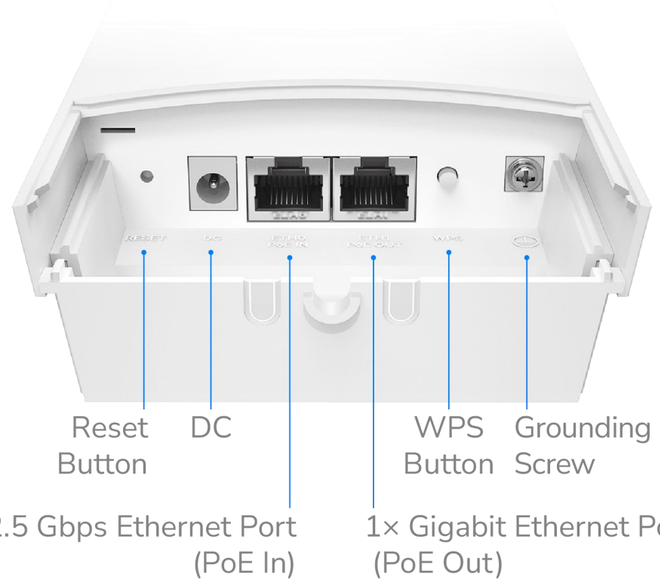


Datasheet

Highlights

A 5 GHz wireless bridge designed for long-range point-to-point connectivity. It supports high-speed data transmission over distances of up to 10 km. Perfect for CCTV, building-to-building links, farms, factories, warehouses, and remote network deployment.

- 10 km (6.2 miles) Long Range
- 2402 Mbps (5 GHz) Wi-Fi 6
- 1× 2.5GbE PoE In, 1× GbE PoE Out
- Beamwidth (H×V) 70° × 15°
- 802.3at/af, Passive PoE, DC
- IP65, -40~65°C (-40~149°F), 6kV Surge

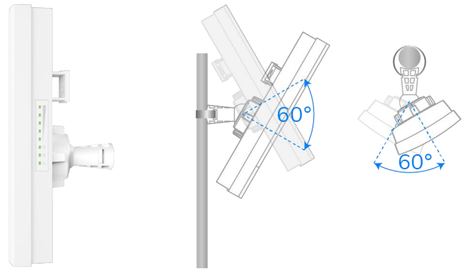


Package Content

- WB10K Kit
- PoE Adapter
- Power Cord
- Ethernet Cable
- Installation Guide
- Mounting Kit

Installation

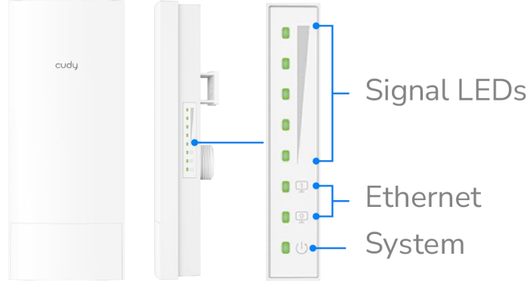
- Pole Mounting (Ball-Joint Mount Included)



