

RK-40-2013-15, př. 8b
počet stran: 8

Příloha č.2: Specifikace zařízení

1 x ORCAVE 1S10 - 10 GHz - 3210-60
3 x UBIQUITI NETWORKS Rocket M5 + sektorová anténa
1 x Všesměrová anténa 5 GHz
1 x Všesměrová anténa 2,4 GHz

Orcave 32xx60

anténní systém Arkivator o průměru 0.6 m pro frekvenční pásma 7 - 38 GHz

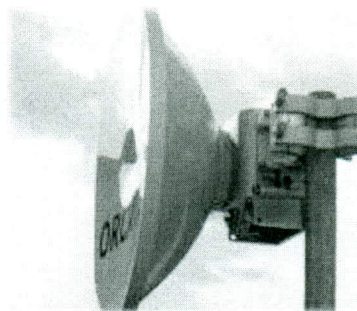
Popis

Anténní soustava 32xx60 je důležitou součástí přenosových systémů Orcave. Řada 32xx60 byla konstruována pro mikrovlnnou komunikaci point-to-point ve frekvenční pásmech 7-38 GHz. Anténní soustava je vybavena přírubou pro spojení s mikrovlnnými jednotkami Orcave 1S10, 14xx, ATH WFM a Harris Stratex a dalších pomocí dodávaného mikrovlnného adaptéru.

Tvar antény je navržen s ohledem na velkou odolnost proti nepříznivým klimatickým jevům. Kónický radomový kryt zabraňuje vytvoření silné námrazy, která by mohla zhoršovat mikrovlnné parametry. Masivní úchyt zajišťuje systému dostatečnou stabilitu i v silném větru.

Konstrukce tohoto úchytu z hliníkové slitiny poskytuje vysoký komfort při instalaci, na úchytu použité stavěcí šrouby zabezpečují pohodlné a přesné zaměření systému ve vertikálním i horizontálním směru.

Kompaktní rozměry anténního systému usnadňují manipulaci při instalaci i transportu. Anténní soustava 32xx60 je předurčená pro dlouhé a středně dlouhé spoje v městských aglomeracích i mimo ně.



Vlastnosti

průměr 0.6 m (2 ft)

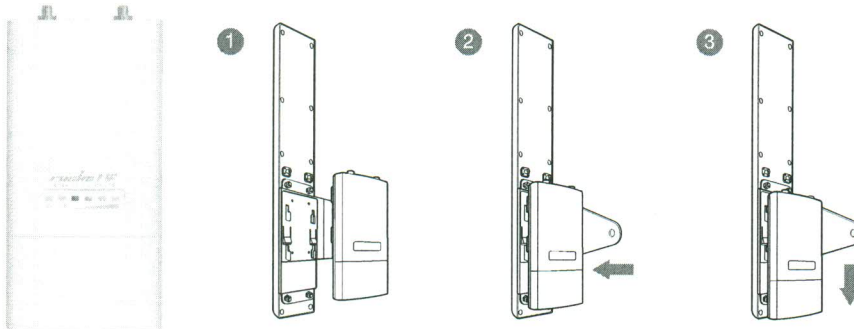
Přínosy

lehká anténní soustava pro dlouhé spoje

snadná manipulace a instalace

přesné doladění soustavy pomocí stavěcích šroubů na úchytu

ROCKET M5: 5GHz Hi Power 2x2 MIMO AirMax TDMA BaseStation



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MIMO TDMA Protocol

COMPATIBLE ANTENNAS

AirMax Sector 5G-17-90
AirMax Sector 5G-16-120
AirMax Sector 5G-20-90
AirMax Sector 5G-19-120
Rocket Dish 5G-30

SYSTEM INFORMATION

Processor Specs	Atheros MIPS 24KC, 400MHz
Memory Information	64MB SDRAM, 8MB Flash
Networking Interface	1 X 10/100 BASE-TX (Cat. 5, RJ-45) Ethernet Interface

