WASP-866M-SA-W3

The best-in-class carrier grade wireless bridge

WASP is the most advanced Point-to-Point / Point-to-MultiPoint Wireless solution in the market. Offering MIMO technology, these cost effective, high performance radios are feature rich, extremely versatile, and are suitable for a wide range of applications.

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WASP Highlights

The new generation radios offer flexible configuration options for different network architectures and delivering exceptional performance in a wide variety of applications.

Powerful inbuilt software routing features enable sophisticated IP networks to be built without the need for external routers and appliances, thereby reducing networking complexity and the cost of ownership. Software Defined Radio (SDR) features ensure high throughput, even when small VOPI packets are used.

The powerful modulation scheme significantly improves the quality of data delivery and effectively mitigates interference from other systems. WASP offer up to 550Mbps net throughput (867Mbps PHY rate), the potential to offer an incredible experience is inherent in the system.

WASP radios provide multiple layers of security, for a higher level of security, AES (Advanced Encryption Standard) is available, providing 128-bit encryption, thereby ensuring that the delivery of data is secure and reliable.

WASP is designed to provide maximum performance in any conditions. Metal IP standards rated enclosure not only protects from harsh weather conditions, but also allows using high-power radio for long distance links at the same time creating a shield for unwanted RF noise from nearby sources. The standalone radio add flexibility to connect to any antenna makes this product ideal for short to long range communication both in PtP & PtMP scenario. Such outstanding quality and flexibility makes this product ideal option for wireless bridging especially in mission critical connectivity applications requiring reliable data transmission.

Key features

- 802.11ac.
- Ideal for PtP / PtMP / Wireless ISP.
- Simple to configure and install.
- Support extended frequency bands 4.9 - 6.1 GHz.
- Integrated 2x2 MIMO antenna.
- Higher capacity up to 550Mbps*.
- 5/10/20/40/80MHz Channelization support.
- Compact and robust.
- IP67 Rated Enclosure.
- <10-Watt power consumption.
- WEB, SNMP and Telnet management.
- Smart Station Coordination Function (SSCF).
- Spectrum Analyzer.

Specifications

WASP-866M-SA-W3

WIRELESS INTERFACE

Operating Frequency Range	Extended Frequency bands 4.9 - 6.1 GHz (FCC 5.150 - 5.250 and 5.725 - 5.850 GHz) country dependent. **Dynamic Frequency Selection (DFS) feature for regions requiring DFS enabled.**
Operating Range	External antenna dependent *
Operating Modes	PtP / PtMP / CPE
Modulation Types	802.11 a/n: OFDM (64-QAM, 16-QAM, QPSK, BPSK) 802.11 ac: OFDM (256-QAM, 64-QAM, 16-QAM, QPSK, BPSK)
Wireless Standards & PHY rate	IEEE 802.11 a/n/ac, SSCF 802.11 ac @ 40 Mhz: 400, 360, 300, 270, 240, 180, 120, 90, 60, 30 Mbps 802.11 ac @ 80 Mhz: 866, 780, 650, 585, 520, 390, 260, 195, 130, 65 Mbps
Maximum RF Output Power @ antenna port	UP TO 30dBm** – TPC (Transmit Power Control), 1dB steps
Net Aggregate Throughput	Up to 550Mbps*
Duplex Mode	Time Division Duplex (TDD)
Latency	<3ms*
Channel Size	5/10/20/40/80MHz support
Error Correction	LDPC, FEC – Forward Error Correction, k = 1/2, 2/3, 3/4, 5/6

ANTENNA

External Antenna	2 x N-type (female) connector for MIMO antenna

SECURITY

Encryption	64/128-bit WEP data encryption, WPA, AES 128-bit
Wireless SSID Suppress	Yes
Authentication	802.1x with Radius Authentication EAP-Transport Layer Security (TLS)

NETWORKING AND MANAGEMENT

IEEE Standards support	802.1d, 802.1p, 802.1q, 802.11e, 802.11h, 802.11i, 802.11-2007
Management Tools	Telnet, SSH, HTTP and SNMP v1/v2/v3
Protocol Support	SNMP v1/v2/v3, HTTP, FTP, IPv4, IPv6, dual stack
VLAN support	IEEE 802.1Q, QinQ, Tagging, Un-tagging
QoS support	IEEE 802.1P, 4 layers as standard
Layer 2	IP Bridging

PHYSICAL INTERFACE

Ports	1 x 10/100/1000Base-T, RJ45 802.3af/at (Data + PoE Power input)

POWER SUPPLY

Power Supply	37 - 56 VDC PoE 802.3af (AC to DC adapter included)
Power Source	100 – 240 VAC
Power Consumption	<10 Watts

ENCLOSURE

Dimensions (HxWxD)	198mm x 198mm x 46mm
IP Rating	IP67 Impact resistant ABS & Aluminium
Weight	2 kg
Mounting	Wall / Pole mount bracket
Wind Resistance	200Km/h

ENVIRONMENTAL

Operating Temperature	-40C/+65 deg C
Operating Humidity	5% to 95% Relative Humidity

* *Actual throughput and radio link distance is depending on factors such as external interference, LOS, RSSI and will result in lower MCS data rate at longer distance.*

** *TX power should be set according to country specific regulatory requirements and should not exceed.*

Specifications

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RF PERFORMANCE (PHY RATES):

40 MHz	Modulation, Mbps	400	360	300	270	240	180	120	90	60	30
	TX Power, dBm	26	27	28	29	30	30	30	30	30	30
	Receive sensitivity, dBm	-70	-72	-76	-78	-80	-84	-87	-92	-94	-95
80 MHz	Modulation, Mbps	866	780	650	585	520	390	260	195	130	65
	TX Power, dBm	24	25	25	26	27	28	28	29	29	29
	Receive sensitivity, dBm	-64	-66	-70	-72	-74	-78	-81	-85	-88	-90