



rocket™ M TITANIUM

Powerful 2x2 MIMO airMAX™ BaseStation

Models: RM2-Ti, RM5-Ti

Rugged Weatherproof Die-Cast Aluminum Enclosure

High Throughput Gigabit Ethernet Port

Incredible 50+ km Range and 150+ Mbps Speed

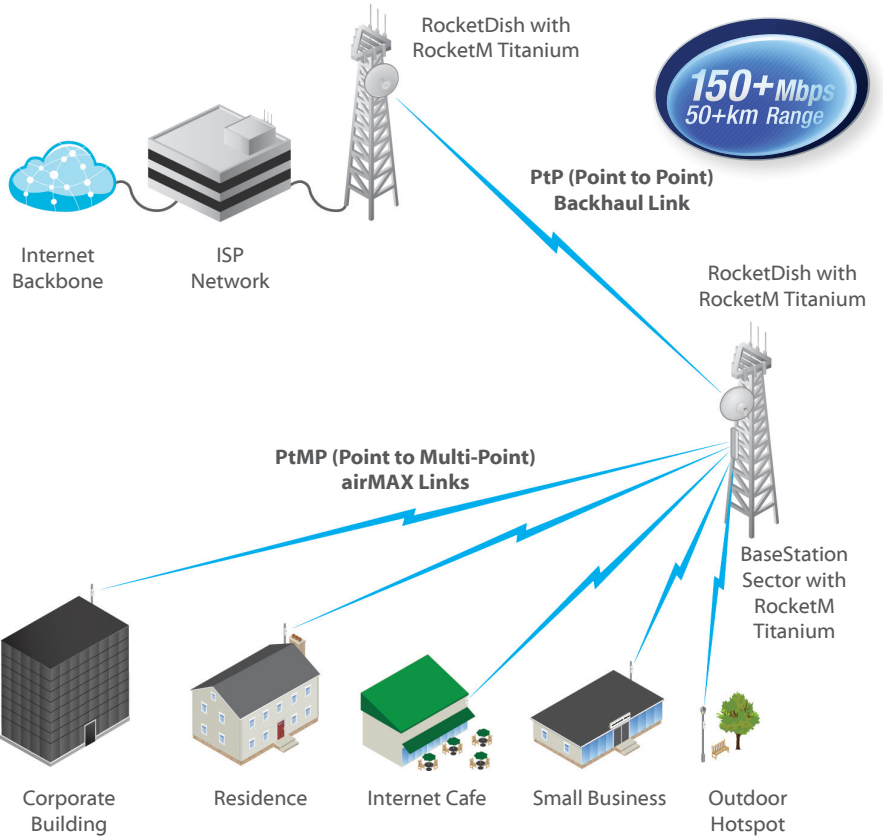


Powerful airMAX™ BaseStation Platform

Building upon our market-leading Rocket™ series, the RocketM Titanium features enhanced radio performance and superior durability. Its carrier-class capabilities link distances up to 50+ km and provide breakthrough speeds of up to 150+ Mbps. The RocketM Titanium takes advantage of its Gigabit Ethernet connection to deliver high throughput for reliable data transfers.

The RocketM Titanium enclosure was specifically designed to improve performance in harsh RF environments and in extreme weather conditions. Enclosed in aircraft-grade aluminum, the RocketM Titanium is a rugged, high-power, linear 2x2 MIMO radio.

Rocket devices may be deployed in PtP bridging or PtMP airMAX BaseStation applications. They can be paired with your choice of airMAX BaseStation™ Sector or RocketDish™ antennas. This versatility gives network architects unparalleled flexibility and convenience.



airMAX Technology

Unlike standard WiFi protocol, Ubiquiti's Time Division Multiple Access (TDMA) airMAX protocol allows each client to send and receive data using pre-designated time slots scheduled by an intelligent AP controller. This "time slot" method eliminates hidden node collisions and maximizes airtime efficiency. It significantly improves performance in throughput, reduces latency, and increases scalability compared to all other outdoor systems in its class.

- **Intelligent QoS** Priority is given to voice or video for seamless streaming.
- **Scalability** High capacity and scalability.
- **Long Distance** Capable of high-speed links up to 50+ km.
- **Latency** Multiple features dramatically reduce noise.

