

AirBQ M9

Platform information			
Modem board	LOCOM2, Ubiquiti networks, Inc., Atheros MIPS 24KC, 400MHz, 64MB SDRAM, 8MB Flash		
Microwave Board	M9, KPE spol. s r.o., 2 way positive mixer with advanced IF extension processing		
Networking Interface	1 X 10/100 BASE-TX (Cat. 5, RJ-45) Ethernet		
Net throughput efficiency	up to 80%		
Models:	M9 12dBi	M9 20dBi	M9 30dBi
Medium access type	CSMA/TDMA		
Regulatory and Compliance information			
Wireless compliance	*under process		
Electromagnetic Compatibility	*under process		
Physical, Environmental, Electrical			
Physical size	M9 12dBi 179x80x59 mm	M9 20dBi 270x200x200 mm	M9 30dBi 750*630*630 mm
Antenna gain	12dBi	20dBi	30dBi
Antenna mode/Xpol	Dual-linear polarity/ better then 30dB		
Channel spacing	5MHz		
Channel bandwidth	5,10,20,40MHz, estimated 2-39MHz scaling		
Frequency range	9,2-10,5GHz, based on client requirements		
Management	WEB, SSH, SNMP		
Weight	250gr	1200gr	3300gr
Outdoor package	UV stabilised polymer	Cast Alloy box with patch high gain antenna	UV stabilised polymer Enclosure in focus of 60cm offset dish
Environment humidity	0 -95% condensing		
Temperature range	-35 to 60 C		
Power supply of PoE adapter	100-240V ~50-60Hz		
Unit power supply	12-27V DC, pairs +(4,5) and -(7,8)		
Max Power Consumption	5W		

Radio parameters

TX power specification		
Speed	level	Accuracy +0dB
1-24	14dBm	-3,00 dB
36,00 Mbps	14dBm	-3,00 dB
48,00 Mbps	14dBm	-3,00 dB
54,00 Mbps	14dBm	-3,00 dB

Modulation Type	Brutto transport speed	
	20MHz	40MHz
SINGLE PATH	800 ns GI	400 ns GI
TWIN PATH	800 ns GI	400 ns GI
BPSK	6,50 Mbps	15,00 Mbps
QPSK	13,00 Mbps	30,00 Mbps
QPSK	19,00 Mbps	45,00 Mbps
16-QAM	26,00 Mbps	60,00 Mbps
16-QAM	39,00 Mbps	90,00 Mbps
64-QAM	52,00 Mbps	120,00 Mbps
64-QAM	58,00 Mbps	135,00 Mbps
64-QAM	65,00 Mbps	150,00 Mbps
BPSK	13,00 Mbps	30,00 Mbps
QPSK	26,00 Mbps	60,00 Mbps
QPSK	39,00 Mbps	90,00 Mbps
16-QAM	52,00 Mbps	120,00 Mbps
16-QAM	78,00 Mbps	180,00 Mbps
64-QAM	104,00 Mbps	240,00 Mbps
64-QAM	117,00 Mbps	270,00 Mbps
64-QAM	130,00 Mbps	300,00 Mbps

RX power sensitivity specification, preliminary Qualcomm specification		
Speed	level	Accuracy +0dB
1-24	-83,00 dBm	-3,00 dB
36,00 Mbps	-80,00 dBm	-3,00 dB
48,00 Mbps	-77,00 dBm	-3,00 dB
54,00 Mbps	-75,00 dBm	-3,00 dB

MCS0	14dBm	-3,00 dB
MCS1	14dBm	-3,00 dB
MCS2	14dBm	-3,00 dB
MCS3	14dBm	-3,00 dB
MCS4	14dBm	-3,00 dB
MCS5	14dBm	-3,00 dB
MCS6	14dBm	-3,00 dB
MCS7	14dBm	-3,00 dB
MCS8	14dBm	-3,00 dB
MCS9	14dBm	-3,00 dB
MCS10	14dBm	-3,00 dB
MCS11	14dBm	-3,00 dB
MCS12	14dBm	-3,00 dB
MCS13	14dBm	-3,00 dB
MCS14	14dBm	-3,00 dB
MCS15	14dBm	-3,00 dB

MIMO 2X2

MIMO 2X2

MCS0	-96,00 dBm	-3,00 dB
MCS1	-95,00 dBm	-3,00 dB
MCS2	-92,00 dBm	-3,00 dB
MCS3	-90,00 dBm	-3,00 dB
MCS4	-86,00 dBm	-3,00 dB
MCS5	-83,00 dBm	-3,00 dB
MCS6	-77,00 dBm	-3,00 dB
MCS7	-74,00 dBm	-3,00 dB
MCS8	-95,00 dBm	-3,00 dB
MCS9	-93,00 dBm	-3,00 dB
MCS10	-90,00 dBm	-3,00 dB
MCS11	-87,00 dBm	-3,00 dB
MCS12	-84,00 dBm	-3,00 dB
MCS13	-79,00 dBm	-3,00 dB
MCS14	-78,00 dBm	-3,00 dB
MCS15	-75,00 dBm	-3,00 dB

AirBQ is certified solution for quick widespread distribution and data collection in Point to Point line aswell as on Point to Multipoint lines. Well known parameters from 5GHz networks are brought to different frequency ranges with all it's unique abilities. Very simple to install, use and maintenance unit brings new wave to lite networks operated in urban areas, where secure, reliable and compact devices are demanded.

AirBQ design was subdued to requests of security and surveillance purposes. Its robust, high custom made frequencies are bringing new level of stability and reliability among ISM bands. Fast ethernet interface permits to build high speed surveillance systems with ADSL subscription lines.

Unlike standard WiFi protocol, Time Division Multiple Access (TDMA) protocol allows each client to send & receive data using pre-designated time slots scheduled by an intelligent AP controller. This "time slot" method eliminates hidden node collisions & maximizes air time efficiency. Intelligent QoS Priority is given to voice/video for seamless access. Scalability High capacity and scalability. Long Distance Capable of high speed 50km+ links Latency Multiple features dramatically reduce noise.

