

# airMAX Omni

Next-Gen 2x2 Dual Polarity MIMO Omni Antenna

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

Hi-Performance, Long Range

Seamlessly Integrates with  
Rocket M

360 Degree Coverage



# Overview

## Omnidirectional Coverage

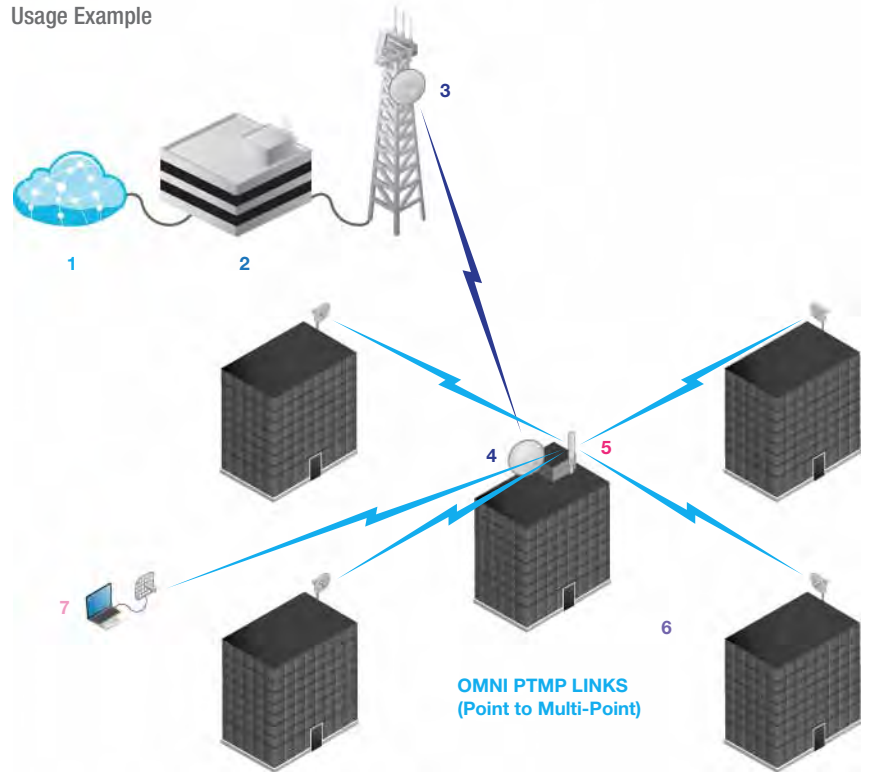
AirMax Omni is a Carrier Class 2x2 Dual Polarity MIMO omnidirectional antenna that was designed to seamlessly integrate with Rocket M radios (Rocket M sold separately).

Rocket M combines the “brains” in one robust unit; just pair Rocket M with AirMax Omni to create 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:

- 1 Internet Backbone
- 2 ISP Network
- 3 RocketDish with Rocket M (PtP backhaul)
- 4 RocketDish with Rocket M (PtP backhaul)
- 5 AirMax Omni with Rocket M (PtMP)
- 6 Corporate campus with NanoBridge M clients
- 7 Mobile computer with AirGrid M client

### Usage Example



AirMax Omni Antennas provide wide 360° coverage and utilize AirMax technology to produce Carrier Class performance and power.

## Utilize AirMax Technology \*

Unlike standard WiFi protocol, Ubiquiti's Time Division Multiple Access (TDMA) AirMax protocol allows each client to send & receive data using pre-designated time slots scheduled by an intelligent AP controller.

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

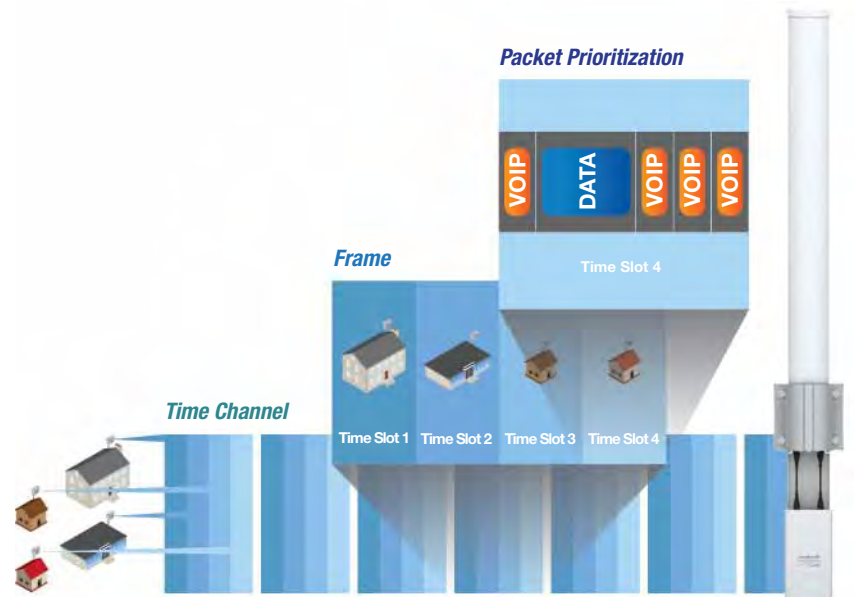
**Intelligent QoS** Priority is given to voice/video for seamless access.

