



# Ubiquiti Networks Products Overview

AirMAX - Fixed Outdoor Wireless

AirFiber – Wireless Carrier Backhaul Solutions

UniFi – WiFi, Switching and Routing, Video Surveillance

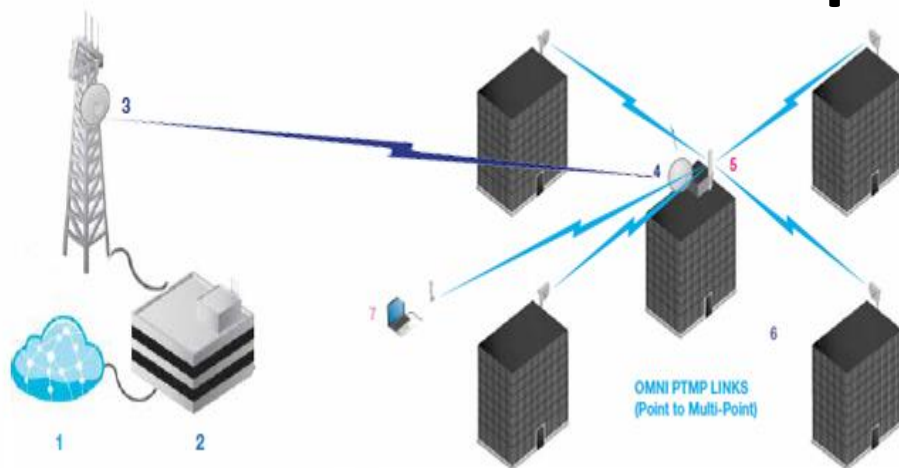
EdgeMax – Carrier Routing

mFi – Home Controls and Automation

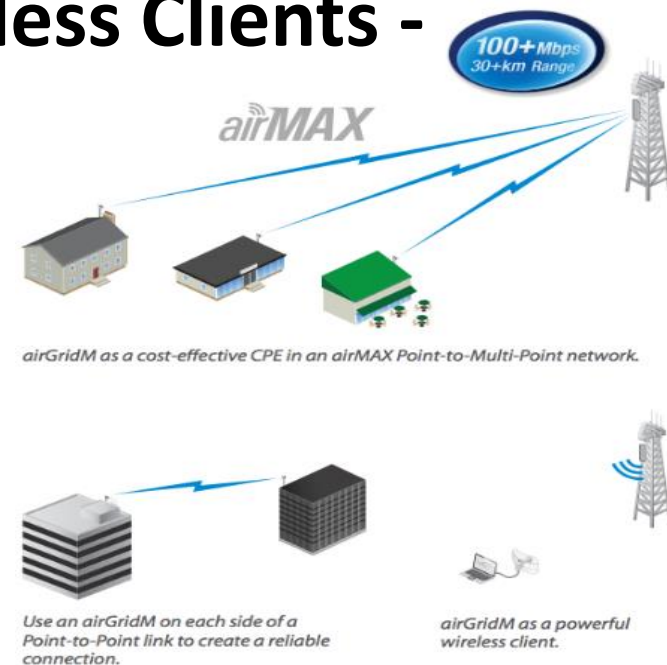
# AirMax Outdoor Wireless Solutions

Point to Multipoint, Point to Point, Wireless Clients

## Point to Multipoint



## Wireless Clients - CPE



## Point to Point - Bridging



# Outdoor 2.4 GHz CPE With Antenna (Wireless Radio + Antenna)



2,4 Ghz	LocoM2	NSM2	AG-HP-2G16	AG-HP-2G20
Frequency	2,4 GHz	2,4 GHz	2,4 GHz	2,4 GHz
Gain	8 dBi	11 dBi	16 dBi	20 dBi
CPU	Atheros MIPS 24KC, 400MHz	Atheros MIPS 24KC, 400MHz	Atheros MIPS 24KC, 400MHz	Atheros MIPS 24KC, 400MHz
Memory	32MB SDRAM, 8 MB Flash	32MB SDRAM, 8 MB Flash	32MB SDRAM, 8 MB Flash	32MB SDRAM, 8 MB Flash
Interface	(1) 10/100 Ethernet Ports	(2) 10/100 Ethernet Ports	(1) 10/100 Ethernet Ports	(1) 10/100 Ethernet Ports
Dimension	163x31x80	294x31x80	370x270x270	620x460x360
Power Supply (PoE)	included 24V, 0.5A PoE Adapter	included 24V, 0.5A PoE Adapter	included 24V, 0.5A PoE Adapter	included 24V, 0.5A PoE Adapter
Max Power Consumption	5.5 W	8 W	3 W	3 W
Polarization	Dual Linear	Dual Linear	Single Polarity	Single Polarity
Enclosure	Outdoor UV Plastic	Outdoor UV Plastic	Metal + Outdoor UV Plastic	Metal + Outdoor UV Plastic
Mounting	Pole Mount Kit Included	Pole Mount Kit Included	Mount Included	Mount Included
Output Power	23 dBm	28 dBm	28 dBm	28 dBm
Beamwidth	60deg H-pol/ 60deg V-pol	55deg H-pol/ 53deg V-pol	narrow beamwidth	narrow beamwidth
Range	5+ km	13+ km	10+ km	20+ km
Applications	Point to Multipoint, Point to Point, Wireless Client	Point to Multipoint, Point to Point, Wireless Client	Point to Multipoint, Point to Point, Wireless Client	Point to Multipoint, Point to Point, Wireless Client