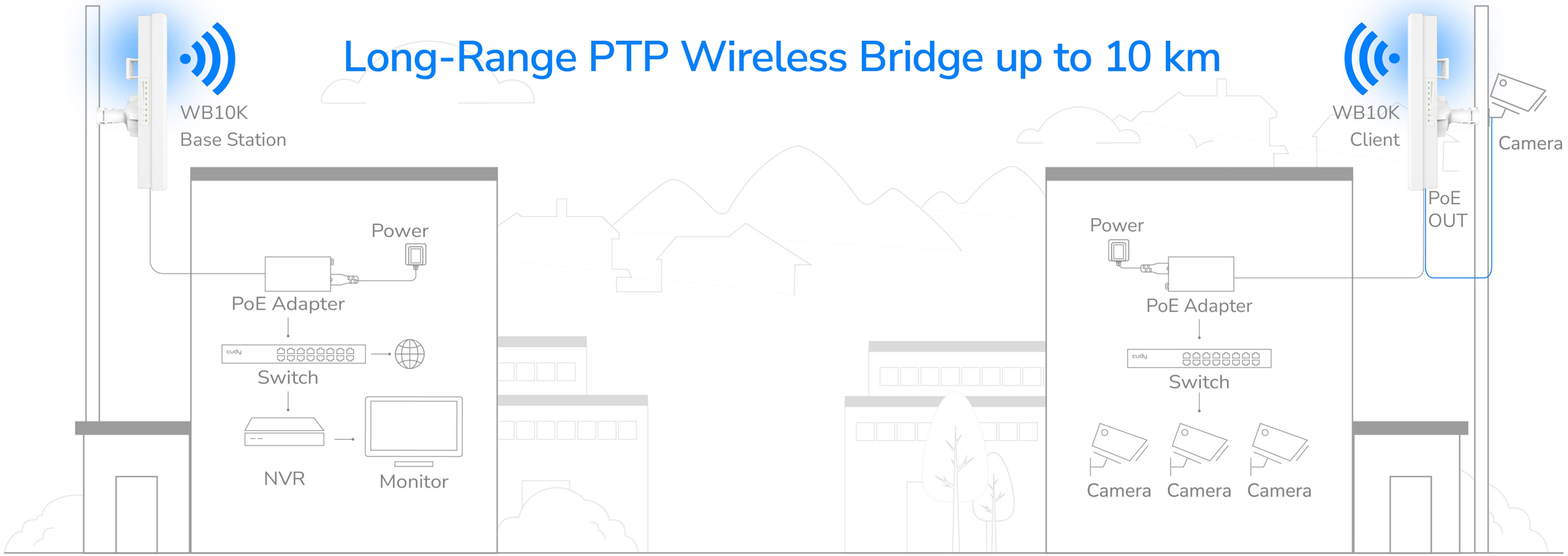
- Wall Mounting



LED Indicators



Long-Range PTP Wireless Bridge up to 10 km



Establishes a reliable point-to-point wireless link over distances of up to 10 km, reducing the need for extensive cabling across farms, campuses, construction sites, and surveillance deployments.

Auto-Pairing

Pre-configured devices pair automatically after power-on, simplifying setup and saving installation time.

2.5 GbE Connectivity

Equipped with a 2.5 GbE PoE-in port and a Gigabit PoE-out port for high-speed connectivity and flexible deployment.

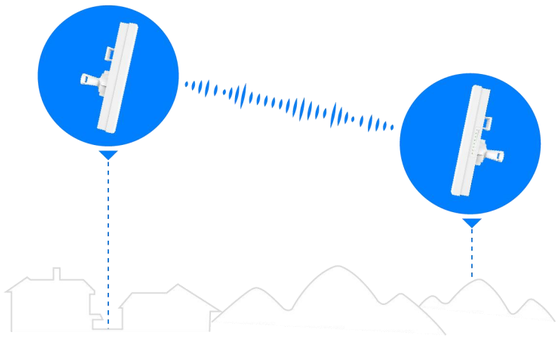
Outdoor-Ready

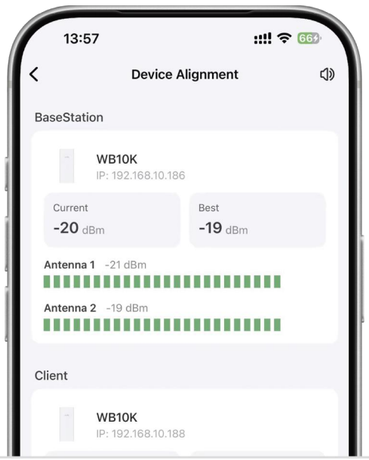
IP65-rated weather resistance and 6 kV surge protection ensure reliable performance in outdoor environments.

Easy Network Management with the Cudy App

Monitor and manage your wireless bridges remotely.

