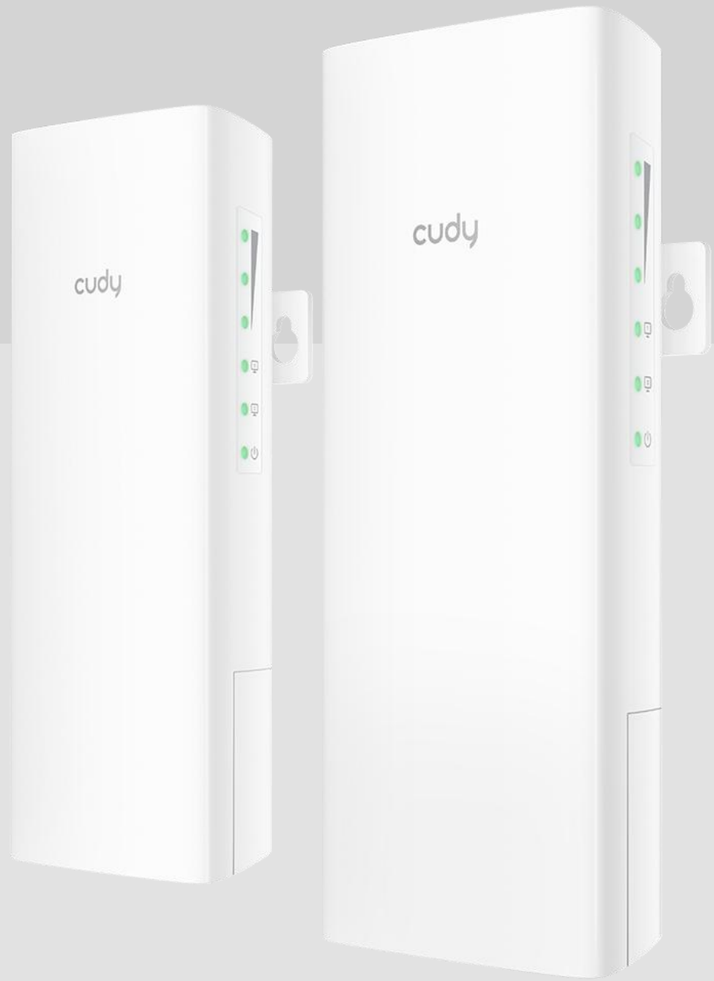
Model: WB05 Kit 1.0

500 Meters 2.4 GHz High-Power Wireless Bridge



Datasheet

Highlights

A 2.4 GHz wireless bridge designed to deliver stable and long-range connectivity up to 500 meters. Ideal for campuses, farms, and elevator surveillance PtP deployment. Supports up to 3× 8MP cameras at 500m.

- 300 Mbps Wi-Fi
- 7 dBi High-Gain Antennas
- Beamwidth (H×V) 105° × 80°
- DC, Passive PoE
- PoE Passthrough
- IP55, -30~60°C (-30~140°F), 4kV Surge

Actual wireless data throughput will vary as a result of network conditions, client limitations, and environmental factors including building layout, obstacles, and client location.

Package Content

- WB05 Kit
- Power Adapter
- PoE Adapter
- Installation Guide
- Zip Tie

Hardware Specs

Model Version	WB05 Kit 1.0	
CPU	CPU Details	580 MHz Single-Core CPU
Memory/Storage	Flash/ROM	8 MB (64 Mbit) NOR
	DDR/RAM	64 MB (512 Mbit) DDR2
Wireless	2.4 GHz Wi-Fi Speed	300 Mbps
	2.4 GHz Wi-Fi Streams	2 Spatial Streams
	Wi-Fi Antennas	2× Internal Directional
	Receive Sensitivity (Typical)	802.11b: -96 dBm @ 1 Mbps -89 dBm @ 11 Mbps 802.11g : -93 dBm @ 6M -76 dBm @ 54M 802.11n : -93 dBm @ H20 MCS0 -75 dBm @ H20 MCS7 -88 dBm @ H40 MCS0 -71 dBm @ H40 MCS7
	FEM or PA/LNA	2.4 GHz: 2× Internal

Wireless	Beamwidth (H×V)	105° × 80°
	Range Performance	Max: 500 m (1640 ft)
Interfaces	10/100 Mbps RJ45 Ports	2
	Ethernet Notes	ETH0: PoE In, ETH1: PoE OUT* (See Power section)
Buttons and LEDs	LED	Signal Strength, Ethernet, System
	Physical Buttons	Reset Button
Power	Power Input Type	• DC Jack • PoE via Ethernet Port
	Power Methods	• DC • Passive PoE
	Power Input	• DC: 12V⎓1A • Passive PoE: 12-57V⎓
	Power Output	802.3af at ETH1
	Max Power Consumption (W)	19W (with PoE output), 2.4W (without PoE output)

Hardware Specs

Power	Idle Power Consumption (W)	1.4W
	Max Power Output (W)	15W
	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
	Note	The PoE output requires a 48V passive PoE input and must be enabled on the configuration page. The bundled 12V power adapter is insufficient to power the PoE output.
Reliability	Camera Capacity	500 m: 3× 8MP cameras
	EMC	IEC/EN 61000-4-2 ESD Level 4: Contact 8kV, Air 15kV IEC/EN 61000-4-5 Surge Level 4: CM 4kV

Reliability	Environment	• Operating Temperature: -30 ℃ ~ 60 ℃ (-22 ℉ ~140 ℉) • Operating Temperature with Normal Air Flow: -30 ℃ ~ 70 ℃ (-22 ℉ ~158 ℉) • Storage Temperature: -40 ℃ ~ 70 ℃ (-40 ℉ ~ 158 ℉) • Humidity: 5% ~ 90% non-condensing • Storage Humidity: 0% ~ 100% non-condensing
	Ingress Protection Rating	IP55
Certifications	FCC, CE	
Mechanical	Installation	• Wall-mount • Pole-mount
	Dimension	179.7×37.2×44 mm 7.07×1.46×1.73 inches
Package Content	• WB05 Kit • Power Adapter • PoE Adapter • Installation Guide • Zip Tie	

Hardware Specs

Ordering Information	Retail Package Dimension	245×195×48 mm 9.65×7.68×1.89 inches
	Units per Carton	20
	Carton Dimension	50.6×27×41.4 cm 19.92×10.63×16.3 inches
Compatibility	Compatible Accessories	POE52-30W 1.0, POE24-12W 1.0, POE48-18W 1.0
	Note	Choose with caution: Some suggested models may provide enough power for the device's own consumption but may be insufficient to support PoE Out.

Software Specs

Model Version	WB05 Kit 1.0	
Wireless	Wi-Fi Standards	Wi-Fi 4
	Max Wi-Fi Modulation	64-QAM
	Wi-Fi Channel Width	Auto/20/40 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

Software Specs

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

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

Software Specs

Dashboard	Panel	• LAN Status • System Version • WDS Status