JBZ520ac

5 GHz high-capacity wireless device

500 Mbps

Incredible performance

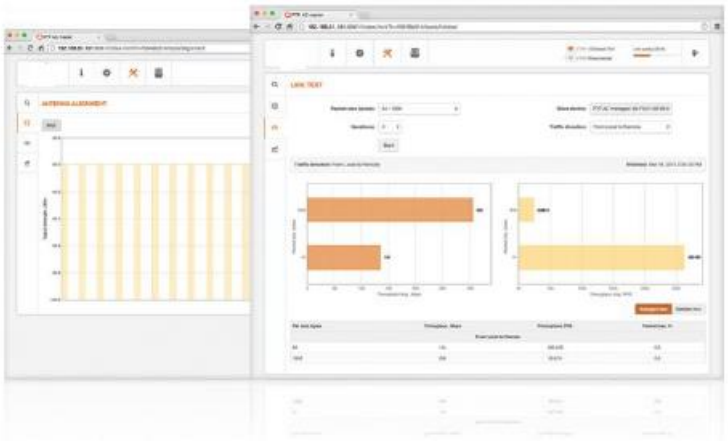
500+ Mbps throughput - a result of powerful hardware platform with 802.11ac technology based radio and a proprietary data transmission protocol (iPoll). Incorporating a QCA 9563 CPU (750 MHz), a QCA 9882 radio and 64 MBytes of RAM and 16 MBytes of flash memory, the device is an ideal solution for capacity demanding applications. State of the art RF design with great output power and sensitivity parameters improve range and capacity over highest the modulation - 256 QAM. The 24V Gigabit Ethernet port (passive PoE) allows utilizing the full capacity of the radio when used in a point-to-point or point-to-multipoint network design.

New form factor

The shape of the enclosure is now smaller, lighter but retains the IP-66 weather protection rating. Smaller packaging reduces freight costs and makes them less obvious. The new design has no metal parts, which makes them lighter and corrosion resistant.

New mounting

The adjustable mounting bracket is very easy to assemble and install. It consists of two easy to connect parts that allow tilting the device up and down when installing on a pole. A metal strap is included to securely tighten the device. This design includes additional reinforcements and thicker materials to ensure survival in extreme climate conditions.



Powerful OS

The OS is a highly functional and easy to use operating system embedded in hardware device for effortless setup and trouble free operation. High performance (500 Mbps) allows offering more bandwidth together with additional services such as VoIP and IPTV. This is possible when using this smart QoS mechanism and multi-cast traffic enhancements for triple play services. Such services are essential for all next generation service providers to complement their existing portfolios. iPoll, this proprietary transmission protocol, ensures smooth performance with a high number of clients even in noisy environments.

Specifications

Distance recommendation	PTMP mode	PTP mode
JBZ 520 ac	10 km/ 6.21 mi	15 km/ 9.32 mi

Wireless

WLAN standard	IEEE 802.11 a/n/ac, iPoll 3
Radio mode	MIMO 2x2
Radio frequency band	5 GHz models: 5.150 - 5.850 GHz (FCC 5.150 - 5.250 and 5.725 - 5.850 GHz)
Transmit power	Up to 30 dBm (country dependent)
Channel size	5, 10, 20, 40, 80 MHz
Modulation schemes	802.11 a/n: OFDM (64-QAM, 16-QAM, QPSK, BPSK) 802.11 ac: OFDM (256-QAM, 64-QAM, 16-QAM, QPSK, BPSK)
Data rates	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
Error correction	FEC, LDPC
Duplexing scheme	Time division duplex

MHz 40	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
MHz 80	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

Antenna

Type	Integrated dual-polarized directional panel antenna
Gain	20 dBi

Wired

Interface	10/100/1000 Base-T, RJ45

Physical

Dimensions	216 mm (8.5 ‘’), 184 mm (7.2 ‘’), 80 mm (3.1 ‘’)
Weight	413 g (0.91 lb)
Mounting	Pole mounting bracket included

Power

Power supply	24 VDC passive PoE (AC to 24 VDC adapter is included in the package)

Power source	100 – 240 VAC
Power consumption (max)	10 W

Environmental

Operating temperature	-40°C (-40 F) ~ +65°C (+149 F)
Humidity	0 ~ 90 % (non-condensing)

Management

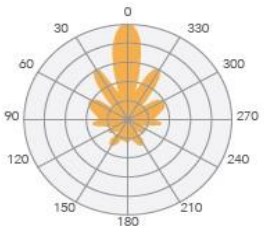
System monitoring	SNMP, Syslog, Web UI, WNMS
Configuration	WebUI, WNMS

Regulatory

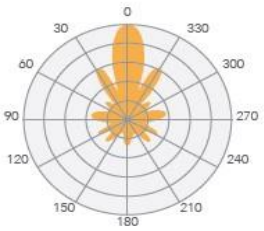
Certification	FCC/IC/C

Antenna specifications

V Pol

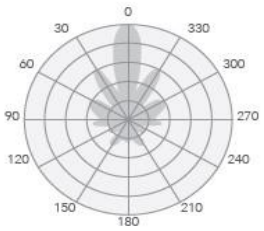


Azimuth

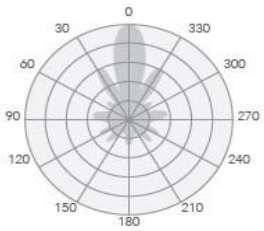


Elevation

H Pol



Azimuth



Elevation

Frequency range	5.1 - 5.9 GHz
Gain	20 dBi
Polarization	Dual linear
Cross-pol Isolation	27 dBi
VSWR	<1.8
Azimuth beamwidth (H pol)	16 deg
Azimuth beamwidth (V pol)	16 deg
Elevation beamwidth	16 deg