DATASHEET

PoE Adapter

Provides Earth Grounding and Surge Protection

Helps Protect Against ESD Events

Powers Ubiquiti® PoE Devices

UBIQUITI®
NETWORKS

PoE Adapter

Ubiquiti Networks offers Power over Ethernet (PoE) Adapters to power a variety of Ubiquiti products. The PoE Adapters are compatible with most Ubiquiti PoE devices*, including:

- airFiber®
- airMAX®
- EdgeMAX®
- mFi®
- UniFi® AP
- UniFi Video / airVision®

* *Check product specifications to verify PoE compatibility.*

Ubiquiti PoE Adapter Compatibility with the airGateway™

Specific PoE Adapter models are designed to work with the airGateway. The airGateway is a compact CPE (consumer premises equipment) gateway with built-in Wi-Fi used to connect the subscriber's local network to the WISP network.

The airGateway is available in three models:

- **airGateway** Standard model with an internal antenna
- **airGateway Pro** Dual-Band Wi-Fi model with an internal antenna
- **airGateway-LR** Long-range Wi-Fi model with an external antenna for extended range

The airGateway plugs into any of these PoE Adapters:

Model Number	Compatibility
POE-15-12W	✓
POE-24-12W	✓
POE-24-12W-G	✓*
POE-24-7W	✓*
POE-24-12W-G-WH	✓*

* *airGateway maximum LAN port speed: 100 Mbps*

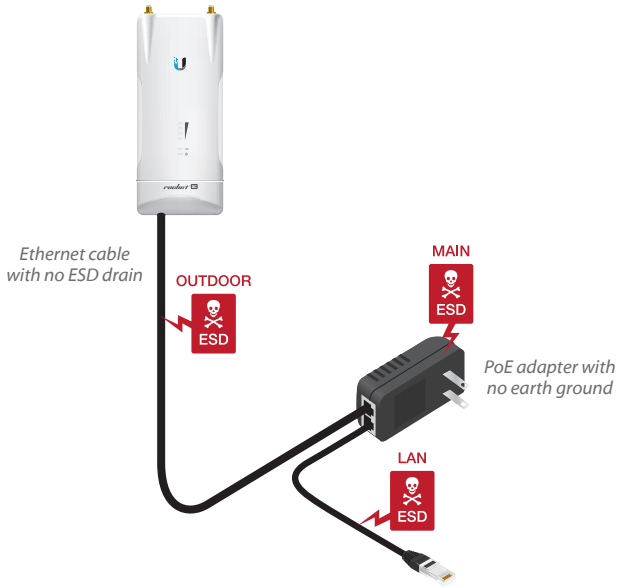
Protection

Ubiquiti PoE Adapters provide a variety of features to help protect your PoE devices:

- Surge protection
- Clamping protection
- Maximum surge discharge
- Peak pulse current
- AC cable with earth ground

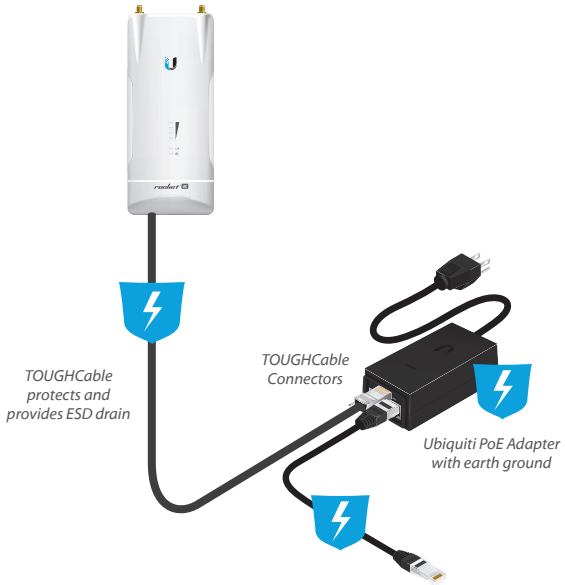
Electrostatic discharge (ESD) is the leading cause for outdoor device failures. You can effectively protect against ESD damage using a grounded Ubiquiti PoE Adapter, TOUGHCable™, and TOUGHCable Connectors.

Potential for ESD



Areas vulnerable to ESD events in a network without a Ubiquiti PoE Adapter.