REGULATORY / COMPLIANCE INFORMATION

Wireless Approvals	FCC Part 15.247, IC RS210, CE
RoHS Compliance	YES

OPERATING FREQUENCY 5470MHz-5825MHz

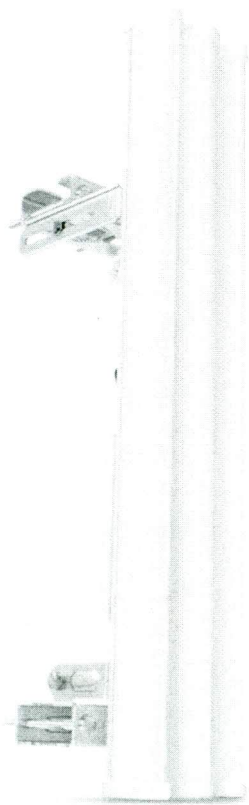
5GHz TX POWER SPECIFICATIONS				5GHz RX SPECIFICATIONS			
	DataRate	Avg. TX	Tolerance		DataRate	Sensitivity	Tolerance
11a	1-24Mbps	27 dBm	+/-2dB	11a	24Mbps	-83 dBm	+/-2dB
	36Mbps	25 dBm	+/-2dB		36Mbps	-80 dBm	+/-2dB
	48Mbps	23 dBm	+/-2dB		48Mbps	-77 dBm	+/-2dB
	54Mbps	22 dBm	+/-2dB		54Mbps	-75 dBm	+/-2dB
SSx1	MCS0	27 dBm	+/-2dB	SSx1	MCS0	-96 dBm	+/-2dB
	MCS1	27 dBm	+/-2dB		MCS1	-95 dBm	+/-2dB
	MCS2	27 dBm	+/-2dB		MCS2	-92 dBm	+/-2dB
	MCS3	27 dBm	+/-2dB		MCS3	-90 dBm	+/-2dB
	MCS4	26 dBm	+/-2dB		MCS4	-86 dBm	+/-2dB
	MCS5	24 dBm	+/-2dB		MCS5	-83 dBm	+/-2dB
	MCS6	22 dBm	+/-2dB		MCS6	-77 dBm	+/-2dB
SSx2	MCS7	21 dBm	+/-2dB	SSx2	MCS7	-74 dBm	+/-2dB
	MCS8	27 dBm	+/-2dB		MCS8	-95 dBm	+/-2dB
	MCS9	27 dBm	+/-2dB		MCS9	-93 dBm	+/-2dB
	MCS10	27 dBm	+/-2dB		MCS10	-90 dBm	+/-2dB
	MCS11	27 dBm	+/-2dB		MCS11	-87 dBm	+/-2dB
	MCS12	26 dBm	+/-2dB		MCS12	-84 dBm	+/-2dB
	MCS13	24 dBm	+/-2dB		MCS13	-79 dBm	+/-2dB
	MCS14	22 dBm	+/-2dB		MCS14	-78 dBm	+/-2dB
	MCS15	21 dBm	+/-2dB		MCS15	-75 dBm	+/-2dB

PHYSICAL / ELECTRICAL / ENVIRONMENTAL

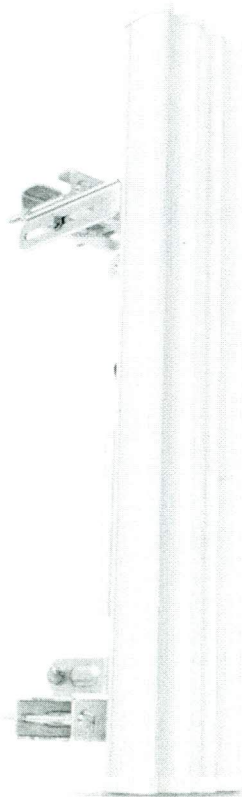
Enclosure Size	16cm length x 8cm width x 3cm height
Weight	0.5 kg
RF Connector	2x RPSMA (Waterproof)
Enclosure Characteristics	Outdoor UV Stabilized Plastic
Mounting Kit	Pole Mounting Kit included
Max Power Consumption	6.5 Watts
Power Supply	24V, 1A POE Supply Included
Power Method	Passive Power over Ethernet (pairs 4,5+; 7,8 return)
Operating Temperature	-30C to 75C
Operating Humidity	5 to 95% Condensing
Shock and Vibration	ETSI300-019-1.4

5GHz AirMax 2x2 MIMO Basestation Sector Antennas

Revolutionary, Cost/Performance Breakthrough Carrier Class MIMO BaseStation Antennas



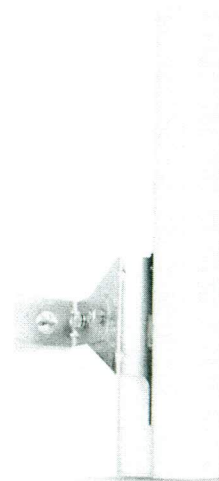
AirMax Sector 5G-20-90
Hi-gain 20dBi, 90deg.