**Scalability** High capacity and scalability.

**Long Distance** Capable of high speed 50km+ links

**Latency** Multiple features dramatically reduce noise.

\*When Omni is paired with Rocket M



AirMax Clients (up to 100 clients can be connected per AirMax Omni, 4 clients are shown to show general concept)

AirMax Omni

# Models



[left to right] **AMO-5G10** (5GHz, 10dBi), **AMO-5G13** (5GHz, 13dBi), **AMO-2G10** (2.4GHz, 10dBi), **AMO-2G13** (2.4GHz, 13dBi)

# 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 hi-performance outdoor multipoint networking.

**Protocol Support**

**Ubiquiti Channelization**

**Spectral Width Adjust**

**ACK Auto-Timing**

**AAP Technology**

**Multi-Language Support**



www.ubnt.com/airos

## airView

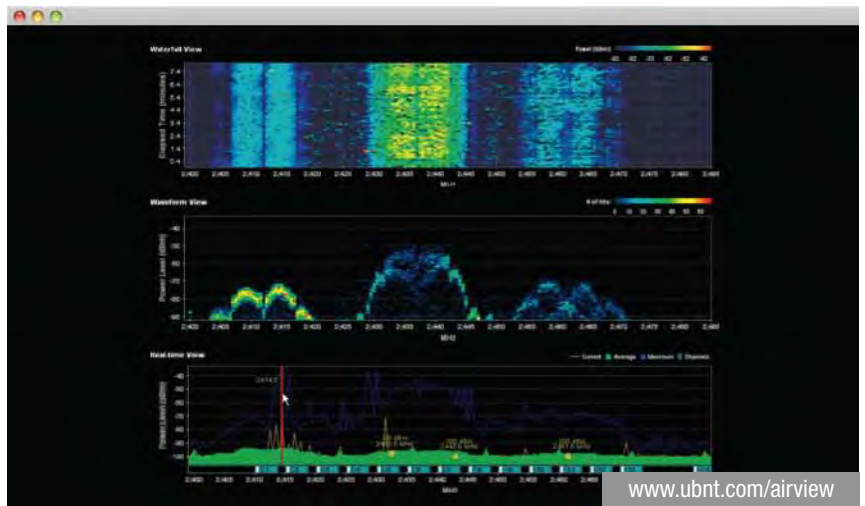
Integrated on all Ubiquiti M products, AirView provides Advanced Spectrum Analyzer Functionality: Waterfall, waveform, and real-time spectral views allow operators to identify noise signatures and plan their networks to minimize noise interference.

**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.



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## 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**



