

SR71-A

Outdoor 3x3 802.11n MIMO mini-PCI Module

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|-------------------|-------------------------------------------------------------------|
| 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

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|----------------------------|-------------------------------------------|
| 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

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|----------------------------------------------------------------------|-------------------------------|
| 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)

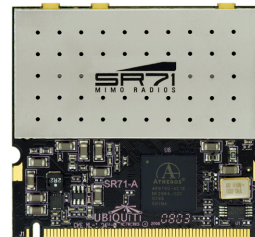
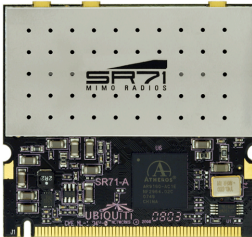
Antenna Use (Point to Point)

3x3 Operation

1x1 Operation

Chain0 Chain1 Chain2

Chain0



UBIQUITI OMNI24-5



UBIQUITI PANEL24-17



Pacific Wireless HDDA5W-32