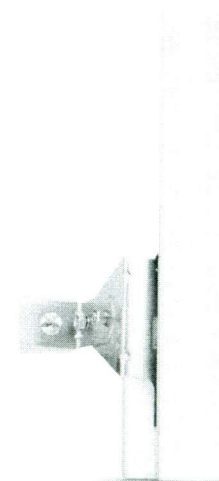
AirMax Sector 5G-19-120
Hi-Gain 19dBi, 120deg.

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MIMO TDMA Protocol System




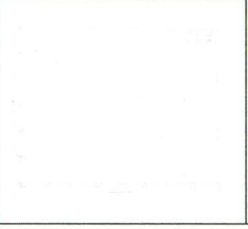
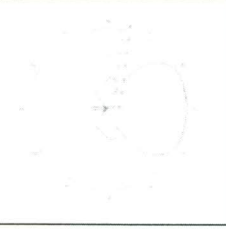
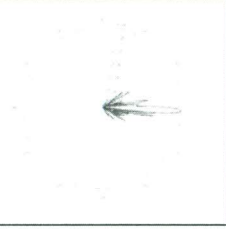
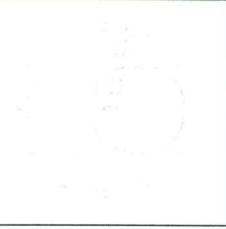
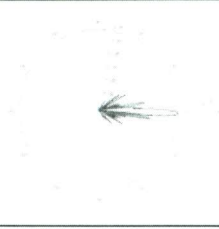

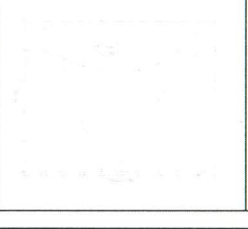
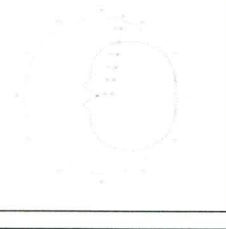
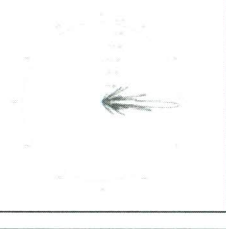
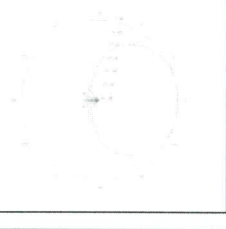
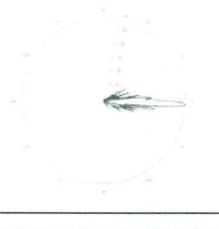

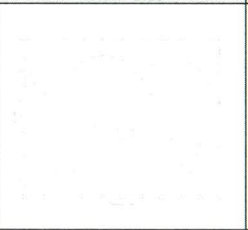
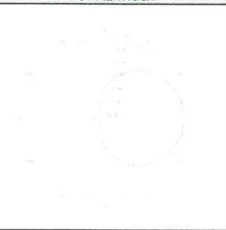
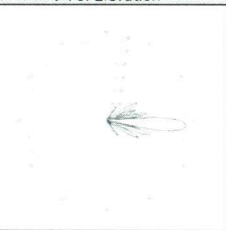
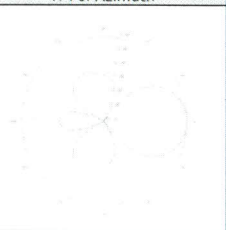
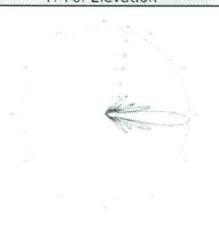

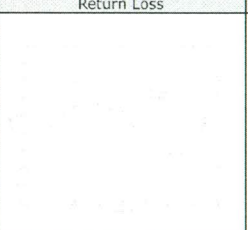
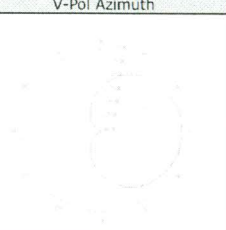
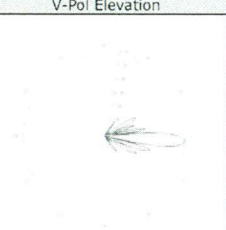
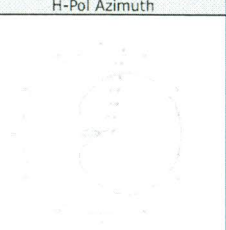
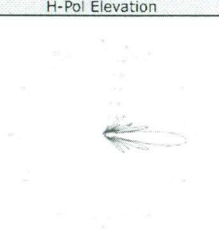
AirMax Sector 5G-17-90
Mid-Gain 17dBi, 90deg



AirMax Sector 5G-16-120
Mid-Gain 16dBi, 120 deg.

