

IOT-S306S

Industrial Outdoor Wireless Bridge with PoE & RS485



Outstanding Features

- 3-in-1 Outdoor Wireless Bridge, PoE Switch, and Voltage Booster
- 4× 10/100Mbps RJ45 Ports
- Supports IEEE 802.3af PoE Output on One Port (Port ETH2)
- Supports DC 12-52V or IEEE802.3af/at PoE Input (Port ETH1) power supply
- Supports wireless speeds up to 300 Mbps
- 5.8 GHz Bridge Transmission Distance up to 3 km (Line of Sight)
- RS485 Port for Integration with Sensors or Controllers
- Supports integration with Linovision RemoteMonit cloud platform for device monitoring and remote management.
- Professional outdoor enclosure design, IP55 dustproof and waterproof rating, supports wall mounting or pole mounting

Specification

Hardware Specifications

Main Chipset	Atheros AR9344, 600 MHz
DRAM	DDR2, 64 MB
Flash	8 MB

Network & Device Interfaces

Ethernet Ports	3 × 10/100 Mbps RJ45 ports (1 port supports IEEE 802.3af PoE output; 1 port supports IEEE 802.3af/at PoE input)
Uplink Port	1 × 10/100 Mbps uplink Ethernet port
Console Port	1 × console port
RS485 Interface	1 × RS485 interface
DC Power Interface	1 × DC input (DC 12–52 V, 2 A input; internally boosted to DC 48 V to enable IEEE 802.3af PoE output on ETH2; maximum output power 15 W)

Wireless Data Rates

802.11a	54, 48, 36, 24, 18, 12, 9, 6 Mbps
802.11n HT20	7.2, 14.4, 21.7, 28.9, 43.3, 57.8, 65, 72.2, 86.7, 115.6, 130, 144.4 Mbps
802.11n HT40	15, 30, 45, 60, 90, 120, 135, 150, 180, 240, 270, 300 Mbps

Wireless Technology

Transmission Method	Direct Sequence Spread Spectrum (DSSS)
Modulation	OFDM / BPSK / QPSK / CCK / DQPSK / DBPSK

Standards & Protocol Support

Wireless Standards	IEEE 802.11n, IEEE 802.11a
Ethernet Standards	IEEE 802.3, IEEE 802.3u, IEEE 802.3x
PoE Standards	IEEE 802.3af, IEEE 802.3at
Network Protocols	CSMA/CA, TCP/IP, IPX/SPX, NetBEUI, DHCP, NDIS3, NDIS4, NDIS5

RF Characteristics

Frequency Range	4900–6100 MHz
-----------------	---------------

**Disclaimer: Technical specifications may subject to change without prior notice*

RF Output Power (@25 °C ±2 dB)

802.11a	6–24 Mbps	27 ±2 dBm
	36–48 Mbps	26 ±2 dBm
	54 Mbps	25 ±2 dBm
802.11n HT20	MCS 0–3	27 ±2 dBm
	MCS 4	26 ±2 dBm
	MCS 5	25.5 ±2 dBm
	MCS 6	25 ±2 dBm
	MCS 7	24.5 ±2 dBm
802.11n HT40	MCS 0–3	26 ±2 dBm
	MCS 4	25.5 ±2 dBm
	MCS 5	25 ±2 dBm
	MCS 6	24.5 ±2 dBm
	MCS 7	24 ±2 dBm

Receiver Sensitivity

802.11a	6Mbps ≤ -89; 54Mbps ≤ -73	
802.11n	HT20	MCS 0 ≤ -86; MCS 7 ≤ -68
	HT40	MCS 0 ≤ -83; MCS 7 ≤ -65

