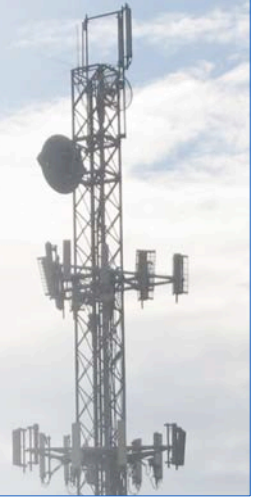




# SuperRange4

Public Safety 4.9GHz Modular Radio



The SuperRange4 is the first hi-power 4.9GHz mini-PCI card with FCC Part90Y modular approval. It achieves mask compliance at 400mW output power through an innovative amplifier design and also exhibits sensitivity and selectivity far beyond common 802.11 radios that have been simply shifted to operate in the 4.9GHz band. The SuperRange4 is compatible with Atheros Linux MADWIFI and has been proven in extreme temperature conditions.

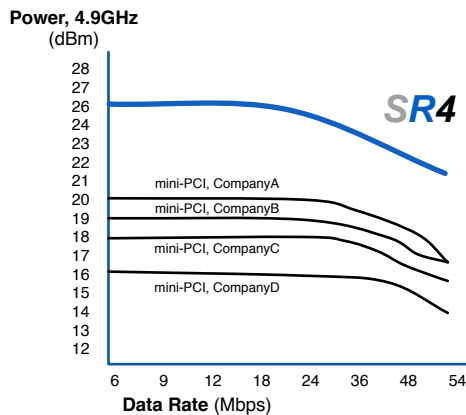
*Hi-Performance PCB for Maximum RF Performance*

**MODULAR FCC PART90Y APPROVAL**  
*Licensed for 4.9GHz Operation with up to 27dBi Gain Antenna*

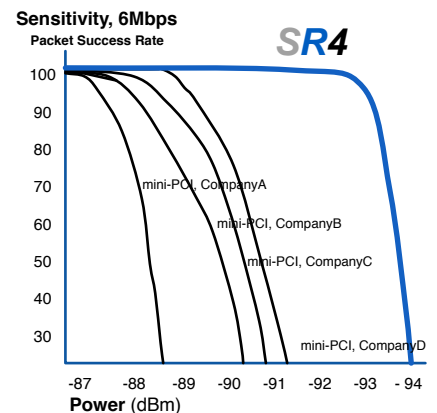


*Built-in HeatSink for Temperature Performance*

*Built for Industrial / Rugged Applications*



- | FEATURES                  |
|---------------------------|
| 400mW Output Power        |
| FCC Part90Y Compliant     |
| Industry-Best Sensitivity |
| Extended Temperature      |
| Enhanced Filtering        |
| 5/10/20/40 MHz Channels   |
| MMCX Ant. Connector       |