GPS Synchronization*

RocketM5 Titanium has integrated Ubiquiti airSync™ technology. airSync enhances the hardware and software of the Rocket to utilize GPS signals for precision timing.

GPS Signal Reporting

airOS™ was upgraded to take full advantage of the new GPS hardware in the RocketM5 Titanium. Easily manage and monitor GPS satellite signals.

No Co-Location Interference

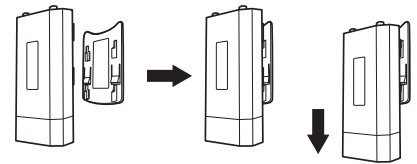
Synchronized transmission among RocketM5 Titanium Basestations effectively eliminates co-location interference.

External GPS Antenna

The RocketM5 Titanium includes a weatherproof, external GPS antenna.

Easy Installation

The RocketM Titanium and airMAX antennas have been designed to seamlessly work together.

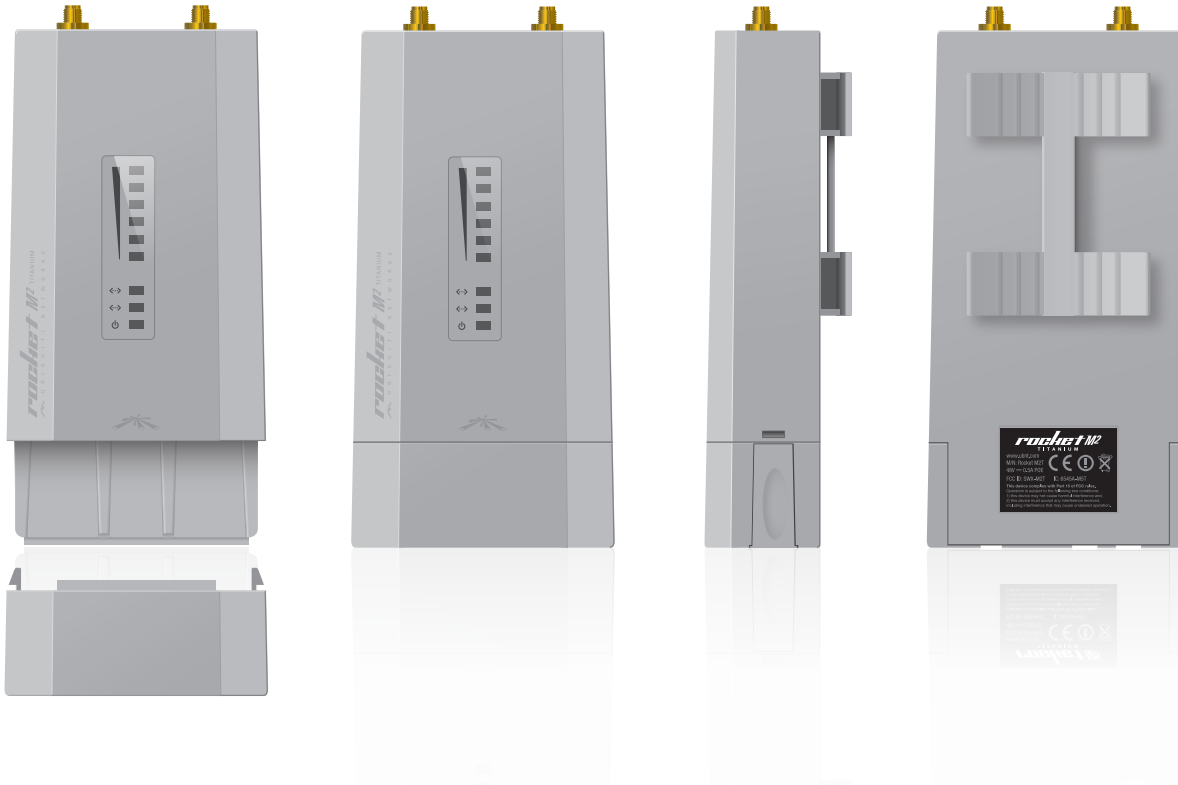


Installing the RocketM Titanium on an airMAX BaseStation Sector or RocketDish antenna requires no special tools. You simply snap it securely into place with the universal Rocket mount built into the antenna.