Protection Against ESD



Ubiquiti PoE Adapters and TOUGHCable protect against ESD events in a network.

Models

POE-25-5W

POE-24-7W

POE-15-12W
POE-24-12W
POE-24-12W-G

POE-24-24W
POE-24-24W-G
POE-24-30W

POE-48-24W
POE-48-24W-G

POE-24-12W-G-WH

POE-48-24W-WH
POE-48-24W-G-WH

POE-24-AF5X

POE-50-60W

POE-54-80W-G

POE-54-80W

Specifications

Model	POE-25-5W	POE-24-7W	POE-15-12W
Dimensions	64 × 44× 30 mm (2.53 × 1.73 × 1.18")	72 x 45 x 33 (2.84 x 1.75 x 1.33")	85 x 44 x 29 mm (3.35 x 1.73 x 1.14")
Weight	65 g (2.3 oz)	72.1g (2.54 oz)	91.7 g (3.24 oz)
Output Voltage	24VDC @ 0.2A	24VDC @ 0.3A	15VDC @ 0.8A
LAN Activity Indicator	No	No	No
Gigabit LAN Port	No	Yes	No
Remote Reset Capability	Yes	Yes	No
Reset Button	Yes	Yes	No
Input Voltage	100-240AC @ 50/60Hz	100-240AC @ 50/60Hz	90-260VAC @ 47-63 Hz
Input Current	0.3A @ 120VAC, 0.2A @ 240VAC	0.3A @ 120VAC, 0.2A @240VAC	0.3A @ 120VAC, 0.2A @ 240VAC
Inrush Current	<40A Peak @ 120VAC, <70A Peak @ 230VAC	<40A Peak @ 120VAC, <70A Peak @ 230VAC	<30A Peak @ 120VAC, <60A Peak @ 230VAC
Efficiency	72+%	80+%	75+%
Output Ripple	1% Max.	1% Max.	1% Max.
Switching Frequency	60kHz Max.	65 kHz	50 kHz
Line Regulation	± 1%	± 1%	± 1%
Load Regulation	± 3%	± 3%	± 3%
2-Pair Powering	Pins 4, 5 (+) and Pins 7, 8 (-)	Pins 4, 5 (+) and Pins 7, 8 (-)	Pins 4, 5 (+) and Pins 7, 8 (-)
Operating Temperature	0 to 40° C (32 to 104° F)	0 to 40°C (32 to 104°F)	0 to 40° C (32 to 104° F)
Storage Temperature	-30 to 70° C (-22 to 158°F)	-30 to 70°C (-22 to 158°F)	-30 to 70℃ (-22 to 158° F)
Operating Humidity	35 to 95% Noncondensing	35 to 95% Non-Condensing	35 to 95% Noncondensing
AC Connector	IEC-320 C6	IEC-320 C6	IEC-320 C6
Data IN / POE	RJ45 Shielded Socket	RJ45 Shielded Socket	RJ45 Shielded Socket
Surge Protection	Difference and Common Mode	Difference and Common Mode	Difference and Common Mode
Clamping Protection	11V Data, 60V Power	11V Data, 60V Power	11V Data, 60V Power
Max. Surge Discharge	1500A (8/20 μs) Power	1500A (8/20 μs) Power	1500A (8/20 μs) Power
Peak Pulse Current	36A (10/1000 μs) Data	36A (10/1000 μs) Data	36A (10/1000 μs) Data
Shunt Capacitance	<5 pF data	<5 pf data	<5 pF data
Response Time	<1 ns	<1 ns	<1 ns
Compliance	IEC 60950-1:2005+A1 UL60950-1 EN55022:2010, EN55024:2010 FCC Class B	IEC 60950-1:2005+A1 UL60950-1 EN55022:2010, EN55024:2010 FCC Class B	IEC 60950-1:2005+A1 UL60950-1 EN55022:2010, EN55024:2010 FCC Class B
AC Cable with Earth Ground	EU, AR, BR, UL/cUL, CCC, Mexico, RCM	EU, AR, BR, UL/cUL, CCC, Mexico, RCM	USA, EU, AR, BR, UL, CCC, Mexico