Antenna

Frequency Range	4900–6100 MHz
Polarization	Vertical / Horizontal
Gain	16 dBi

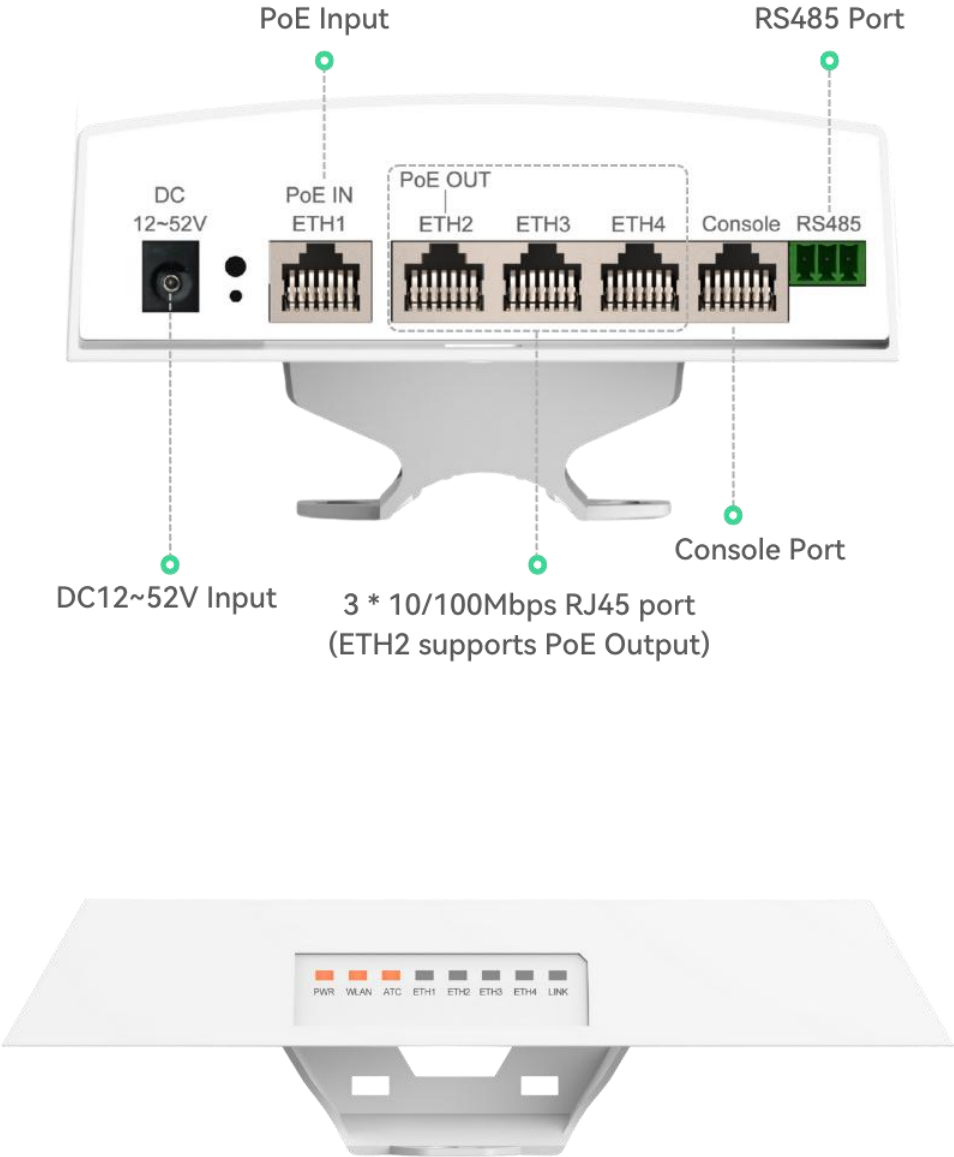
Switching & Forwarding Performance

Switching Capacity	1 Gbps
Packet Forwarding Rate	12.96 Mpps
Forwarding Mode	Wire-speed forwarding on all ports

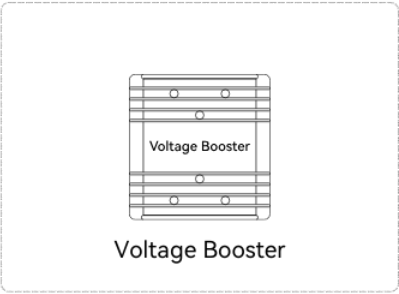
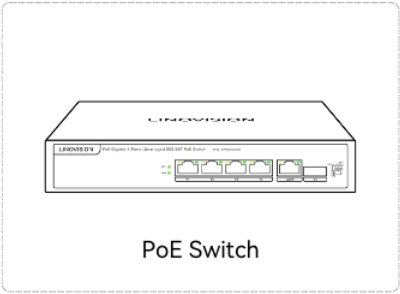
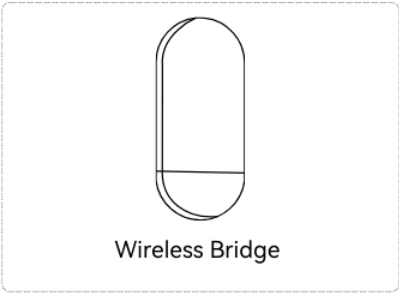
MAC Address Table	4K
Port Auto-Negotiation	Supported
Power System	
Power Input	DC 12–48 V / PoE 48 V
Boost Converter Input	DC 12–36 V, 2 A
Maximum PoE Output Power	15 W
Power Consumption	≤ 6 W
Management & Security	
Management Methods	WEF-based management, SNMP MIB, Telnet, Serial
MAC Address Control	Not supported
Encryption	WEF (64/128-bit), WPA, WPA2, 802.1X
Serial Device Server (RS485)	
Interface	RS485 terminal
Ethernet Protection	RJ45 interface, 2 kV surge protection
Serial Signals	RXD, TXD, GND
Baud Rate	300–115200 bps
Parity	None, Odd, Even, Mark, Space
Data Bits	5–9 bits
Flow Control	None
Software & Configuration	
Supported Protocols	Ethernet, IP, TCP, UDP, HTTP, ARP, ICMP, DHCP, DNS
Configuration Methods	ZLVirCOM tool, Web browser, device management function library
Communication Method	TCP/IP direct communication, virtual serial port mode
Operating Mode	
Operating Temperature	–30 to +65 °C
Storage Temperature	–50 to +80 °C
Humidity (Non-condensing)	≤95% (non-condensing)

