



# airMAX™ Omni

Next-Gen 2x2 Dual Polarity MIMO Omni Antenna

Models: AMO-2G10, AMO-2G13, AMO-3G12, AMO-5G10, AMO-5G13

High Performance, Long Range

Seamlessly Integrates with RocketM

360° Coverage

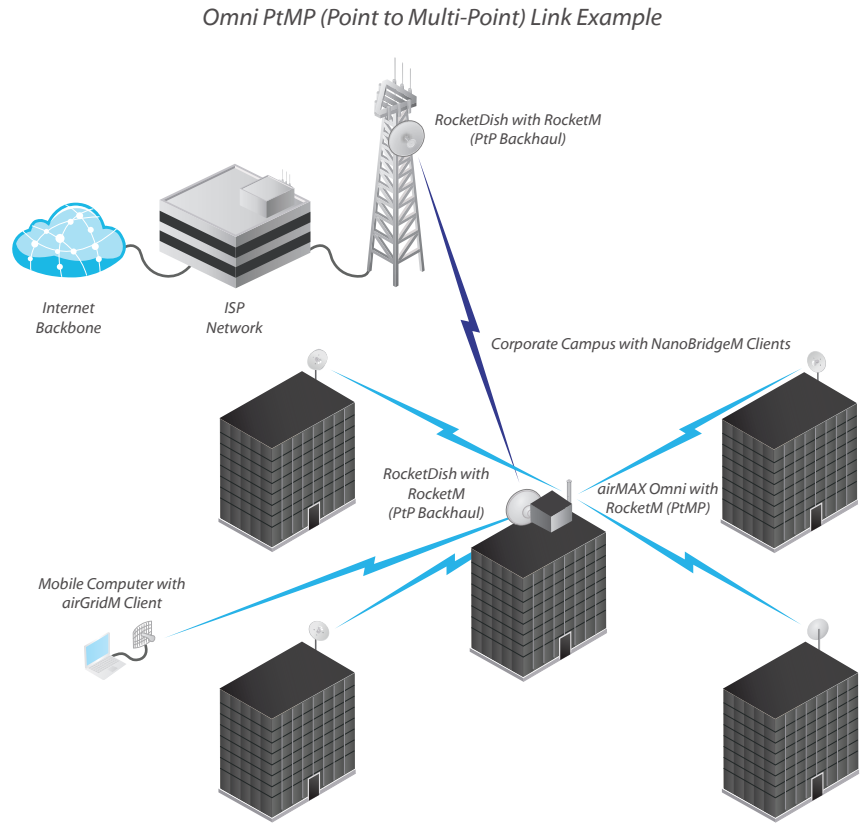
# Overview

## Omnidirectional Coverage

airMAX Omni is a Carrier Class 2x2 Dual Polarity MIMO Omnidirectional Antenna that was designed to seamlessly integrate with RocketM radios (RocketM sold separately).

Pair the RocketM's radio with the airMAX Omni's reach to create a powerful, 360° omnidirectional basestation.. This seamless integration gives network architects unparalleled flexibility and convenience.

On the right is one example of how airMAX Omni can be deployed:



airMAX Omni antennas provide wide 360° coverage and utilize airMAX technology to produce carrier-class performance and power.

## Utilize airMAX Technology\*

Unlike standard Wi-Fi 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.

