

# SR71-A

Outdoor 3x3 802.11n MIMO mini-PCI Module

Wireless Chipset	Atheros AR9160 with DFS SUPPORT
Radio Operation	IEEE 802.11a/b/g/n
Interface	32-bit mini-PCI Type IIIA
Operation Voltage	3.3VDC
Antenna Ports	(3) MMCX for 3x3 MIMO Operation
Temperature Range	-20C to +70C (extended temp version up to +95C)
Security	802.11i with AES-CCM & TKIP Encryption, 802.1x, 64/128/152bit WEP
Data Rates	Legacy 802.11a/b/g (1-54Mbps), 802.11n (up to 300Mbps)
RoHS Compliance	YES

### REGULATORY INFORMATION

Wireless Modular Approvals	FCC , Industry Canada, CE (100mW limited)
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### OPERATING FREQUENCY 2412MHz-2462MHz

2.4GHz TX POWER SPECIFICATIONS				2.4GHz RX SPECIFICATIONS			
	DataRate	Avg. TX	Tolerance		DataRate	Sensitivity	Tolerance
11b/g	1-24Mbps	24 dBm	+/-2dB	11b/g	1-24Mbps	-97 dBm	+/-3dB
	36Mbps	22 dBm	+/-2dB		36Mbps	-90 dBm	+/-3dB
	48Mbps	20 dBm	+/-2dB		48Mbps	-86 dBm	+/-3dB
	54Mbps	19 dBm	+/-2dB		54Mbps	-84 dBm	+/-3dB
2.4GHz 11n HT20 / HT40	MCS0	24 dBm	+/-2dB	2.4GHz 11n HT20 / HT40	MCS0	-97 dBm	+/-3dB
	MCS1	24 dBm	+/-2dB		MCS1	-96 dBm	+/-3dB
	MCS2	24 dBm	+/-2dB		MCS2	-93 dBm	+/-3dB
	MCS3	22 dBm	+/-2dB		MCS3	-91 dBm	+/-3dB
	MCS4	22 dBm	+/-2dB		MCS4	-87 dBm	+/-3dB
	MCS5	22 dBm	+/-2dB		MCS5	-84 dBm	+/-3dB
	MCS6	18 dBm	+/-2dB		MCS6	-78 dBm	+/-3dB
	MCS7	15 dBm	+/-2dB		MCS7	-75 dBm	+/-3dB
	MCS8	24 dBm	+/-2dB		MCS8	-96 dBm	+/-3dB
	MCS9	24 dBm	+/-2dB		MCS9	-94 dBm	+/-3dB
	MCS10	22 dBm	+/-2dB		MCS10	-91 dBm	+/-3dB
	MCS11	20 dBm	+/-2dB		MCS11	-88 dBm	+/-3dB
	MCS12	20 dBm	+/-2dB		MCS12	-85 dBm	+/-3dB
	MCS13	17 dBm	+/-2dB		MCS13	-80 dBm	+/-3dB
	MCS14	17 dBm	+/-2dB		MCS14	-79 dBm	+/-3dB
MCS15	15 dBm	+/-2dB	MCS15	-76 dBm	+/-3dB		

### OPERATING FREQUENCY 5745MHz-5825MHz

5GHz TX POWER SPECIFICATIONS				5GHz RX SPECIFICATIONS			
	DataRate	Avg. TX	Tolerance		DataRate	Sensitivity	Tolerance
11a	1-24Mbps	24 dBm	+/-2dB	11a	1-24Mbps	-96 dBm	+/-3dB
	36Mbps	22 dBm	+/-2dB		36Mbps	-95 dBm	+/-3dB
	48Mbps	20 dBm	+/-2dB		48Mbps	-94 dBm	+/-3dB
	54Mbps	19 dBm	+/-2dB		54Mbps	-91 dBm	+/-3dB
5GHz 11n	MCS0	24 dBm	+/-2dB	5GHz 11n	MCS0	-96 dBm	+/-3dB
	MCS1	24 dBm	+/-2dB		MCS1	-95 dBm	+/-3dB
	MCS2	24 dBm	+/-2dB		MCS2	-92 dBm	+/-3dB
	MCS3	22 dBm	+/-2dB		MCS3	-90 dBm	+/-3dB
	MCS4	22 dBm	+/-2dB		MCS4	-86 dBm	+/-3dB
	MCS5	22 dBm	+/-2dB		MCS5	-83 dBm	+/-3dB
	MCS6	18 dBm	+/-2dB		MCS6	-77 dBm	+/-3dB
	MCS7	15 dBm	+/-2dB		MCS7	-74 dBm	+/-3dB
	MCS8	24 dBm	+/-2dB		MCS8	-95 dBm	+/-3dB
	MCS9	24 dBm	+/-2dB		MCS9	-93 dBm	+/-3dB
	MCS10	22 dBm	+/-2dB		MCS10	-90 dBm	+/-3dB
	MCS11	20 dBm	+/-2dB		MCS11	-87 dBm	+/-3dB
	MCS12	20 dBm	+/-2dB		MCS12	-84 dBm	+/-3dB
	MCS13	17 dBm	+/-2dB		MCS13	-79 dBm	+/-3dB
	MCS14	17 dBm	+/-2dB		MCS14	-78 dBm	+/-3dB
MCS15	15 dBm	+/-2dB	MCS15	-75 dBm	+/-3dB		

### AVG. CURRENT CONSUMPTION INFORMATION

MODE	6Mbps	MCS0	MCS15	MODE	6Mbps	MCS0	MCS15
100% TX	1.25A	1.25A	1.25A	100% TX	1.25A	1.25A	1.25A
Real-World	0.75A	0.80A	0.45A	Real-World	0.75A	0.80A	0.35A
Idle	0.30A	0.30A	0.30A	Idle	0.30A	0.30A	0.30A

### RANGE PERFORMANCE

Indoor (Antenna Dependent):	greater than 300m
Outdoor (Antenna Dependent):	greater than 60km

### DRIVER INFORMATION

Operating System Support	Ubiquiti LiteStationX + AirOS
For help with special driver support, please e-mail support@ubnt.com	

# COMPLIANCE INFORMATION

## FCC

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

The antennas used for this transmitter must be installed to provide a separation distance of at least 194.09cm from all persons and must not be located or operating in conjunction with any other antenna or transmitter.

## INDUSTRY CANADA

This Class A digital apparatus complies with Canadian ICES-003.  
Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that permitted for successful communication.

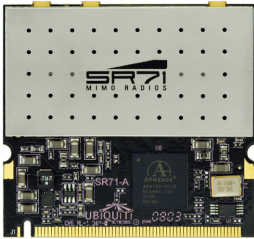
**FCCID: SWX-SR71**  
**IMPORTANT NOTE: EQUIPMENT MANUFACTURERS ARE RESPONSIBLE FOR DISPLAYING SR71 MODULAR FCC ID ON FINAL INTEGRATED EQUIPMENT**

**IMPORTANT NOTE REGARDING ANTENNA USE**

**Antenna Use (Point to Multipoint)**

### 3x3 Operation

Chain0      Chain1      Chain2

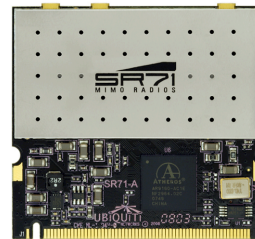


**UBIQUITI OMNI24-5**

**Antenna Use (Point to Point)**

### 1x1 Operation

Chain0



**UBIQUITI PANEL24-17**



**Pacific Wireless HDDA5W-32**