AirMax 5GHz Carrier Class Sector 2x2 MIMO Antennas

TECHNICAL SPECIFICATIONS

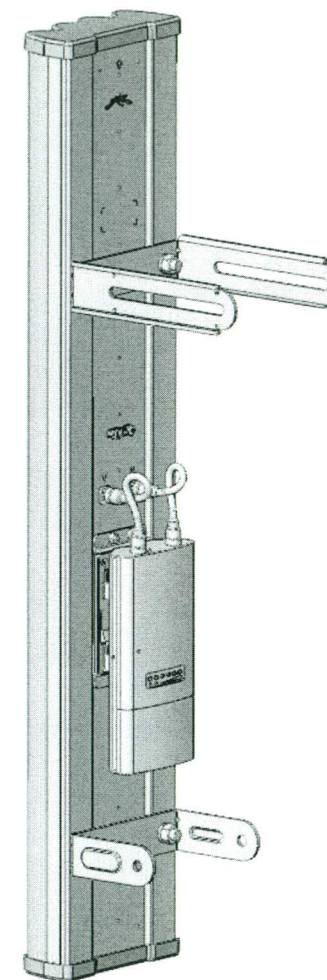
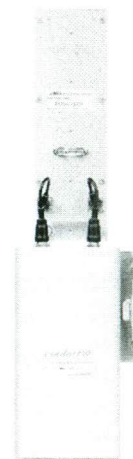
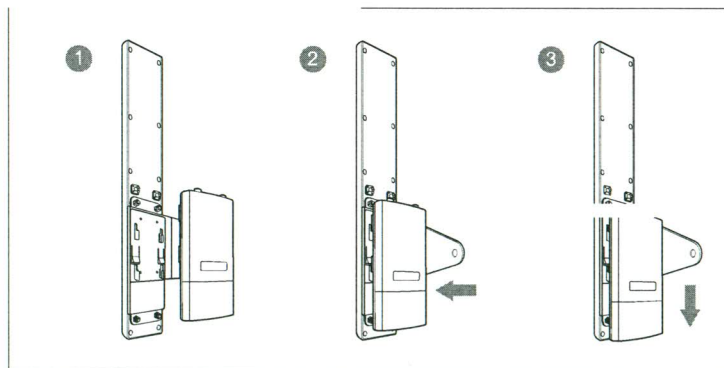
Hi-Gain Airmax Sector 5G-90-20							
Antenna and Electrical Characteristics		Return Loss	V-Pol Azimuth	V-Pol Elevation	H-Pol Azimuth	H-Pol Elevation	
	Frequency Range	5.15-5.85 GHz					
	Gain	19.4-20.3 dBi					
	Polarization	Dual Linear					
	Cross-pol Isolation	28dB min.					
	Max VSWR	1.5:1					
	H-pol Beamwidth (6dB)	91 deg.					
	V-pol Beamwidth (6dB)	85 deg.					
	Elevation Beamwidth	4 deg.					
	Electrical Down tilt	2 deg.					
	ETSI Specification	EN 302 326 DN2					
	Dimensions	700x145x93mm					
	Weight	5.9 kg					
	Windloading	160 mph					
Hi-Gain Airmax Sector 5G-120-19							
Antenna and Electrical Characteristics		Return Loss	V-Pol Azimuth	V-Pol Elevation	H-Pol Azimuth	H-Pol Elevation	
	Frequency Range	5.15-5.85 GHz					
	Gain	18.6-19.1dBi					
	Polarization	Dual Linear					
	Cross-pol Isolation	28dB min.					
	Max VSWR	1.5:1					
	H-pol Beamwidth (6dB)	123 deg.					
	V-pol Beamwidth (6dB)	123 deg.					
	Elevation Beamwidth	4 deg.					
	Electrical Down tilt	2 deg.					
	ETSI Specification	EN 302 326 DN2					
	Dimensions	700x145x79 mm					
	Weight	5.9 kg					
	Windloading	160 mph					
Mid-Gain Airmax Sector 5G-90-17							
Antenna and Electrical Characteristics		Return Loss	V-Pol Azimuth	V-Pol Elevation	H-Pol Azimuth	H-Pol Elevation	
	Frequency Range	4.90-5.90 GHz					
	Gain	16.1-17.1dBi					
	Polarization	Dual Linear					
	Cross-pol Isolation	22dB min.					
	Max VSWR	1.5:1					
	H-pol Beamwidth (6dB)	72 deg.					
	V-pol Beamwidth (6dB)	93 deg.					
	Elevation Beamwidth	8 deg.					
	Electrical Down tilt	4 deg.					
	ETSI Specification	EN 302 326 DN2					
	Dimensions	367x63x41mm					
	Weight	1.1kg					
	Windloading	120 mph					
Mid-Gain Airmax Sector 5G-120-16							
Antenna and Electrical Characteristics		Return Loss	V-Pol Azimuth	V-Pol Elevation	H-Pol Azimuth	H-Pol Elevation	
	Frequency Range	5.10-5.90 GHz					
	Gain	15.0-16.0dBi					
	Polarization	Dual Linear					
	Cross-pol Isolation	22dB min.					
	Max VSWR	1.5:1					
	H-pol Beamwidth (6dB)	137 deg.					
	V-pol Beamwidth (6dB)	118 deg.					
	Elevation Beamwidth	8 deg.					
	Electrical Down tilt	4 deg.					
	ETSI Specification	EN 302 326 DN2					
	Dimensions	367x63x41mm					
	Weight	1.1 kg					
	Windloading	120 mph					