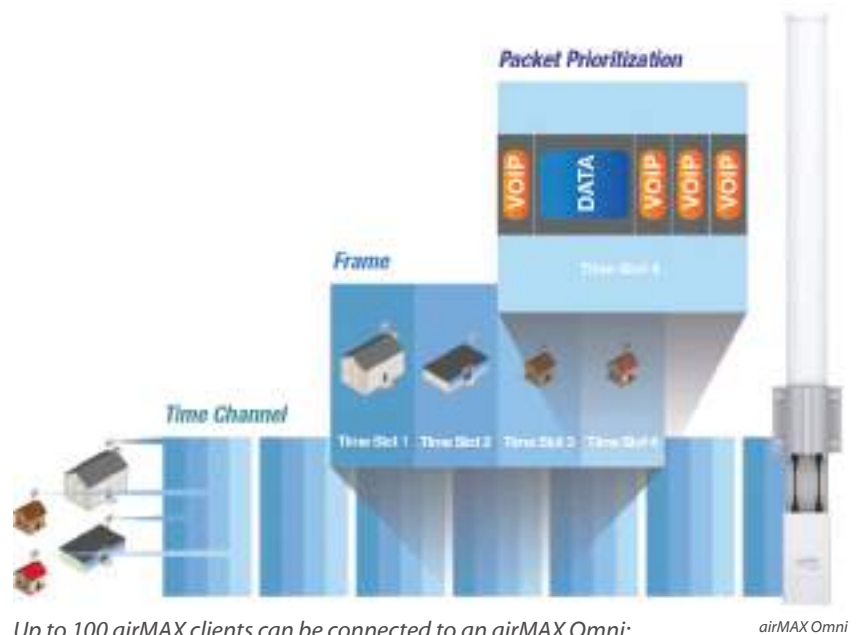
This "time slot" method eliminates hidden node collisions and maximizes airtime efficiency. It provides many magnitudes of performance improvements in latency, throughput, and scalability compared to all other outdoor systems in its class.

**Intelligent QoS** Priority is given to voice/video for seamless streaming.

**Scalability** High capacity and scalability.

**Long Distance** Capable of high-speed, carrier-class links.

**Latency** Multiple features dramatically reduce noise.

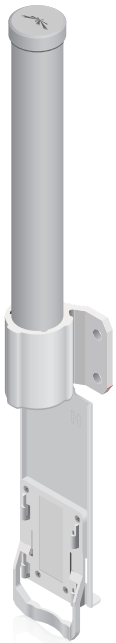


Up to 100 airMAX clients can be connected to an airMAX Omni; four airMAX clients are shown to illustrate the general concept.

airMAX Omni

\* When Omni is paired with RocketM

# Models



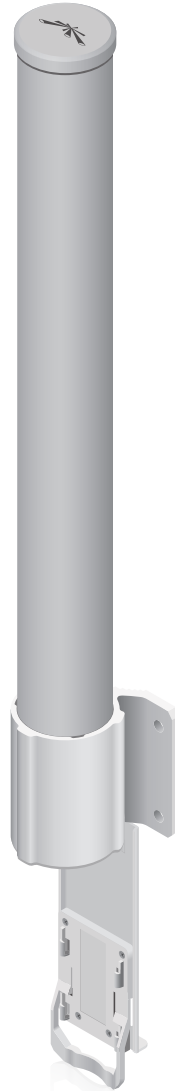
AMO-5G10  
(5 GHz, 10 dBi)



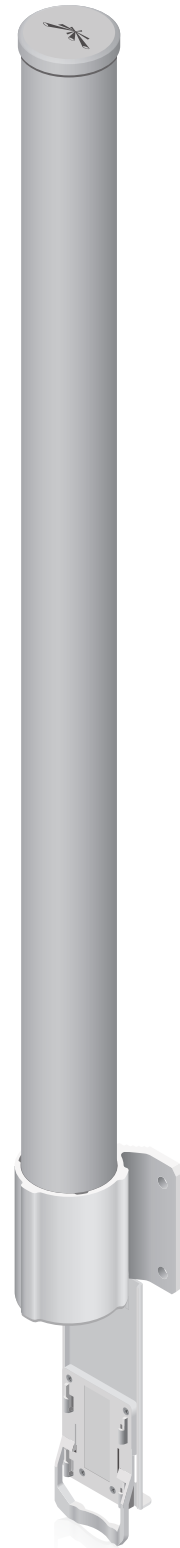
AMO-5G13  
(5 GHz, 13 dBi)



AMO-3G12  
(3 GHz, 12 dBi)



AMO-2G10  
(2.4 GHz, 10 dBi)