Humidity (Non-condensing)	≤95% (non-condensing)
Product Specifications	
Dimensions (L × W × H)	228 × 135 × 45 mm (8.98 × 5.31 × 1.77 in)
Weight	0.4 kg (0.88 lb)

Interface



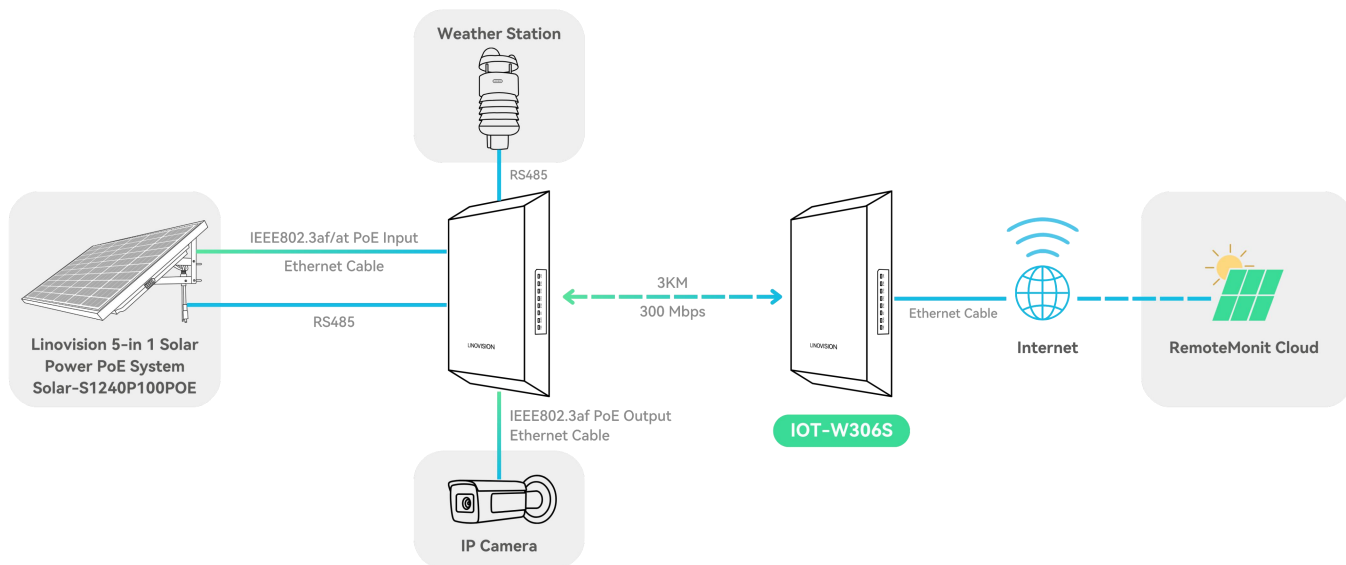
3-in-1 Design



IOT-W306S

**Disclaimer: Technical specifications may subject to change without prior notice*

Connection Diagram



Package Contents



IOT-W306S



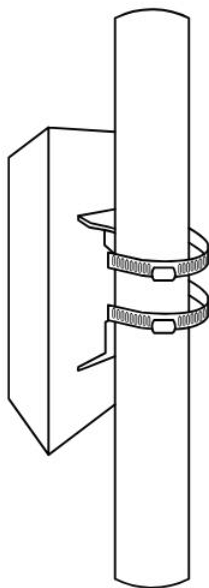
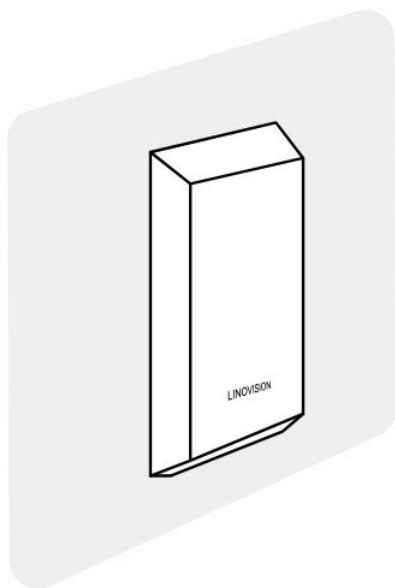
Power Adapter



Hoop



Quick Guide



Wall Mounting & Pole-Mounting