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MIMO TDMA Protocol System


Instantly pair with Rocket M5 to create a powerful AirMax 2x2 MIMO PtMP BaseStation. Mating bracket and weatherproof RF jumpers included.

rocket M5



DECLARATION OF CONFORMITY

Hereby
Ubiquiti Networks, Inc.
91 E. Tasman Dr. San Jose, CA 95134
Declares that this
Rocket M5 5GHz CPE
is in compliance with the essential requirements and other relevant
provisions of Directive 1999/5/EC

<u>Standard</u>	<u>Description</u>
■ EN 301 893 V1.4.1 (2007-07)	Harmonized EN covering essential requirements of Article 3.2 of the R&TTE Directive for 5GHz radio equipment
■ EN 301 489-1 V1.4.1 (2002-08)	Electromagnetic compatibility and Radio spectrum Matters (ERM)
■ EN 301 489-17 V1.2.1 (2002-08)	Electromagnetic compatibility (EMC) standard for radio equipment services; Part 17: Specific conditions for wideband data and HIPERLAN equipment
■ EN 60950-1:2006	Safety for information technology equipment
■ EN50385-2002	RF Exposure Limits
■ CE MARKING	

DATE: 2009/7/17



Robert J. Pera
Senior RF Engineer
Ubiquiti Networks, Inc.

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- Nederlands [Dutch]** Hierbij verklaart UBIQUITI NETWORKS dat het toestel UBIQUITI NETWORKS M series, in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG
Bij deze verklaart UBIQUITI NETWORKS dat deze UBIQUITI NETWORKS M series, voldoet aan de essentiële eisen en aan de overige relevante bepalingen van Richtlijn 1999/5/EC.
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Suomi
- Suomi [Finnish]** UBIQUITI NETWORKS vakuuttaa täten että UBIQUITI NETWORKS M series, tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
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Par la présente, UBIQUITI NETWORKS déclare que ce UBIQUITI NETWORKS M series, est conforme aux exigences essentielles et aux autres dispositions de la directive 1999/5/CE qui lui sont applicables
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Hiermit erklärt UBIQUITI NETWORKS die Übereinstimmung des Gerätes UBIQUITI NETWORKS M series, mit den grundlegenden Anforderungen und den anderen relevanten Festlegungen der Richtlinie 1999/5/EG. (Wien)
- Ελληνική [Greek]** ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ UBIQUITI NETWORKS ΔΗΛΩΝΕΙ ΟΤΙ UBIQUITI NETWORKS M series, ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/EK
- Magyar [Hungarian]** Alulírott, UBIQUITI NETWORKS nyilatkozom, hogy a UBIQUITI NETWORKS M series, megfelel a vonatkozó alapvető követelményeknek és az 1999/5/EC irányelv egyéb előírásainak.
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