www.ubnt.com/aircontrol

\* When AirMax Omni is paired with Rocket M

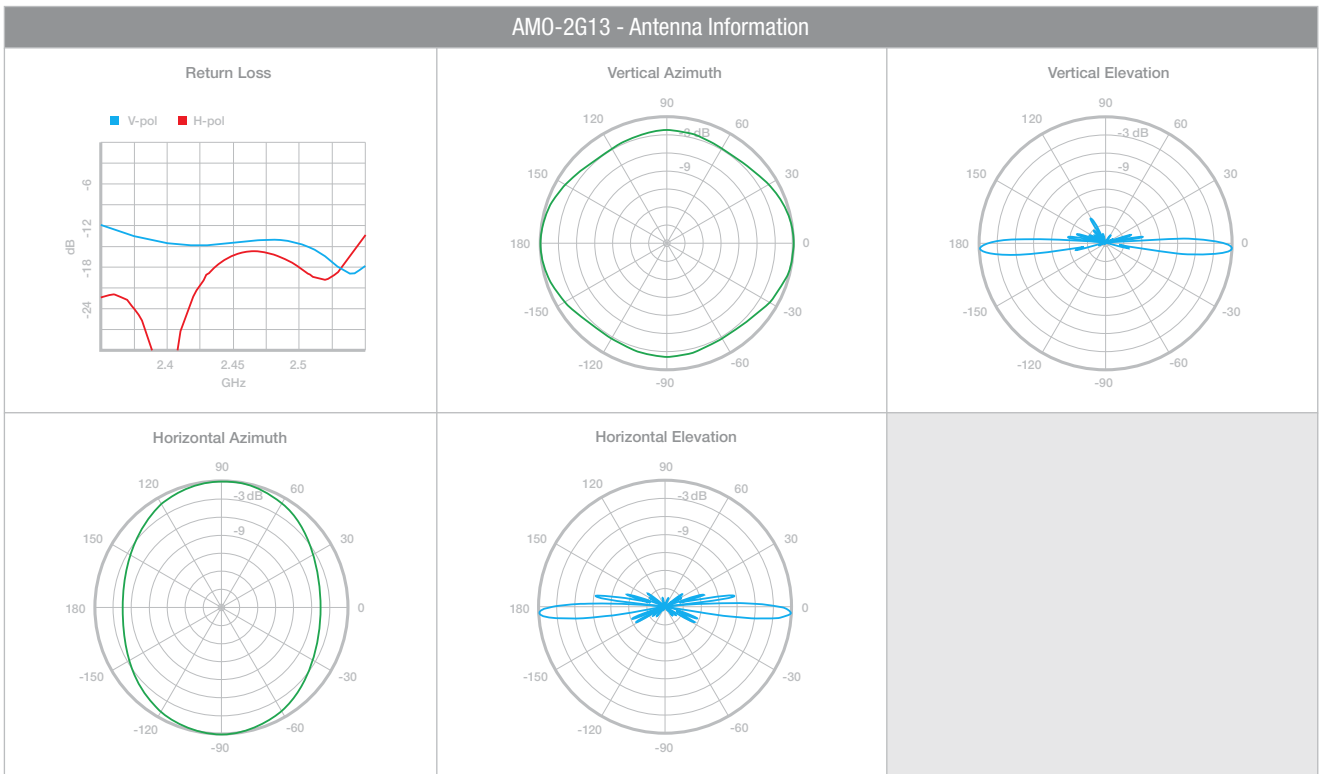
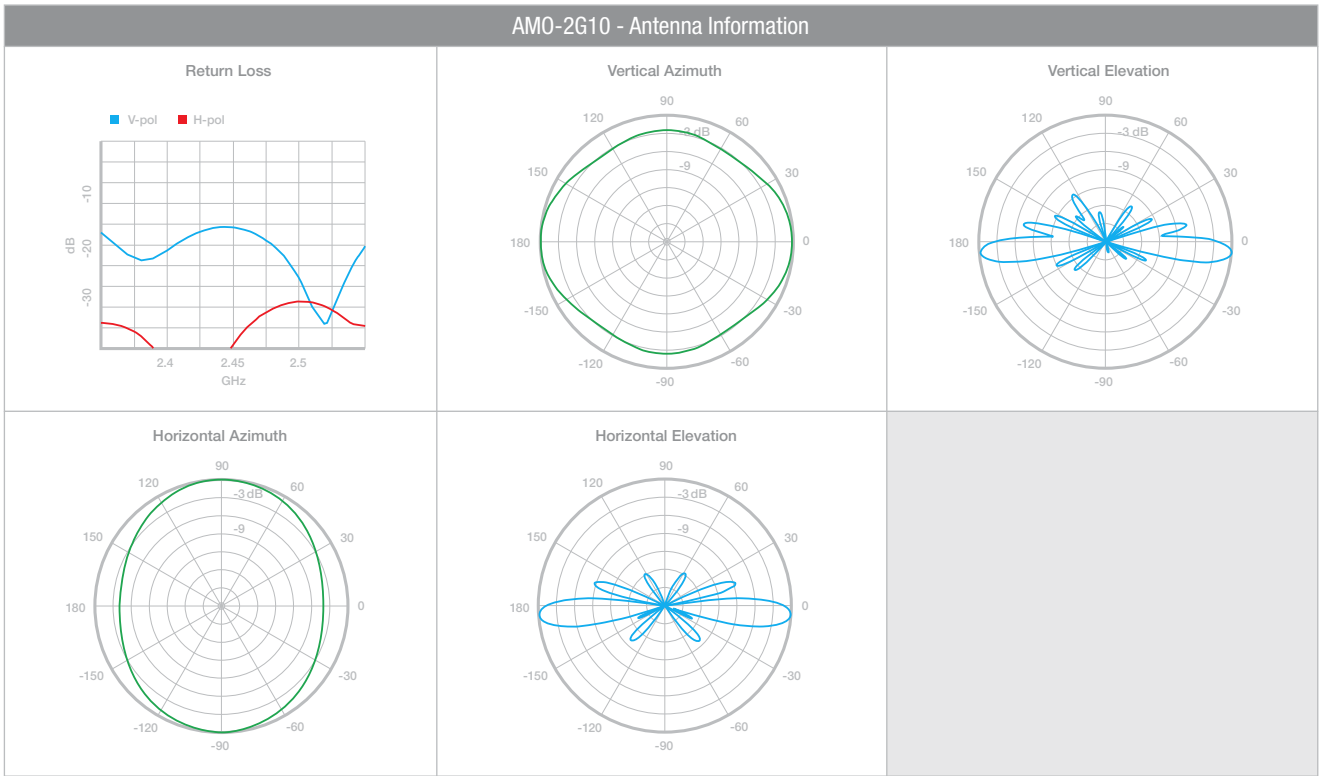
# Specifications