Specifications

Model	POE-24-12W	POE-24-12W-G	POE-24-12W-G-WH
Dimensions	87 x 44 x 29 mm (3.43 x 1.73 x 1.14")	87 x 44 x 29 mm (3.43 x 1.73 x 1.14")	89 x 46 x 33 mm (3.48 x 1.81 x 1.30")
Weight	92 g (3.25 g)	99.4 g (3.51 g)	75 g (2.65 g)
Output Voltage	24VDC @ 0.5A	24VDC @ 0.5A	24VDC @ 0.5A
LAN Activity Indicator	No	No	No
Gigabit LAN Port	No	Yes	Yes
Remote Reset Capability	Yes	Yes	Yes
Reset Button	Yes	Yes	Yes
Input Voltage	90-260VAC @ 47-63 Hz	90-260VAC @ 47-63 Hz	90-260VAC @ 47-63 Hz
Input Current	0.3A @ 120VAC, 0.2A @ 240VAC	0.3A @ 120VAC, 0.2A @ 240VAC	0.3A @ 120VAC, 0.2A @ 240VAC
Inrush Current	<30A Peak @ 120VAC, <60A Peak @ 230VAC	<30A Peak @ 120VAC, <60A Peak @ 230VAC	<30A Peak @ 120VAC, <60A Peak @ 230VAC
Efficiency	75+%	75+%	75+%
Output Ripple	1% Max.	1% Max.	1% Max.
Switching Frequency	50 kHz	50 kHz	50 kHz
Line Regulation	± 1%	± 1%	± 1%
Load Regulation	± 3%	± 3%	± 3%
2-Pair Powering	Pins 4, 5 (+) and Pins 7, 8 (-)	Pins 4, 5 (+) and Pins 7, 8 (-)	Pins 4, 5 (+) and Pins 7, 8 (-)
Operating Temperature	0 to 40°C (32 to 104°F)	0 to 40°C (32 to 104°F)	0 to 40°C (32 to 104°F)
Storage Temperature	-30 to 70℃ (-22 to 158°F)	-30 to 70℃ (-22 to 158°F)	-30 to 70℃ (-22 to 158°F)
Operating Humidity	35 to 95% Noncondensing	35 to 95% Noncondensing	35 to 95% Noncondensing
AC Connector	IEC-320 C6	IEC-320 C6	IEC-320 C6
Data IN / POE	RJ45 Shielded Socket	RJ45 Shielded Socket	RJ45 Shielded Socket
Surge Protection	Difference and Common Mode	Difference and Common Mode	Difference and Common Mode
Clamping Protection	11V Data, 60V Power	11V Data, 60V Power	11V Data, 60V Power
Max. Surge Discharge	1500A (8/20 μs) Power	1500A (8/20 μs) Power	1500A (8/20 μs) Power
Peak Pulse Current	36A (10/1000 μs) Data	36A (10/1000 μs) Data	36A (10/1000 μs) Data
Shunt Capacitance	<5 pF data	<5 pF data	<5 pF data
Response Time	<1 ns	<1 ns	<1 ns
Compliance	IEC 60950-1:2005+A1 UL60950-1 EN55022:2010, EN55024:2010 FCC Class B	IEC 60950-1:2005+A1 UL60950-1 EN55022:2010, EN55024:2010 FCC Class B	IEC 60950-1:2005+A1 UL60950-1 EN55022:2010, EN55024:2010 FCC Class B
AC Cable with Earth Ground	USA, EU, AR, BR, UL, CCC, Mexico	USA, EU, AR, BR, UL, CCC, Mexico	USA, EU, AR, BR, UL, CCC, Mexico