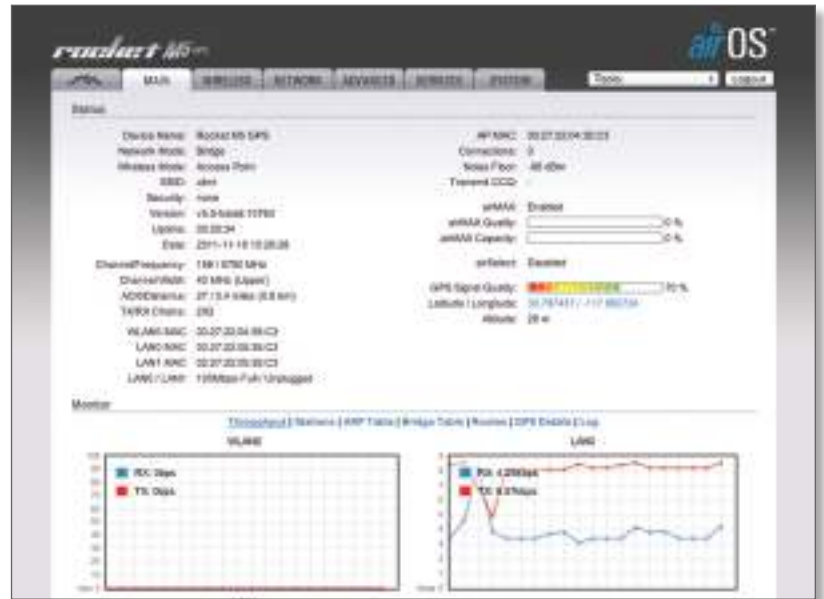
AMO-2G13  
(2.4 GHz, 13 dBi)

# Software

## airOS™

airOS is an intuitive, 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, which enables high-performance, outdoor multipoint networking.

- Protocol Support
- Ubiquiti Channelization
- Spectral Width Adjustment
- ACK Auto-Timing
- AAP Technology
- 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 real-time as a function of frequency.
- **Recording** Automize AirView to record and report results.



## airControl™

airControl is a powerful and intuitive, web-based server network management application, which 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



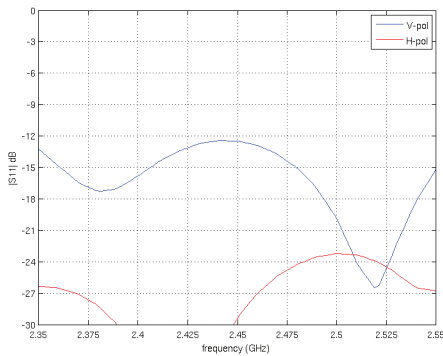
# Specifications

Antenna Characteristics					
Model	AMO-2G10	AMO-2G13	AMO-3G12	AMO-5G10	AMO-5G13
Dimensions* (mm)	1030 X 122 X 84	1390 X 122 X 105	1012 X 122 X 105	582 X 90 X 65	799 X 90 X 65
Weight*	2.1 kg	2.4 kg	2.05 kg	0.68 kg	0.82 kg
Frequency Range	2.35 - 2.55 GHz	2.35 - 2.55 GHz	3.4 - 3.7 GHz	5.45 - 5.85 GHz	5.45 - 5.85 GHz*
Gain	10 dBi	13 dBi	12 dBi	10 dBi	13 dBi
Elevation Beamwidth	12°	7°	8°	12°	7°
Max VSWR	1.7:1	1.7:1	1.6:1	1.6:1	1.5:1
Downtilt	4°	2°	4°	4°	2°
Wind Survivability	125 mph	125 mph	125 mph	125 mph	125 mph
Wind Loading	14 lb @ 100 mph	16 lb @ 100 mph	16 lb @ 100 mph	10 lb @ 100 mph	12 lb @ 100 mph
Polarization	Dual-Linear	Dual-Linear	Dual-Linear	Dual-Linear	Dual-Linear
Cross-pol Isolation	25 dB min.	25 dB min.	25 dB min.	25 dB min.	25 dB min.
ETSI Specification	EN 302 326 DN2	EN 302 326 DN2	EN 302 326 DN2	EN 302 326 DN2	EN 302 326 DN2
Mounting	Universal Pole Mount, RocketM Bracket, and Weatherproof RF Jumpers Included				

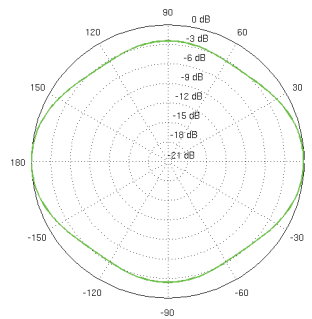
\* Dimensions and weight include pole mount and exclude RocketM (RocketM sold separately)