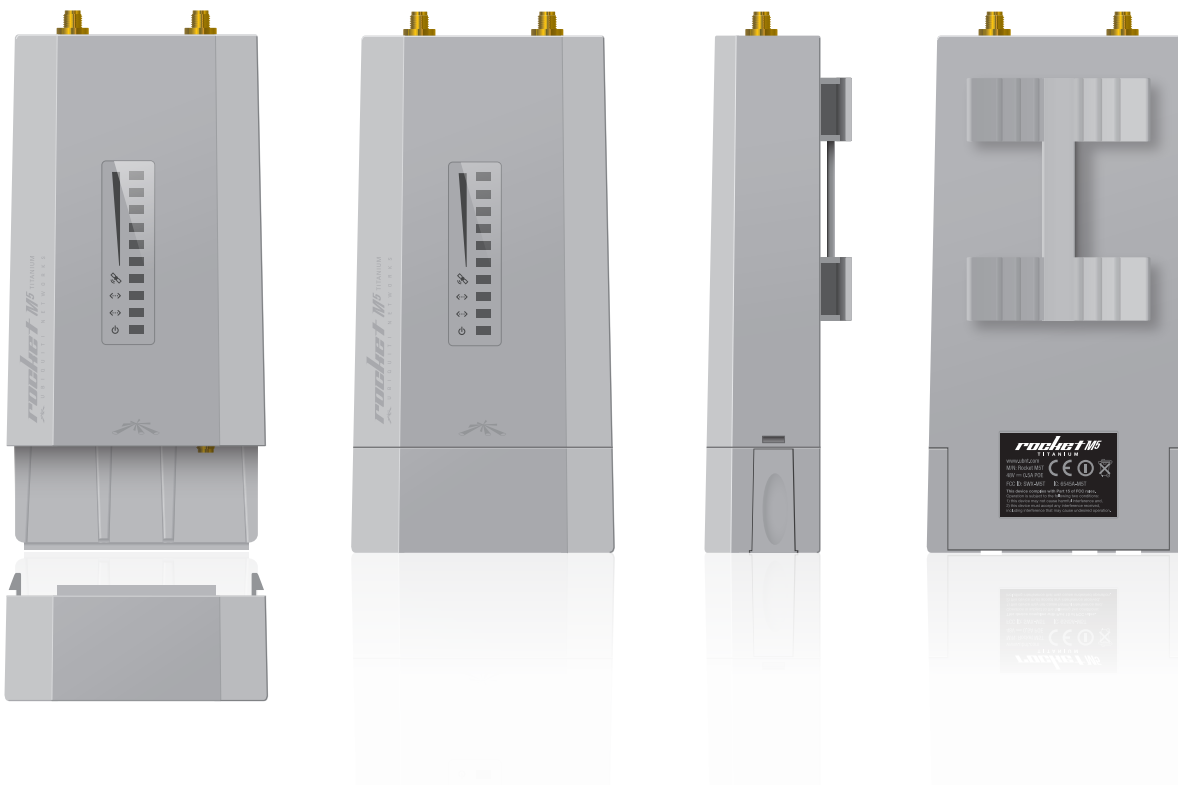
* GPS features only available on RocketM5 Titanium

