

Data Link Description

During flight operations, data will be transmitted from an onboard sensor package to the ground station via a 5 GHz wireless network. A Ubiquiti Nanostation M5 will serve as the onboard router and a Ubiquiti LiteStation SR71 will be connected to the ground station in order to receive the data. Information about the Ubiquiti LiteStation and the Nanostation M5 is attached.



HD26386
Ubiquiti Networks LiteStation SR71

Industrial Embedded Platform. For use with Ubiquiti's Frequency Freedom Radio Modules.

Ubiquiti's LiteStation SR71 provides a powerful and robust platform to utilize any of Ubiquiti's Frequency Freedom radio modules. Featuring a powerful 300MHz processor, isolated radio shielding, extended operating temperature and custom firmware capable of auto-detecting special frequency Ubiquiti cards. LiteStation SR71 can be used to instantly create a powerful radio router with virtually any frequency operation from DC to 6GHz.

More Information, Resources & Support

- [Data Sheet \(coming soon\)](#)
- [Support Pages \(coming soon\)](#)
- [Ubiquiti Reseller Application \(.xls\)](#)

Features:

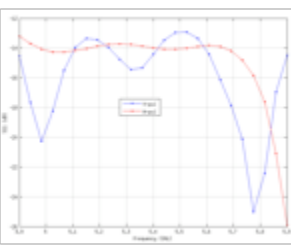
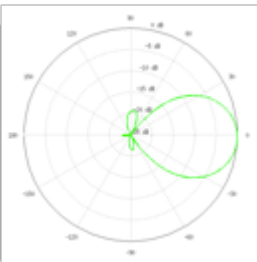
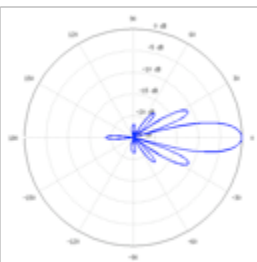
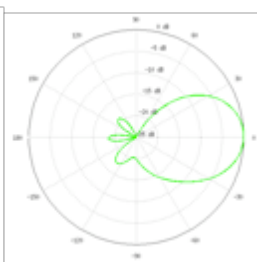
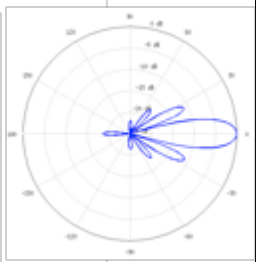
| | |
|--------------------------|--|
| Processor Specs | Atheros AR7131 MIPS 300MHz |
| Memory Information | 32MB SDRAM, 8MB Flash |
| Serial Interface | On board RS232 with DB9 conenctor |
| Networking Interface | 1 X 10/100 BASE-TX (Cat. 5, RJ-45) Ethernet Interface |
| Wireless Approvals | FCC Part 15.247, IC RS210, CE ETSI EN301 489-17 / 893 |
| RoHS Compliance | YES |
| TX Channel Width Support | 5MHz / 10MHz / 20MHz / 40MHz |
| Max Power Consumption | 4 Watts |
| Power Method | Passive Power over Ethernet (pairs 4,5+; 7,8 return) |
| DC Voltage Rating | 5-24V (18V max recommended) |

| | |
|---|---|
| ESD/EMP Protection | Transient Voltage Suppression at POE port |
| Operating Temperature | -40C to 85C (System PCB optimized for low/hi-temp) |
| System LED's | Power, LAN, WAN |
| Antenna Align / Sig Strength LED's | Software adjustable to corresponding to custom RSSI levels |

NanoStation M5: 5GHz Hi Power 2x2 MIMO AirMax TDMA Station

The Most Powerful NanoStation Ever.



| Processor Specs | | SYSTEM INFORMATION | | Atheros MIPS 24KC, 400MHz | | | | | |
|--|----------|---|-----------|---|----------|--|-----------|---|--|
| Memory Information | | | | 32MB SDRAM, 8MB Flash | | | | | |
| Networking Interface | | | | 2 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 | | | | | |
| 11a | DataRate | Avg. TX | Tolerance | 11a | DataRate | Sensitivity | Tolerance | | |
| | 6-24Mbps | 27 dBm | +/-2dB | | 6-24Mbps | -94 dBm min. | +/-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 | | |
| 5GHz 11n | MCS0 | 27 dBm | +/-2dB | 5GHz 11n | 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 | | |
| | MCS7 | 21 dBm | +/-2dB | | 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 | | | | 29.4 cm x 8 cm x 3cm | | | | | |
| Weight | | | | 0.4kg | | | | | |
| Enclosure Characteristics | | | | Outdoor UV Stabilized Plastic | | | | | |
| Mounting Kit | | | | Pole Mounting Kit included | | | | | |
| Max Power Consumption | | | | 8 Watts | | | | | |
| Power Supply | | | | 15V, 0.8A surge portection integrated POE adapter included | | | | | |
| Power Method | | | | Passive Power over Ethernet (pairs 4,5+; 7,8 return) | | | | | |
| Operating Temperature | | | | -30C to +80C | | | | | |
| Operating Humidity | | | | 5 to 95% Condensing | | | | | |
| Shock and Vibration | | | | ETSI300-019-1.4 | | | | | |
| INTEGRATED 2x2 MIMO ANTENNA | | | | | | | | | |
| Frequency Range | | 4.9-5.9 GHz | | Max VSWR | | 1.6:1 | | | |
| Gain | | 14.6-16.1dBi | | H-pol Beamwidth | | 43 deg. | | | |
| Polarization | | Dual Linear | | V-pol Beamwidth | | 41 deg. | | | |
| Cross-pol Isolation | | 22dB minimum | | Elevation Beamwidth | | 15 deg. | | | |
|  | |  | |  | |  | |  | |
| VSWR | | H-Pol Azimuth | | H-Pol Elevation | | V-Pol Azimuth | | V-Pol Elevation | |
| 802.11n / Airmax Support Only at this Time. 802.11a support expected with AirOS 5.1 Release by end of Year | | | | | | | | | |