Antenna Characteristics				
	AMO-2G10	AMO-2G13	AMO-5G10	AMO-5G13
Frequency Range	2.35 - 2.55 GHz		5.45 - 5.85 GHz*	
Gain	10 dBi	13 dBi	10 dBi	13 dBi
Elevation Beamwidth	12 deg	7 deg	12 deg	7 deg
Max VSWR	1.7:1		1.6:1	1.5:1
Downtilt	4 deg	2 deg	4 deg	2 deg
Dimensions** (l x w x h)	217 x 123 x 1011 mm	217 x 123 x 1386 mm	158 x 98 x 579 mm	158 x 98 x 834 mm
Weight**	2.1 kg	2.4 kg	0.68 kg	0.82 kg
Wind Survivability	125 mph	100 mph	125 mph	
Wind Loading	28 lb @ 100 mph	38 lb @ 100 mph	8 lb @ 100 mph	10 lb @ 100 mph
Polarization	Dual Linear			
Cross-pol Isolation	25 dB min			
ETSI Specification	EN 302 326 DN2			
Mounting	Universal pole mount, Rocket M bracket, and weatherproof RF jumpers included			

\* Only 5745 - 5825 MHz is supported in the USA

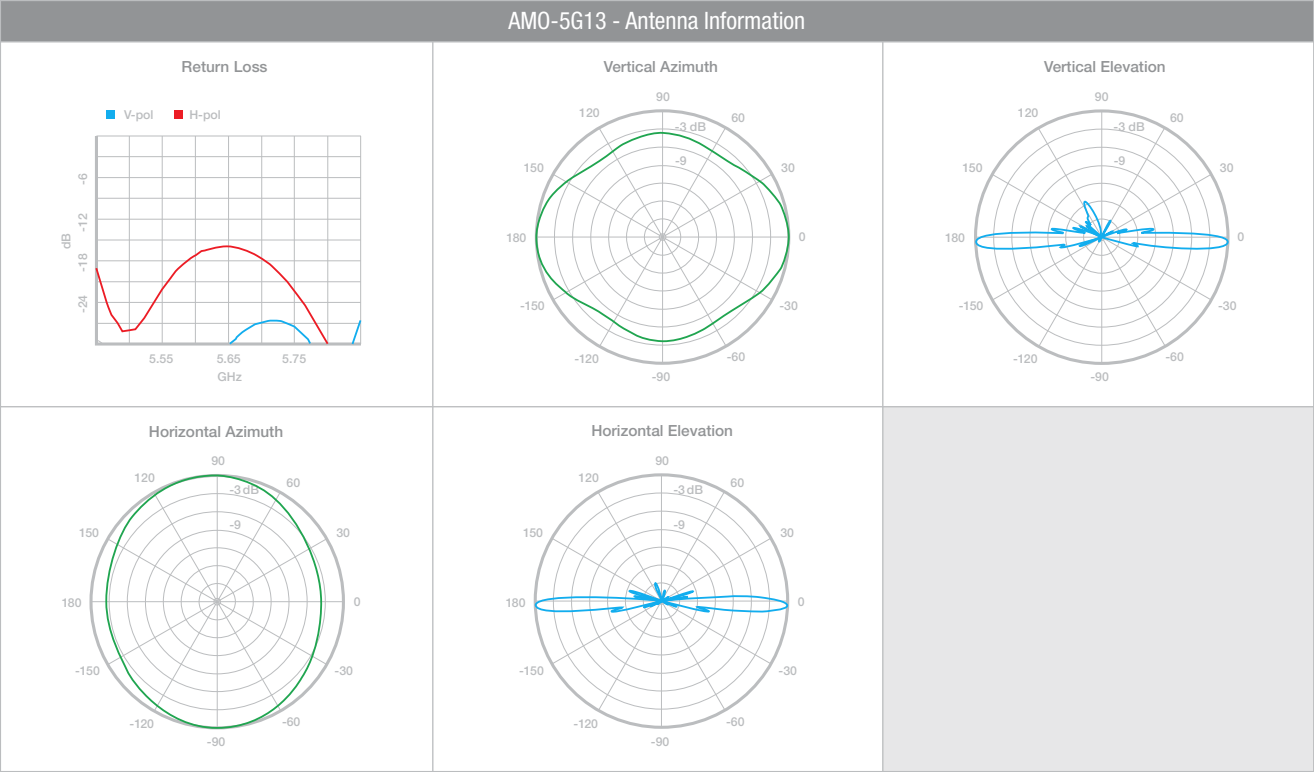
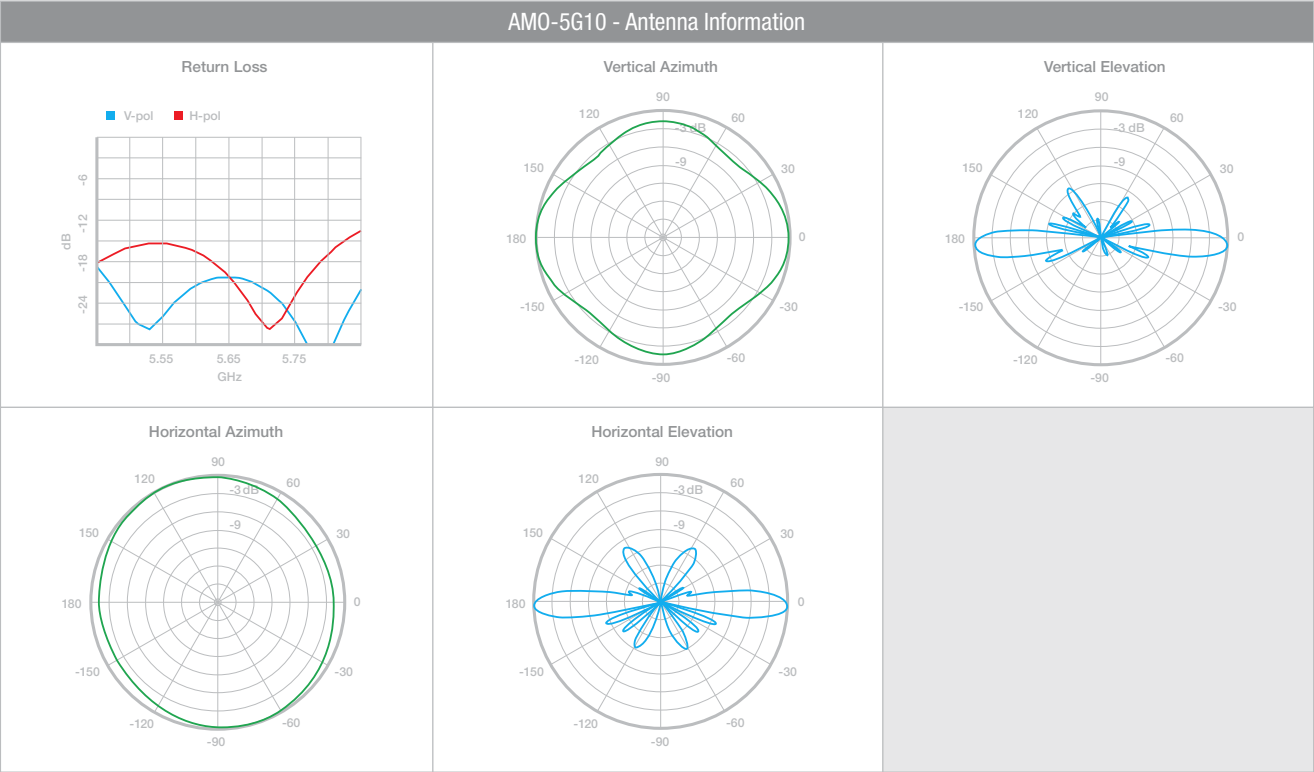
\*\* Dimensions and weight include pole mount; do not include Rocket M (Rocket M sold separately)