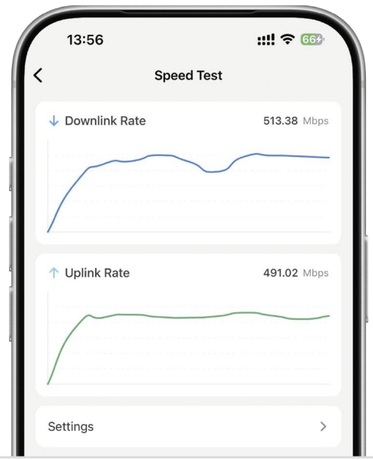
Antenna Alignment





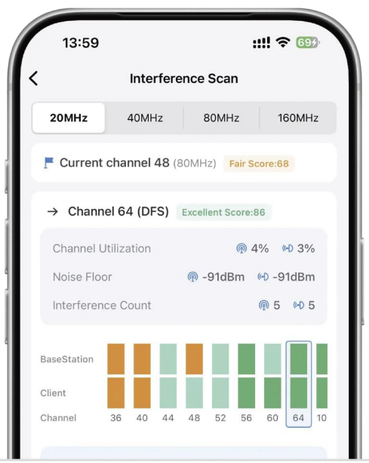
Speed Test



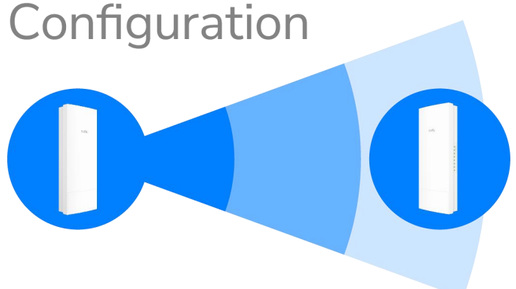


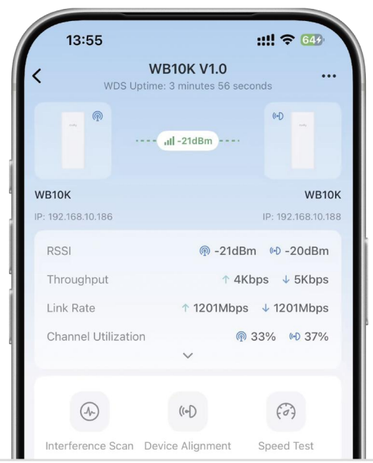
Interference Detection





Monitoring and Configuration





Hardware Specs

Model Version	WB10K Kit 1.0	
CPU	CPU Details	1.3 GHz Dual-Core CPU
Memory/Storage	Flash/ROM	128 MB (1 Gbit) NAND
	DDR/RAM	256 MB (2 Gbit) DDR3
Wireless	5 GHz Wi-Fi Speed	2402 Mbps
	5 GHz Wi-Fi Streams	2 Spatial Streams
	Wi-Fi Antennas	2× Internal Directional
	Receive Sensitivity (Typical)	802.11a: -92 dBm @ 6 Mbps -72 dBm @ 54 Mbps 802.11n : -89 dBm @ HT40 MCS0 -69 dBm @ HT40 MCS7 802.11ac : -86 dBm @ VHT80 MCS0 -61 dBm @ VHT80 MCS9 802.11ax : -85 dBm @ HE80 MCS0 -57 dBm @ HE80 MCS11
	FEM or PA/LNA	5 GHz: 2× External

Wireless	Beamwidth (H×V)	70° × 15°
	Range Performance	Max: 10 km (6.2 miles)
Interfaces	2.5G RJ45 Ports	1
	Gigabit RJ45 Ports	1
	Ethernet Notes	ETH0: PoE In, ETH1: PoE OUT* (See Power section)
Buttons and LEDs	LED	Signal Strength, Ethernet, System
	Physical Buttons	Reset Button, WPS Button
Power	Power Input Type	• DC Jack • PoE via Ethernet Port
	Power Methods	• DC • Passive PoE • 802.3at/af PoE
	Power Input	• DC: 12V⎓ 1A • Passive PoE: 48-57V⎓ • PoE: 802.3at
	Power Output	802.3af/at ETH1

Hardware Specs

Power	Max Power Consumption (W)	24W (with PoE output), 9W (without PoE output)
	Idle Power Consumption (W)	5.4W
	Power Adapter In the Box	Input: 100-240V~, 50/60Hz Output: 12V⎓ 1A
	DC Plug Size (OD × ID)	5.50 ± 0.05 mm × 2.10 ± 0.05 mm
Reliability	EMC	IEC/EN 61000-4-2 ESD Level 4: Contact 8kV, Air 15kV IEC/EN 61000-4-5 Surge Level X: CM 6kV, DM 4kV
	Environment	• Operating Temperature: -40 ℃ ~ 65 ℃ (-40 ℉ ~149 ℉) • Storage Temperature: -40 ℃ ~ 70 ℃ (-40 ℉ ~ 158 ℉) • Humidity: 0% ~ 100% non-condensing • Storage Humidity: 0% ~ 100% non-condensing

Certifications	FCC, CE	
Mechanical	Installation	• Wall-mount • Pole-mount
	Dimension	240×100×53.7 mm 9.45×3.94×2.11 inches
Package Content	• WB10K Kit • PoE Adapter • Power Cord • Ethernet Cable • Installation Guide • Mounting Kit	
Ordering Information	Retail Package Dimension	280×105×272 mm 11.02×4.13×10.71 inches
	Units per Carton	5
	Carton Dimension	55×29×29.8 cm 21.65×11.42×11.73 inches

Software Specs

Model Version	WB10K Kit 1.0	
Wireless	Wi-Fi Standards	Wi-Fi 6
	Max Wi-Fi Modulation	1024-QAM
	Wi-Fi Channel Width	Auto/20/40/80/160 MHz
	Wi-Fi Security	WPA/WPA2/WPA3
General	Operation Modes	• PtP Base Station • PtP Client
	Pre-Paired	True
Utilities	Antenna Alignment	True
	Speed Test	True
	Interference Detection	True
System	Local Control Method	• Config Web Page • App Control
	Remote Control Method	App Control

System	Firmware Upgrade	• Local Update • App (Over the Air) • Online Update
	Reliability	Backup and Restore
	Diagnostic Tools	Diagnosis

Software Specs

System	Languages	• English • Bengali • Catalan • Czech • German • Greek • Spanish • French • Hebrew • Croatian • Hungarian • Italian • Japanese • Khmer • Korean • Dutch • Norwegian • Polish • Portuguese • Romanian • Russian • Slovak • Swedish • Thai • Turkish • Ukrainian • Vietnamese • Simplified Chinese • Traditional Chinese

Dashboard	Panel	• LAN Status • System Version • WDS Status