Models

RocketM2 Titanium



RocketM5 Titanium

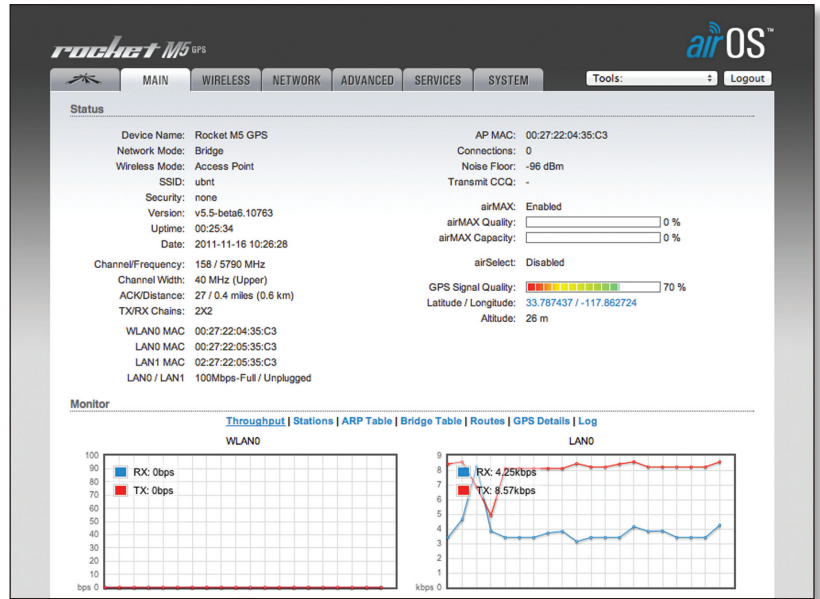


Software

airOS™

airOS is a versatile, highly developed Ubiquiti firmware technology. It is exceptionally intuitive and was designed to require no training to operate. Behind the user interface is a powerful firmware architecture that enables high-performance, outdoor multipoint networking.

- Protocol Support
- Channel Shifting
- Spectral Width Adjustment
- ACK Auto-Timing
- AAP Technology
- Multiple VLAN Support
- DHCP Relay
- Multi-Language Support



airView™

Integrated on all Ubiquiti M products, airView provides advanced spectrum analyzer functionality: waterfall, waveform, and real-time spectral views allow operators to identify noise signatures and plan their networks to minimize noise interference.

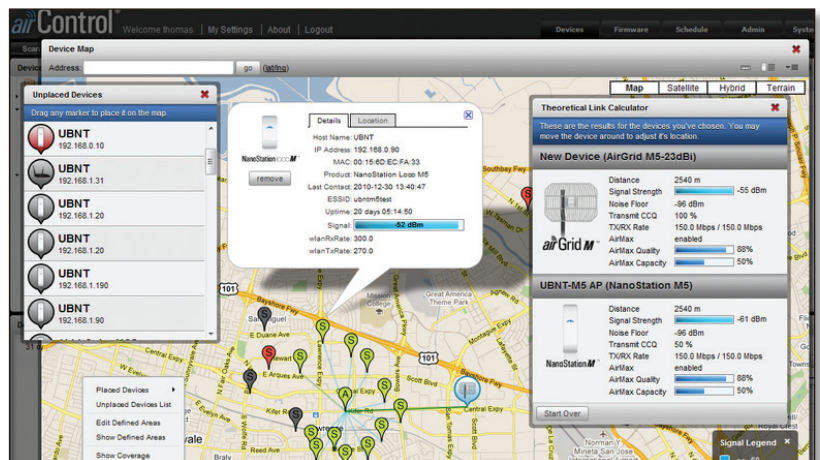
- **Waterfall** Aggregate energy over time for each frequency.
- **Waveform** Aggregate energy collected.
- **Real-time** Energy is shown in real time as a function of frequency.
- **Recording** Automate airView to record and report results.



airControl™

airControl is a powerful and intuitive, Web-based server network management application that allows operators to centrally manage entire networks of Ubiquiti devices.

- Network Map
- Monitor Device Status
- Mass Firmware Upgrade
- Web UI Access
- Manage Groups of Devices
- Task Scheduling