# Specifications (cont.)





# Specifications (cont.)



# TOUGH Cable

OUTDOOR CARRIER CLASS SHIELDED

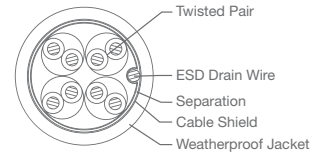
Protect your networks from the most brutal environments with Ubiquiti's industrial-grade shielded ethernet cable, TOUGH Cable.

**Increase Performance** Dramatically improve your ethernet link states, speeds, and overall performance with Ubiquiti TOUGH Cables.

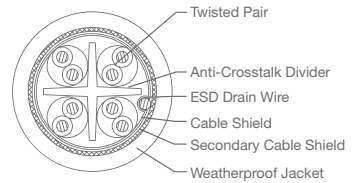
**Extreme Weatherproof** TOUGH Cables have been built to perform even in the harshest weather and environments.

**Eliminate ESD Attacks** Protect your networks from devastating ESD Attacks, TOUGH Cables eliminate ESD attacks and ethernet hardware damage.

**Extended Cable Support** TOUGH Cables have been developed to have increased power handling performance for extended cable run lengths.



**LEVEL 1**  
SHIELDING PROTECTION



**LEVEL 2**  
SHIELDING PROTECTION

## Bulletproof your networks

TOUGH Cable is currently available in two versions: Level 1 Shielding Protection and Level 2 Shielding Protection.

**Level 1** is a Category 5e (100Mbps Ethernet Support) Outdoor Carrier Class Shielded Cable.

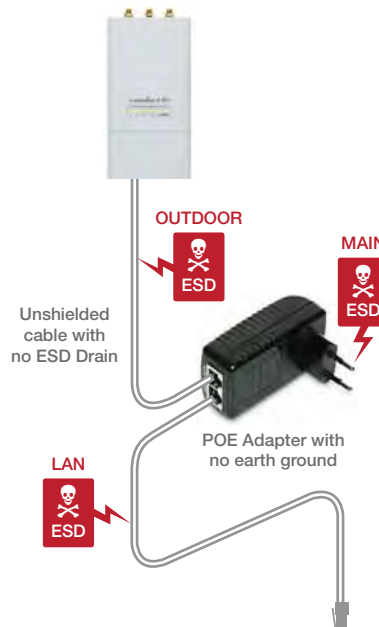
**Level 2** is a Category 6 (1Gbps Ethernet Support) Outdoor Carrier Class Shielded Cable that is also capable of providing enhanced Category 5e performance.

**Additional Information:**

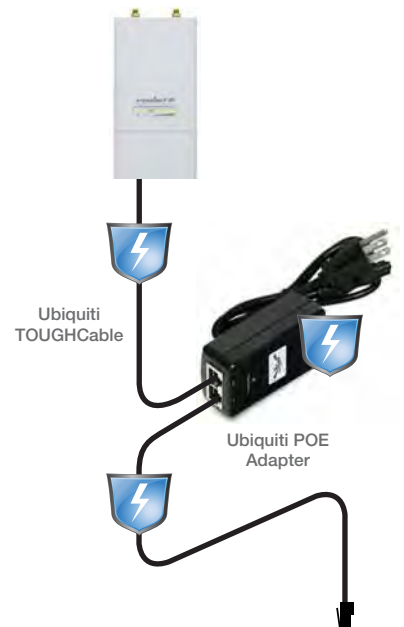
- 24 AWG copper conductor pairs
- ESD Drain Wire: 26 AWG integrated ESD Drain wire to prevent ESD attacks & damage.
- PVC outdoor rated jacket
- 0.35um foil shield
- Multi-Layered Shielding
- 1000ft (304.8m) length

Learn more:  
[www.ubnt.com/toughcable](http://www.ubnt.com/toughcable)

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



By using a grounded Ubiquiti POE adapter (included) along with Ubiquiti TOUGH Cable (sold separately), you can effectively eliminate ESD Attacks.







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

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

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