Specifications

Model	POE-24-AF5X	POE-24-24W	POE-24-24W-G
Dimensions	88 x 57 x 33 mm (3.47 x 2.24 x 1.30")	88 x 57 x 33 mm (3.47 x 2.24 x 1.30")	88 x 57 x 33 mm (3.47 x 2.24 x 1.30")
Weight	158.5 g (5.59 oz)	135 g (4.76 oz)	158.5 g (5.59 oz)
Output Voltage	24VDC @ 1.0A	24VDC @ 1.0A	24VDC @ 1.0A
LAN Activity Indicator	No	No	No
Gigabit LAN Port	Yes	No	Yes
Remote Reset Capability	Yes	Yes	Yes
Reset Button	Yes	Yes	Yes
Input Voltage	90-260VAC @ 47-63 Hz	90-260VAC @ 47-63 Hz	90-260VAC @ 47-63 Hz
Input Current	0.6A @ 120VAC, 0.4A @ 240VAC	0.6A @ 120VAC, 0.4A @ 240VAC	0.6A @ 120VAC, 0.4A @ 240VAC
Inrush Current	<60A Peak @ 120VAC, <120A Peak @ 230VAC	<60A Peak @ 120VAC, <120A Peak @ 230VAC	<60A Peak @ 120VAC, <120A Peak @ 230VAC
Efficiency	80+%	80+%	80+%
Output Ripple	1% Max.	1% Max.	1% Max.
Switching Frequency	65 kHz	65 kHz	65 kHz
Line Regulation	± 1%	± 1%	± 1%
Load Regulation	± 3%	± 3%	± 3%
2-Pair Powering	–	Pins 4, 5 (+) and Pins 7, 8 (-)	–
4-Pair Powering	Pins 1, 2, 4, 5 (+) and Pins 3, 6, 7, 8 (-)	–	Pins 1, 2, 4, 5 (+) and Pins 3, 6, 7, 8 (-)
Operating Temperature	0 to 40°C (32 to 104°F)	0 to 40°C (32 to 104°F)	0 to 40°C (32 to 104°F)
Storage Temperature	-30 to 70℃ (-22 to 158°F)	-30 to 70°C (-22 to 158°F)	-30 to 70℃ (-22 to 158°F)
Operating Humidity	35 to 95% Noncondensing	35 to 95% Noncondensing	35 to 95% Noncondensing
AC Connector	IEC-320 C6	IEC-320 C6	IEC-320 C6
Data IN / POE	RJ45 Shielded Socket	RJ45 Shielded Socket	RJ45 Shielded Socket
Surge Protection	Difference and Common Mode	Difference and Common Mode	Difference and Common Mode
Clamping Protection	11V Data, 60V Power	11V Data, 60V Power	11V Data, 60V Power
Max. Surge Discharge	1500A (8/20 μs) Power	1500A (8/20 μs) Power	1500A (8/20 μs) Power
Peak Pulse Current	36A (10/1000 μs) Data	36A (10/1000 μs) Data	36A (10/1000 μs) Data
Shunt Capacitance	<5 pF data	<5 pF data	<5 pF data
Response Time	<1 ns	<1 ns	<1 ns
Compliance	IEC 60950-1:2005+A1 UL60950-1 EN55022:2010, EN55024:2010 FCC Class B	IEC 60950-1:2005+A1 UL60950-1 EN55022:2010, EN55024:2010 FCC Class B	IEC 60950-1:2005+A1 UL60950-1 EN55022:2010, EN55024:2010 FCC Class B
AC Cable with Earth Ground	USA, EU, AR, BR, UL, CCC, Mexico	USA, EU, AR, BR, UL, CCC, Mexico	USA, EU, AR, BR, UL, CCC, Mexico

