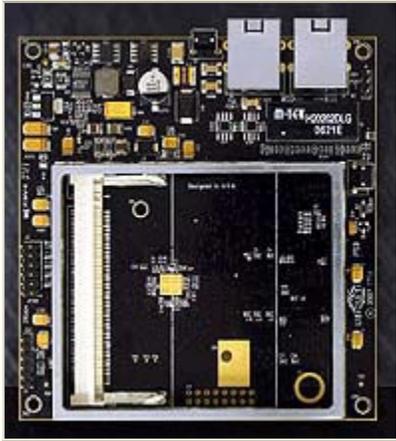


Data Link Description

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.

airMAX
MIMO TDMA Protocol



SYSTEM INFORMATION							
Processor Specs		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 protection 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