Specifications

System Information		
Model	RM2-Ti	RM5-Ti
Processor Specs	Atheros MIPS 74KC, 550 MHz	Atheros MIPS 74KC, 550 MHz
Memory Information	128 MB SDRAM, 8 MB Flash	128 MB SDRAM, 8 MB Flash
RF Connections	2 RP-SMA (Waterproof)	2 RP-SMA (Waterproof) 1 SMA (GPS)
Regulatory / Compliance Information		
Wireless Approvals	FCC Part 15.247, IC RS210, CE	
RoHS Compliance	Yes	
Physical / Electrical / Environmental		
Dimensions	160 x 80 x 44 mm	
Weight	350 g	
Enclosure Characteristics	Die-Cast Aluminum	
Networking Interface	(1) 10/100/1000 Ethernet Port (1) 10/100 Ethernet Port	
Max. Power Consumption	6.5 Watts (RM2-Ti), 8.0 Watts (RM5-Ti)	
Power Supply	48V, 0.5A PoE Adapter (Included)	
Power Method	802.3af Compliant	
ESD/EMP Protection	30KV Contact / Air for Ethernet	
Operating Temperature	-30 to 75° C	
Operating Humidity	5 to 95% Condensing	
Shock and Vibration	ETSI300-019-1.4	
Software Information		
Modes	Station, Access Point, AP Repeater	
Services	SNMP, DHCP, NAT	
Utilities	Site Survey with Preferred SSID, Antenna Alignment Tool, Discovery Utility	
Security	WEP/WPA/WPA2	
QoS	802.11e / WMM Support	
Statistical Reporting	Ethernet Activity, Uptime, Packet Success/Errors	
LED Indicators		
System LEDs	Power, WAN, LAN, GPS (RM5-Ti only)	
Antenna Align / Signal Strength LEDs	Software Adjustable to Correspond to Custom Signal Strength Levels	

Specifications

RocketM2 Titanium

Operating Frequency				2412 - 2462 MHz			
Range Performance				50+ km (Outdoor - Antenna Dependent)			
Output Power				28 dBm			
TX Power Specifications				RX Power Specifications			
Modulation	Data Rate	Avg. TX	Tolerance	Modulation	Data Rate	Sensitivity	Tolerance
11g	1 - 24 Mbps	28 dBm	± 2 dB	11g	1 - 24 Mbps	-97 dBm min.	± 2 dB
	36 Mbps	26 dBm	± 2 dB		36 Mbps	-80 dBm	± 2 dB
	48 Mbps	25 dBm	± 2 dB		48 Mbps	-77 dbm	± 2 dB
	54 Mbps	24 dBm	± 2 dB		54 Mbps	-75 dBm	± 2 dB
11n / airMAX	MCS0	28 dBm	± 2 dB	11n / airMAX	MCS0	-96 dBm	± 2 dB
	MCS1	28 dBm	± 2 dB		MCS1	-95 dBm	± 2 dB
	MCS2	28 dBm	± 2 dB		MCS2	-92 dBm	± 2 dB
	MCS3	28 dBm	± 2 dB		MCS3	-90 dBm	± 2 dB
	MCS4	27 dBm	± 2 dB		MCS4	-86 dBm	± 2 dB
	MCS5	25 dBm	± 2 dB		MCS5	-83 dBm	± 2 dB
	MCS6	23 dBm	± 2 dB		MCS6	-77 dBm	± 2 dB
	MCS7	22 dBm	± 2 dB		MCS7	-74 dBm	± 2 dB
	MCS8	28 dBm	± 2 dB		MCS8	-95 dBm	± 2 dB
	MCS9	28 dBm	± 2 dB		MCS9	-93 dBm	± 2 dB
	MCS10	28 dBm	± 2 dB		MCS10	-90 dBm	± 2 dB
	MCS11	28 dBm	± 2 dB		MCS11	-87 dBm	± 2 dB
	MCS12	27 dBm	± 2 dB		MCS12	-84 dBm	± 2 dB
	MCS13	25 dBm	± 2 dB		MCS13	-79 dBm	± 2 dB
	MCS14	23 dBm	± 2 dB		MCS14	-78 dBm	± 2 dB
MCS15	22 dBm	± 2 dB	MCS15	-75 dBm	± 2 dB		