Specifications

Model	POE-24-30W	POE-48-24W	POE48-24W-G
Dimensions	94 × 60 × 33 mm (3.70 × 2.36 × 1.30")	88 x 57 x 33 mm (3.47 x 2.24 x 1.30")	92 x 60 x 33 mm (3.62 x 2.36 x 1.30")
Weight	156 g (5.5 oz)	135.5 g (4.78 oz)	158.5 g (5.59 oz)
Output Voltage	24VDC @ 1.25A	48VDC @ 0.5A	48VDC @ 0.5A
LAN Activity Indicator	No	No	No
Gigabit LAN Port	Yes	No	Yes
Remote Reset Capability	Yes	No	No
Reset Button	Yes	No	No
Input Voltage	100-240AC @ 50/60Hz	90-260VAC @ 47-63 Hz	90-260VAC @ 47-63 Hz
Input Current	0.6A @ 120VAC, 0.4A @ 240VAC	0.6A @ 120VAC, 0.4A @ 240VAC	0.6A @ 120VAC, 0.4A @ 240VAC
Inrush Current	<60A Peak @ 120VAC, <120A Peak @ 230VAC	<60A Peak @ 120VAC, <120A Peak @ 230VAC	<65A Peak @ 120VAC, <130A Peak @ 230VAC
Efficiency	83+%	80+%	80+%
Output Ripple	1% Max.	1% Max.	1% Max.
Switching Frequency	65 kHz	65 kHz	65 kHz
Line Regulation	± 1%	± 1%	± 1%
Load Regulation	± 3%	± 3%	± 3%
2-Pair Powering	–	Pins 4, 5 (+) and Pins 7, 8 (-)	Pins 4, 5 (+) and Pins 7, 8 (-)
4-Pair Powering	Pins 1, 2, 4, 5 (+) and Pins 3, 6, 7, 8 (-)	–	–
Operating Temperature	0 to 40° C (32 to 104° F)	0 to 40°C (32 to 104°F)	0 to 40°C (32 to 104°F)
Storage Temperature	-30 to 70° C (-22 to 158° F)	-30 to 70℃ (-22 to 158°F)	-30 to 70℃ (-22 to 158°F)
Operating Humidity	35 to 95% Noncondensing	35 to 95% Noncondensing	35 to 95% Noncondensing
AC Connector	IEC-320 C6	IEC-320 C6	IEC-320 C6
Data IN / POE	RJ45 Shielded Socket	RJ45 Shielded Socket	RJ45 Shielded Socket
Surge Protection	Difference and Common Mode	Difference and Common Mode	Difference and Common Mode
Clamping Protection	11V Data, 60V Power	11V Data, 60V Power	11V Data, 60V Power
Max. Surge Discharge	1500A (8/20 μs) Power	1500A (8/20 μs) Power	1500A (8/20 μs) Power
Peak Pulse Current	36A (10/1000 μs) Data	36A (10/1000 μs) Data	36A (10/1000 μs) Data
Shunt Capacitance	<5 pF data	<5 pF data	<5 pF data
Response Time	<1 ns	<1 ns	<1 ns
Compliance	IEC 60950-1:2005+A1 UL60950-1 EN55022:2010, EN55024:2010 FCC Class B	IEC 60950-1:2005+A1 UL60950-1 EN55022:2010, EN55024:2010 FCC Class B	IEC 60950-1:2005+A1 UL60950-1 EN55022:2010, EN55024:2010 FCC Class B
AC Cable with Earth Ground	EU, AR, BR, UL/cUL, CCC, Mexico, RCM	USA, EU, AR, BR, UL, CCC, Mexico	USA, EU, AR, BR, UL, CCC, Mexico

Specifications

Model	POE-48-24W-WH	POE-48-24W-G-WH	POE-50-60W
Dimensions	93 x 59 x 33 mm (3.66 x 2.32 x 1.30")	96 x 62 x 35 mm (3.78 x 2.44 x 1.38")	101 x 60 x 33 mm (3.98 x 2.36 x 1.30")
Weight	145 g (5.12 oz)	166 g (5.86 oz)	192 g (6.77 oz)
Output Voltage	48VDC @ 0.5A	48VDC @ 0.5A	50VDC @ 1.2A
LAN Activity Indicator	No	No	No
Gigabit LAN Port	No	Yes	Yes
Remote Reset Capability	No	No	No
Reset Button	No	No	No
Input Voltage	90-260VAC @ 47-63 Hz	90-260VAC @ 47-63 Hz	90-260VAC @ 47-63 Hz
Input Current	0.6A @ 120VAC, 0.4A @ 240VAC	0.6A @ 120VAC, 0.4A @ 240VAC	1.3A @ 120VAC, 0.75A @ 230VAC
Inrush Current	<60A Peak @ 120VAC, <120A Peak @ 230VAC	<65A Peak @ 120VAC, <130A Peak @ 230VAC	<100A Peak @120VAC, <200A Peak @ 230VAC
Efficiency	80+%	80+%	85+%
Output Ripple	1% Max.	1% Max.	1% Max.
Switching Frequency	65 kHz	65 kHz	65 kHz
Line Regulation	± 1%	± 1%	± 1%
Load Regulation	± 3%	± 3%	± 3%
2-Pair Powering	Pins 4, 5 (+) and Pins 7, 8 (-)	Pins 4, 5 (+) and Pins 7, 8 (-)	–
4-Pair Powering	–	–	Pins 1, 2, 4, 5 (+) and Pins 3, 6, 7, 8 (-)
Operating Temperature	0 to 40°C (32 to 104°F)	0 to 40°C (32 to 104°F)	0 to 40°C (32 to 104°F)
Storage Temperature	-30 to 70℃ (-22 to 158°F)	-30 to 70℃ (-22 to 158°F)	-30 to 70℃ (-22 to 158°F)
Operating Humidity	35 to 95% Noncondensing	35 to 95% Noncondensing	35 to 95% Noncondensing
AC Connector	IEC-320 C6	IEC-320 C6	IEC-320 C6
Data IN / POE	RJ45 Shielded Socket	RJ45 Shielded Socket	RJ45 Shielded Socket
Surge Protection	Difference and Common Mode	Difference and Common Mode	Difference and Common Mode
Clamping Protection	11V Data, 60V Power	11V Data, 60V Power	11V Data, 60V Power
Max. Surge Discharge	1500A (8/20 μs) Power	1500A (8/20 μs) Power	1500A (8/20 μs) Power
Peak Pulse Current	36A (10/1000 μs) Data	36A (10/1000 μs) Data	36A (10/1000 μs) Data
Shunt Capacitance	<5 pF data	<5 pF data	<5 pF data
Response Time	<1 ns	<1 ns	<1 ns
Compliance	IEC 60950-1:2005+A1 UL60950-1 EN55022:2010, EN55024:2010 FCC Class B	IEC 60950-1:2005+A1 UL60950-1 EN55022:2010, EN55024:2010 FCC Class B	IEC 60950-1:2005+A1 UL60950-1 EN55022:2010, EN55024:2010 FCC Class B
AC Cable with Earth Ground	USA, EU, AR, BR, UL, CCC, Mexico	USA, EU, AR, BR, UL, CCC, Mexico	USA, EU, AR, BR, UL, CCC, Mexico