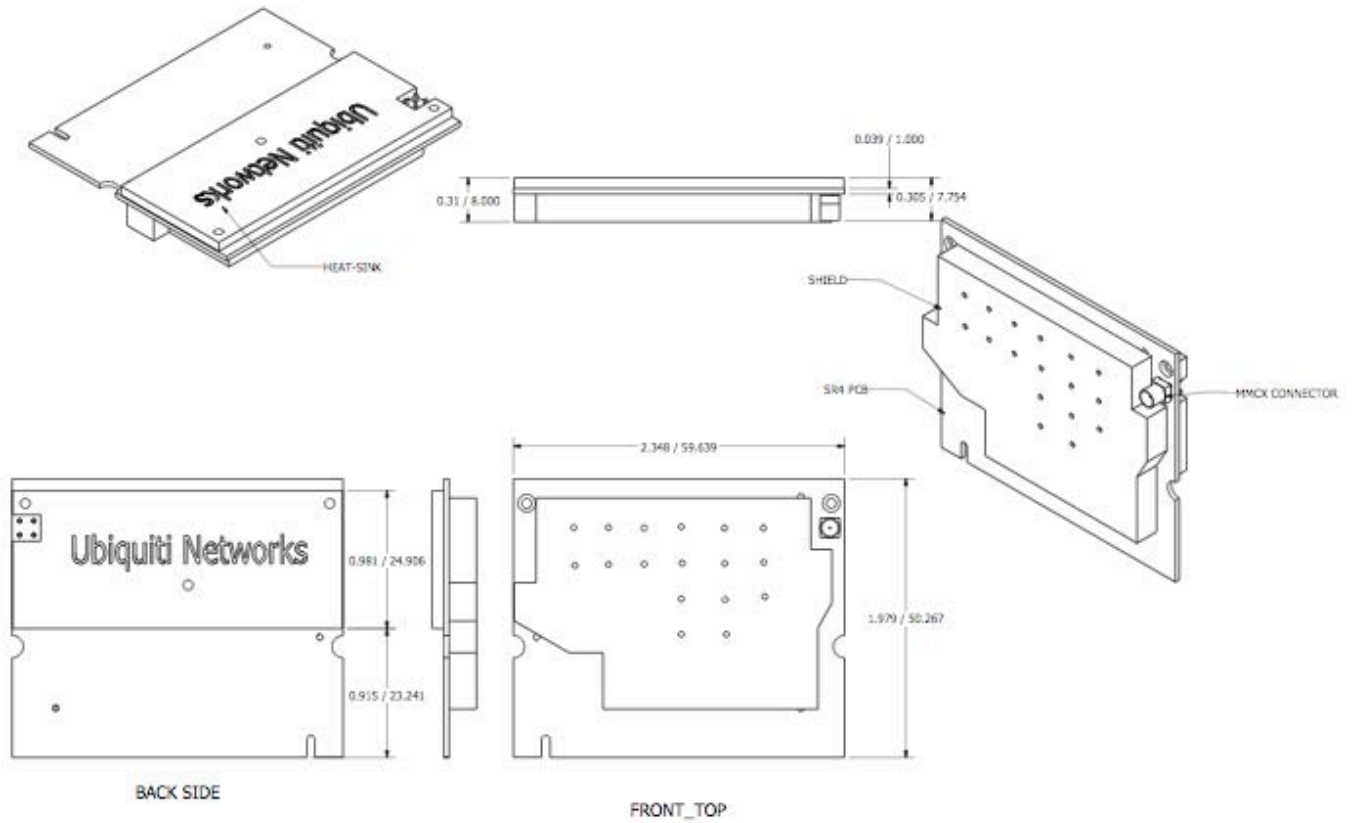
# SuperRange4

## TECHNICAL SPECIFICATIONS

| CARD INFORMATION  |  |           |           |                        |           |             |                 |
|---|--|-----------|-----------|------------------------|-----------|-------------|-----------------|
| Radio Operation   | Proprietary 4.9GHz based on OFDM 802.11a with QPSK/16QAM/64QAM           |           |           |                        |           |             |                 |
| Interface   | 32-bit Cardbus Type II   |           |           |                        |           |             |                 |
| Operation Voltage   | 3.3VDC   |           |           |                        |           |             |                 |
| Antenna Ports   | Dual MMCX (Primary only required; secondary optional for diversity)      |           |           |                        |           |             |                 |
| Temperature Range   | -40C to +80C (extended temp version up to +95C)                          |           |           |                        |           |             |                 |
| Security  | WPA, WPA2, AES-CCM & TKIP Encryption, 802.1x, 64/128/152bit WEP          |           |           |                        |           |             |                 |
| Data Rates  | 6Mbps, 9Mbps, 12Mbps, 24Mbps, 36Mbps, 48Mbps, 54Mbps                     |           |           |                        |           |             |                 |
| RoHS Compliance   | YES  |           |           |                        |           |             |                 |
| REGULATORY INFORMATION  |  |           |           |                        |           |             |                 |
| Wireless Modular Approvals  | FCC PART90Y and Industry Canada. Approval covers antenna use up to 27dBi |           |           |                        |           |             |                 |
| RADIO OPERATING FREQUENCY 4.94-4.99GHz  |  |           |           |                        |           |             |                 |
| TX SPECIFICATIONS   |  |           |           | RX SPECIFICATIONS      |           |             |                 |
| 4.9GHz OFDM   | DataRate   | TX Power  | Tolerance | 4.9GHz OFDM            | DataRate  | Sensitivity | Tolerance       |
|   | 6Mbps  | 26 dBm    | +/-1.5dB  |                        | 6Mbps     | -94 dBm     | +/-1.5dB        |
|   | 9Mbps  | 26 dBm    | +/-1.5dB  |                        | 9Mbps     | -93 dBm     | +/-1.5dB        |
|   | 12Mbps   | 26 dBm    | +/-1.5dB  |                        | 12Mbps    | -91 dBm     | +/-1.5dB        |
|   | 18Mbps   | 26 dBm    | +/-1.5dB  |                        | 18Mbps    | -90 dBm     | +/-1.5dB        |
|   | 24Mbps   | 26 dBm    | +/-1.5dB  |                        | 24Mbps    | -86 dBm     | +/-1.5dB        |
|   | 36Mbps   | 24 dBm    | +/-1.5dB  |                        | 36Mbps    | -83 dBm     | +/-1.5dB        |
|   | 48Mbps   | 23 dBm    | +/-1.5dB  |                        | 48Mbps    | -77 dBm     | +/-1.5dB        |
| 54Mbps  | 22 dBm   | +/-1.5dB  | 54Mbps    | -74 dBm                | +/-1.5dB  |             |                 |
| CURRENT CONSUMPTION INFORMATION   |  |           |           |                        |           |             |                 |
| TX CURRENT CONSUMPTION  |  |           |           | RX CURRENT CONSUMPTION |           |             |                 |
| 4.9GHz OFDM   | DataRate   | Current   | Tolerance | 4.9GHz OFDM            | DataRate  | Current     | Tolerance       |