Specifications

RocketM5 Titanium							
Operating Frequency		5170 - 5825 MHz*					
Range Performance		50+ km (Outdoor - Antenna Dependent)					
Output Power		27 dBm					
TX Power Specifications				RX Power Specifications			
Modulation	Data Rate	Avg. TX	Tolerance	Modulation	Data Rate	Sensitivity	Tolerance
11a	6 - 24 Mbps	27 dBm	± 2 dB	11a	6 - 24 Mbps	-94 dBm min.	± 2 dB
	36 Mbps	25 dBm	± 2 dB		36 Mbps	-80 dBm	± 2 dB
	48 Mbps	23 dBm	± 2 dB		48 Mbps	-77 dbm	± 2 dB
	54 Mbps	22 dBm	± 2 dB		54 Mbps	-75 dBm	± 2 dB
11n / airMAX	MCS0	27 dBm	± 2 dB	11n / airMAX	MCS0	-96 dBm	± 2 dB
	MCS1	27 dBm	± 2 dB		MCS1	-95 dBm	± 2 dB
	MCS2	27 dBm	± 2 dB		MCS2	-92 dBm	± 2 dB
	MCS3	27 dBm	± 2 dB		MCS3	-90 dBm	± 2 dB
	MCS4	26 dBm	± 2 dB		MCS4	-86 dBm	± 2 dB
	MCS5	24 dBm	± 2 dB		MCS5	-83 dBm	± 2 dB
	MCS6	22 dBm	± 2 dB		MCS6	-77 dBm	± 2 dB
	MCS7	21 dBm	± 2 dB		MCS7	-74 dBm	± 2 dB
	MCS8	27 dBm	± 2 dB		MCS8	-95 dBm	± 2 dB
	MCS9	27 dBm	± 2 dB		MCS9	-93 dBm	± 2 dB
	MCS10	27 dBm	± 2 dB		MCS10	-90 dBm	± 2 dB
	MCS11	27 dBm	± 2 dB		MCS11	-87 dBm	± 2 dB
	MCS12	26 dBm	± 2 dB		MCS12	-84 dBm	± 2 dB
	MCS13	24 dBm	± 2 dB		MCS13	-79 dBm	± 2 dB
	MCS14	22 dBm	± 2 dB		MCS14	-78 dBm	± 2 dB
MCS15	21 dBm	± 2 dB	MCS15	-75 dBm	± 2 dB		

* Only 5725 - 5850 MHz supported in the USA

TOUGH Cable™

OUTDOOR CARRIER CLASS SHIELDED

Protect your networks from the most brutal environments with Ubiquiti's industrial-grade shielded Ethernet cable, TOUGH Cable.

Increase Performance

Dramatically improve your Ethernet link states, speeds, and overall performance with Ubiquiti TOUGH Cables.

Extreme Weatherproof

TOUGH Cables have been built to perform even in the harshest weather and environments.

ESD Damage Protection

Protect your networks from devastating electrostatic discharge (ESD) attacks.

Extended Cable Support

TOUGH Cables have been developed to increase power handling performance for extended cable run lengths.

Bulletproof your networks

TOUGH Cable is currently available in two versions: PRO Shielding Protection and CARRIER Shielding Protection.

TOUGH Cable PRO is a Category 5e, outdoor, carrier-class shielded cable with an integrated ESD drain wire.

TOUGH Cable CARRIER is a Category 5e, outdoor, carrier-class shielded cable that features an integrated ESD drain wire, anti-crosstalk divider, and secondary shielding. It is rated to provide optimal performance on Gigabit Ethernet networks.

Additional Information:

- 24 AWG copper conductor pairs
- 26 AWG integrated ESD drain wire to prevent ESD attacks and damage
- PE outdoor-rated, weatherproof jacket
- Multi-layered shielding
- Available in lengths of 1000 ft (304.8 m)

TERMS OF USE: The Ubiquiti radio device must be professionally installed. Shielded Ethernet cable and earth grounding must be used as conditions of product warranty. It is the installer's responsibility to follow local country regulations, including operation within legal frequency channels, output power, and Dynamic Frequency Selection (DFS) requirements.

For further information, please visit www.ubnt.com.

All specifications in this document are subject to change without notice.

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TOUGH Cable Connectors

Specifically designed for use with Ubiquiti TOUGH Cables and available in 100-pc. bags, TOUGH Cable Connectors protect against ESD attacks and Ethernet hardware damage while allowing rapid field deployment without soldering.

ESD attacks are the leading cause for device failures. The diagram below illustrates the areas vulnerable to ESD attacks in a network.

By using a grounded Ubiquiti Power over Ethernet (PoE) Adapter along with Ubiquiti TOUGH Cable and TOUGH Cable Connectors, you can effectively protect against ESD attacks.