Specifications

Model	POE-54-80W-G	POE-54-80W
Dimensions	123 × 65 × 34 mm (4.84 × 2.56 × 1.34")	123 x 65 x 34 mm (4.84 × 2.56 × 1.34")
Weight	275 g (9.7 oz)	299 g (10.55 oz)
Output Voltage	54VDC @ 1.5A	54VDC @ 1.5A
LAN Activity Indicator	No	No
Gigabit LAN Port	Yes	Yes
Remote Reset Capability	No	No
Reset Button	No	No
Input Voltage	100-240AC @ 50/60Hz	100-240AC @ 50/60Hz
Input Current	0.8A @ 120VAC, 0.4A @ 240VAC	0.8A @ 120VAC, 0.4A @ 240VAC
Inrush Current	<80A Peak @ 120VAC, <120A Peak @ 230VAC	<80A Peak @ 120VAC, <120A Peak @ 230VAC
Efficiency	87+%	87+%
Output Ripple	1% Max.	1% Max.
Switching Frequency	100 kHz Max.	100 kHz Max.
Line Regulation	± 1%	± 1%
Load Regulation	± 3%	± 3%
4-Pair Powering	Pins 1, 2, 4, 5 (+) and Pins 3, 6, 7, 8 (-)	Pins 1, 2, 4, 5 (+) and Pins 3, 6, 7, 8 (-)
Operating Temperature	0 to 40° C (32 to 104° F)	0 to 40° C (32 to 104° F)
Storage Temperature	-30 to 70° C (-22 to 158° F)	-30 to 70° C (-22 to 158° F)
Operating Humidity	35 to 95% Noncondensing	35 to 95% Noncondensing
AC Connector	IEC-320 C6	IEC-320 C6
Data IN / POE	RJ45 Shielded Socket	RJ45 Shielded Socket
Surge Protection	Difference and Common Mode	Difference and Common Mode
Clamping Protection	11V Data, 60V Power	11V Data, 60V Power
Max. Surge Discharge	1500A (8/20 µs) Power	1500A (8/20 µs) Power
Peak Pulse Current	36A (10/1000 µs) Data	36A (10/1000 µs) Data
Shunt Capacitance	<5 pF data	<5 pF data
Response Time	<1 ns	<1 ns
Compliance	IEC 60950-1:2005+A1 UL60950-1 EN55022:2010, EN55024:2010 FCC Class B	IEC 60950-1:2005+A1 UL60950-1 EN55022:2010, EN55024:2010 FCC Class B
AC Cable with Earth Ground	EU, AR, BR, UL/cUL, CCC, Mexico, RCM	EU, AR, BR, UL/cUL, CCC, Mexico, RCM

Specifications are subject to change. Ubiquiti products are sold with a limited warranty described at: www.ubnt.com/support/warranty
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