## AMO-2G10 Antenna Information

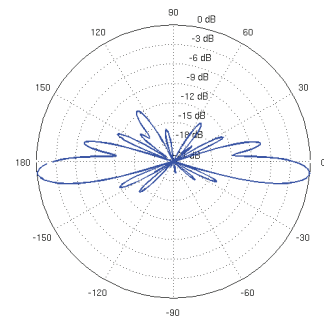
Return Loss



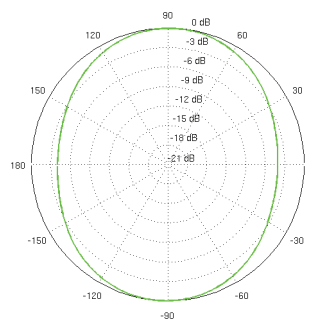
Vertical Azimuth



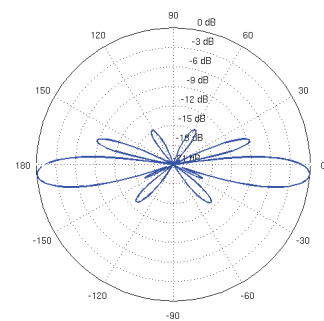
Vertical Elevation



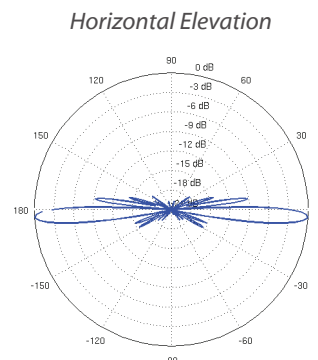
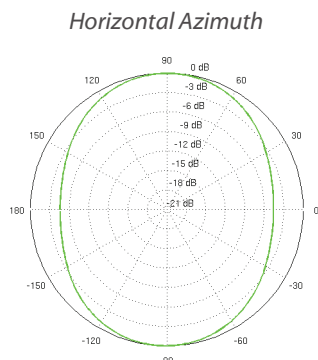
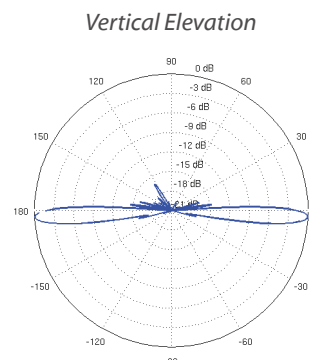
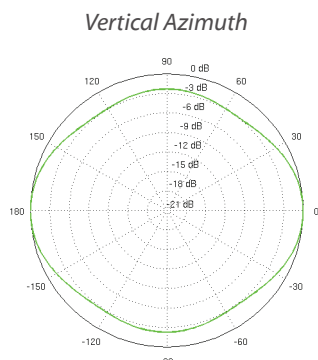
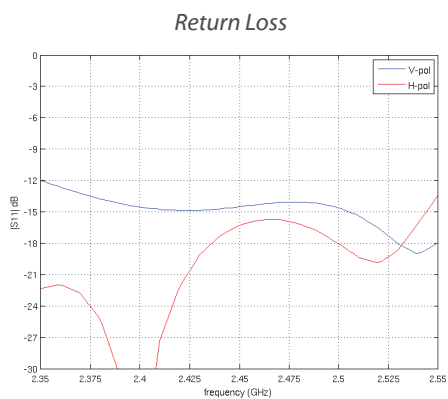
Horizontal Azimuth