|   | 6Mbps  | 1.60 A    | +/-100 mA |                        | 6Mbps     | 300 mA      | +/-100 mA       |
|   | 9Mbps  | 1.60 A    | +/-100 mA |                        | 9Mbps     | 300 mA      | +/-100 mA       |
|   | 12Mbps   | 1.60 A    | +/-100 mA |                        | 12Mbps    | 300 mA      | +/-100 mA       |
|   | 18Mbps   | 1.60 A    | +/-100 mA |                        | 18Mbps    | 300 mA      | +/-100 mA       |
|   | 24Mbps   | 1.60 A    | +/-100 mA |                        | 24Mbps    | 300 mA      | +/-100 mA       |
|   | 36Mbps   | 1.30 A    | +/-100 mA |                        | 36Mbps    | 300 mA      | +/-100 mA       |
|   | 48Mbps   | 1.10 A    | +/-100 mA |                        | 48Mbps    | 300 mA      | +/-100 mA       |
| 54Mbps  | 1.00 A   | +/-100 mA | 54Mbps    | 300 mA                 | +/-100 mA |             |                 |
| 4.9GHz PUBLIC SAFETY FREQUENCY CHANNEL SUPPORT  |  |           |           |                        |           |             |                 |
| Frequency   | 5MHz   | 10MHz     | 20MHz     | Frequency              | 5MHz      | 10MHz       | 20MHz           |
| 4942.5 MHz  |  |           |           | 4967.5 MHz             |           |             |                 |
| 4945.0 MHz  |  |           |           | 4970.0 MHz             |           |             |                 |
| 4947.5 MHz  |  |           |           | 4972.5 MHz             |           |             |                 |
| 4950.0 MHz  |  |           |           | 4975.0 MHz             |           |             |                 |
| 4952.5 MHz  |  |           |           | 4980.0 MHz             |           |             |                 |
| 4957.5 MHz  |  |           |           | 4982.5 MHz             |           |             |                 |
| 4960.0 MHz  |  |           |           | 4985.0 MHz             |           |             |                 |
| 4962.5 MHz  |  |           |           | 4987.5 MHz             |           |             |                 |
| 4965.0 MHz  |  |           |           |                        |           |             |                 |
| RANGE PERFORMANCE   |  |           |           |                        |           |             |                 |
| Indoor (Antenna Dependent):   |  |           |           |                        |           |             | Up to 100meters |
| Outdoor (Antenna Dependent):  |  |           |           |                        |           |             | Over 1km        |
| DRIVER INFORMATION  |  |           |           |                        |           |             |                 |
| Operating System Support  | Linux MADWIFI, WindowsXP, Windows2000                                    |           |           |                        |           |             |                 |
| Advanced Mobility / QuickHandoff  | WindowsXP/2000 Utility with Enhanced Mobility Driver from Ubiquiti       |           |           |                        |           |             |                 |
| Cisco Support   | CCX 4.0 Supported Driver/Utility also available from Ubiquiti            |           |           |                        |           |             |                 |
| For help with MADWIFI or other Special Driver Support, Please e-mail support@ubnt.com |  |           |           |                        |           |             |                 |

# SuperRange4

## MECHANICAL DIMENSIONS



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