光普森科
GPSENKE

6GHz Band 700Mbps PTP Wireless Bridge

GP-AB950-6E Series



INDUSTRIAL NETWORK SOLUTION SPECIALIST
WWW.GPSENKE.COM

Introduction

GP-AB950-6E is an industrial point-to-point wireless bridge, delivering up to 700 Mbps with 2–4 ms low latency and equipped with a 1.2 GHz CPU. The main unit supports optional high-gain antennas, enabling transmission distances of 30 km, 50 km, 80 km, or up to 100 km, depending on the selected antenna and site conditions. It ensures stable long-range transmission for video, voice, and data.

GP-AB950-6E features dual Gigabit ports (one with PoE passthrough), supports 1+1 redundancy, relay mode, auto channel/power control, and includes tools like link test, spectrum analysis, and antenna alignment. Compatible with VLAN, DHCP, dual firmware, SNMP, and cloud management.

Built with an IP67-rated aluminum shell, it resists water, dust, condensation, and wind. RGB LEDs indicate signal and status. Ideal for mining, oilfields, highways, power grids, and remote monitoring.

Main Feature

- Support up to 700 Mbps wireless speed.
- Support 30 km / 50 km / 80 km / 100 km transmission distances with optional antennas.
- Suppprt 2× Gigabit Ethernet ports, one with PoE passthrough.
- Voice & Video Priority: QoS ensures stable transmission.
- 1.2GHz CPU: Handles up to 200,000 pps efficiently.
- Support IEEE 802.3at 48V PoE power supply.
- Support IP67-rated industrial-grade aluminum housing.
- Built-in surge and ESD protection (IEC Class 4).
- Auto channel/power control, link test, and spectrum analysis.
- RGB LED indicators for signal strength and device status.

Technical Parameter

Model	GP-AB950-6E									
CPU	1.2GHz									
QAM	256									
Radio Mode	MIMO 2x2									
Frequency Range	4.900 - 6.400 GHz									
Channel size	5, 10, 20, 40, 80 MHz									
Modulation schemes	OFDM (256-QAM, 64-QAM, 16-QAM, QPSK, BPSK)									
Data rates @ 80 MHz	866, 780, 650, 585, 520, 390, 260, 195, 130, 65 Mbps									
Duplexing scheme	TDD									
Error correction	BCC, LDPC									
Radio security	Hardware AES-128									
Modulation, Mbps	866	780	650	585	520	390	260	195	130	65
TX Power, dBm	24	25	26	27	28	30	30	29	30	29
Receive sensitivity, dBm	-71	-73	-77	-79	-80	-84	-87	-92	-94	-97

Hardware Parameter

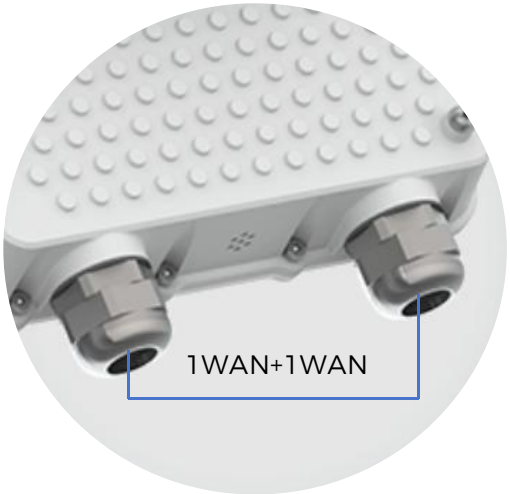
Size		Length 399 mm, width 174 mm, height 47 mm
Weight		2.9 kg
Port	Ethernet	10/100/1000 Base-T with PoE IN (RJ45)
		10/100/1000 Base-T with PoE OUT (RJ45)
	Antenna	2*N-type Connection Port for external high-power antenna
Power Input		PoE 802.3at, isolated 42 - 57 VDC
Power Output		PoE 802.3af, 48 VDC, 12.95W maximum
Max. Consumption		8.6 W
Operating Temperature		-40°C ~ 65°C
Operating Humidity		0%~90%(Non-condensing)
IP Protection Level		IP67
Protection		Support surge and ESD protection according to IEC standards and passes Class 4 requirements

Software Parameter

Features	Wizard for fast link setup
	Centralized controlfrom master: A)Common wireless link parameters ； B)Individual slave parameters
	Smart Auto-channel (FCC/ETSI DFS-compatible,user-configurable)
	Robust data security
	QoS with hardware acceleration
	Spectrum analyzer
	Wireless signal and device state indication on RGB LEDs
	Dual firmware image
Network Function	VLAN Setting
	DHCP server: built-in DHCP server or external DHCP server
	Cloud platform server
Management	Dedicated 24 GHz radio for management
	System monitoring
	System configuration
	SNMP, GUI/HTTP(S), ShelVsSH and WNMS
	GU/HTTP(S) and WNMS

Appearance & Accessories






Device *1


Accessories*1


Manual*1

Dual-Polarized Parabolic Antenna Selection

Model	Distance	Picture	Gain	Bandwidth	Diameter	Note
GP-P5827	30KM		27-28dBi	80MHz	0.6m	Standard configuration. For high-interference or heavy-rain environments, a 30–31 dBi / 1.2 m antenna is recommended for higher link margin.
GP-P5830	50KM		30-31dBi	80MHz	0.9m	Recommended standard configuration, providing improved link margin and stability under rain attenuation.
GP-P5834	80KM		34 dBi	40MHz (Recommend)	1.2m	40 MHz is recommended for stable long-distance transmission. 80 MHz may be used under favorable weather conditions, but rain may reduce the modulation rate.
GP-P5837	100KM		37-38 dBi	40MHz (Recommend)	1.8m	Ultra-long-distance deployment. Requires detailed link-budget calculation, Earth-curvature and Fresnel-zone verification, rigid tower structures, and precise antenna alignment.

Note: The recommended link distance is based on typical line-of-sight conditions. Actual transmission distance and link performance depend on antenna selection, installation height, terrain, interference, weather conditions, and link budget. Final antenna selection should be confirmed through site-specific link calculation.

INDUSTRIAL NETWORK
SOLUTION SPECIALIST

光普森科
GPSENKE

© GPSENKE(CHINA) | All rights reserved.
Update Time: 2026.8.12

This document and any part thereof may not be reproduced or used in any manner without the express written permission of GPSENKE (China).
Product specifications are subject to change without prior notice. Please visit our website for the latest product information.