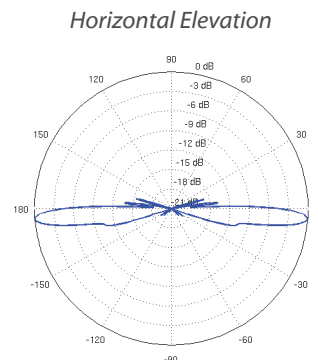
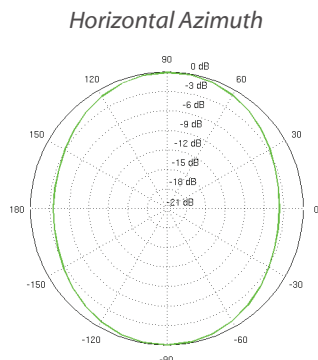
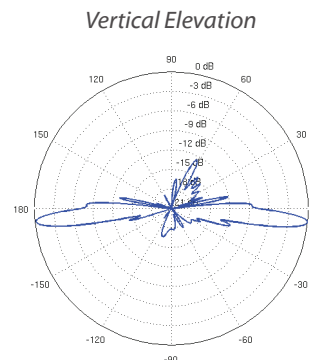
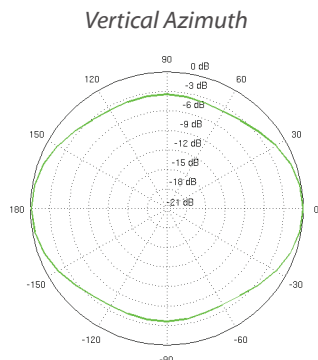
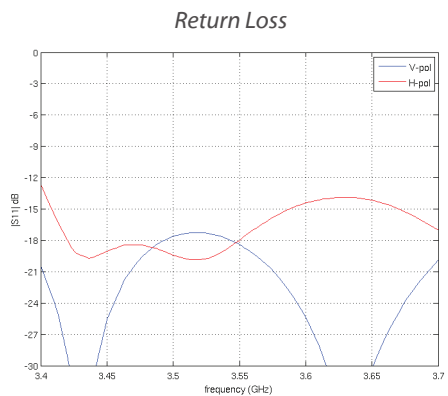
Horizontal Elevation



## AMO-2G13 Antenna Information

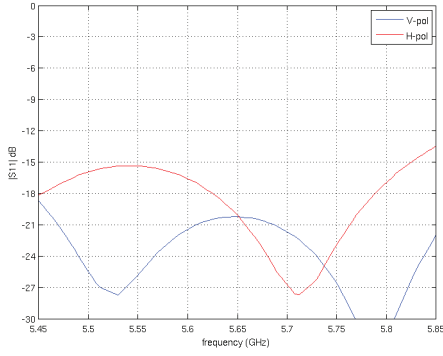


## AMO-3G12 Antenna Information

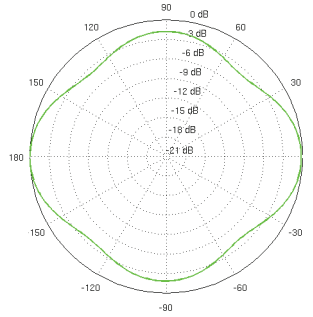


# AMO-5G10 Antenna Information

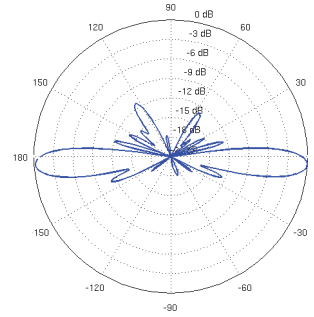
Return Loss



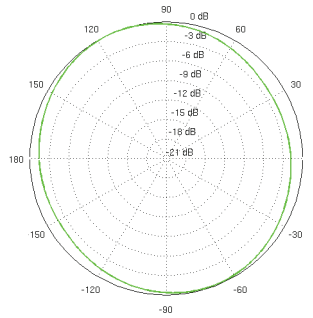
Vertical Azimuth



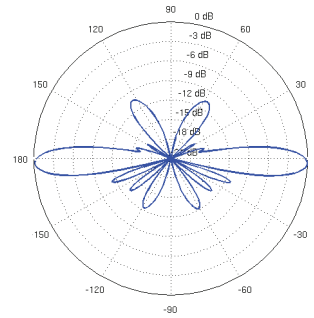
Vertical Elevation



Horizontal Azimuth

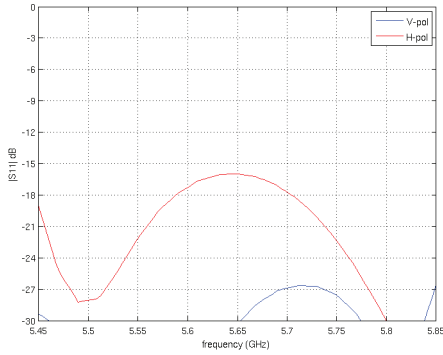


Horizontal Elevation

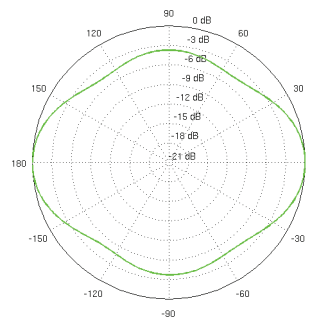


# AMO-5G13 Antenna Information

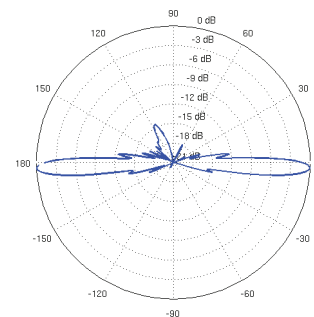
Return Loss



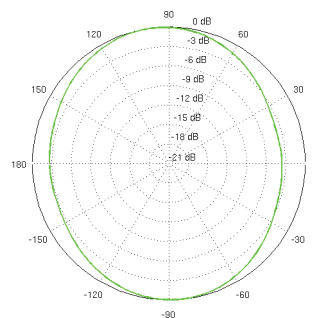
Vertical Azimuth



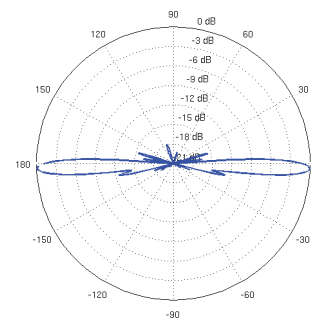
Vertical Elevation



Horizontal Azimuth



Horizontal Elevation



# TOUGH Cable™

OUTDOOR CARRIER CLASS SHIELDED

Protect your networks from the most brutal environments with Ubiquiti Networks' 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

Designed for outdoor use, 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:** Ubiquiti radio devices must be professionally installed. Shielded Ethernet cable and earth grounding must be used as conditions of product warranty. TOUGH Cable is designed for outdoor installations. It is the installer's responsibility to follow local country regulations, including operation within legal frequency channels, output power, indoor cabling requirements, and Dynamic Frequency Selection (DFS) requirements.

For further information, please visit [www.ubnt.com](http://www.ubnt.com).

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

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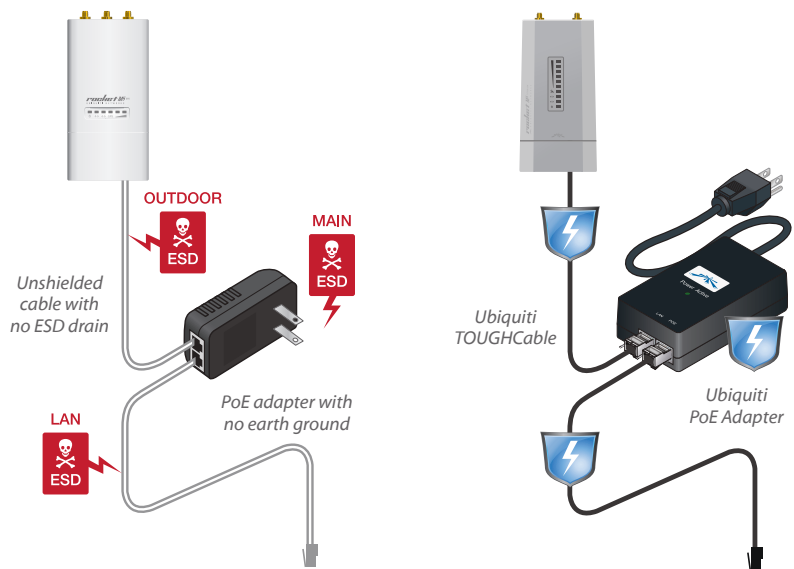


## TOUGH Cable Connectors

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.



[www.ubnt.com](http://www.ubnt.com)