# Outdoor 5 GHz CPE With Antenna (Wireless Radio + Antenna)



5 Ghz	LocoM5	NSM5	AG-HP-5G23	AG-HP-5G27
Frequency	5 GHz	5 GHz	5 GHz	5 GHz
Gain	13 dBi	16 dBi	23 dBi	27 dBi
CPU	Atheros MIPS 24KC, 400MHz	Atheros MIPS 24KC, 400MHz	Atheros MIPS 24KC, 400MHz	Atheros MIPS 24KC, 400MHz
Memory	32MB SDRAM, 8 MB Flash	32MB SDRAM, 8 MB Flash	32MB SDRAM, 8 MB Flash	32MB SDRAM, 8 MB Flash
Interface	(1) 10/100 Ethernet Ports	(2) 10/100 Ethernet Ports	(1) 10/100 Ethernet Ports	(1) 10/100 Ethernet Ports
Dimension	163x31x80	294x31x80	370x270x260	620x460x360
Power Supply (PoE)	included 24V, 0.5A PoE Adapter	included 24V, 0.5A PoE Adapter	included 24V, 0.5A PoE Adapter	included 24V, 0.5A PoE Adapter
Max Power Consumption	5.5 W	8 W	3 W	3 W
Polarization	Dual Linear	Dual Linear	Single Polarity	Single Polarity
Enclosure	Outdoor UV Plastic	Outdoor UV Plastic	Metal + Outdoor UV Plastic	Metal + Outdoor UV Plastic
Mounting	Pole Mount Kit Included	Pole Mount Kit Included	Mount Included	Mount Included
Output Power	23 dBm	27 dBm	25 dBm	25 dBm
Beamwidth	45deg H-pol/ 45deg V-pol	43deg H-pol/ 41deg V-pol	narrow beamwidth	narrow beamwidth
Range	10+ km	15+ km	25+ km	30+ km
Applications	Point to Multipoint, Point to Point, Wireless Client	Point to Multipoint, Point to Point, Wireless Client	Point to Multipoint, Point to Point, Wireless Client	Point to Multipoint, Point to Point, Wireless Client



# Outdoor 2.4 & 5 Ghz CPE Without Antenna (Wireless Radio Only)



<b>2,4 GHz</b>	<b>Bullet M2-HP</b>	<b>Bullet M2-Titanium</b>	<b>Bullet 2 HP</b>	<b>5 GHz</b>	<b>Bullet M5 HP</b>	<b>Bullet M5-Titanium</b>
<b>Frequency</b>	2,4 GHz 28dBm	2,4 GHz 28 dBm	2,4 GHz	<b>Frequency</b>	5 GHz 25dBm	5 GHz 25dBm
<b>Throuput</b>	100+ Mbps	100+ Mbps	100+ Mbps	<b>Throuput</b>	100+ Mbps	100+ Mbps
<b>CPU</b>	Atheros MIPS 24KC, 400MHz	Atheros MIPS 24KC, 400 MHz	Atheros MIPS 4KC, 180MHz	<b>CPU</b>	Atheros MIPS 24KC, 400MHz	Atheros MIPS 24KC, 400 MHz
<b>Memory</b>	32MB SDRAM, 8MB Flash	32 MB SDRAM, 8 MB Flash	16MB SDRAM, 4MB Flash	<b>Memory</b>	32MB SDRAM, 8MB Flash	32 MB SDRAM, 8 MB Flash
<b>Network Interface</b>	(1) 10/100 Ethernet Port	(1) 10/100 Ethernet Port	(1) 10/100 Ethernet Port	<b>Network Interface</b>	(1) 10/100 Ethernet Port	(1) 10/100 Ethernet Port
<b>Dimension</b>	152 x 37 x 31 mm	190 x 46 mm	152 x 31 x 37mm	<b>Dimension</b>	152 x 37 x 31 mm	190 x 46 mm
<b>Antena Connector Type</b>	Integrated N-type Male Jack	N-Type Connector (male)	Integrated N-type Male Jack	<b>Antena Connector Type</b>	Integrated N-type Male Jack	N-Type Connector (male)
<b>Power Supply</b>	Not Included. Requires 24V Passive Power over Ethernet (pairs 4, 5+; 7, 8 return)*	24V, 0.5A PoE Adapter (included) Passive Power over Ethernet (pairs 4, 5+; 7, 8 return)	Not Included. Requires 24V Passive Power over Ethernet (pairs 4, 5+; 7, 8 return)*	<b>Power Supply</b>	Not Included. Requires 24V Passive Power over Ethernet (pairs 4, 5+; 7, 8 return)*	24V, 0.5A PoE Adapter (included) Passive Power over Ethernet (pairs 4, 5+; 7, 8 return)
<b>Max Power Consumption</b>	7W	7W	8W	<b>Max Power Consumption</b>	6W	6W
<b>Housing</b>	Outdoor UV Stabilized Plastic	Titanium Aluminum	Outdoor UV Stabilized Plastic	<b>Housing</b>	Outdoor UV Stabilized Plastic	Titanium Aluminum
<b>Antena Compatibility</b>	Any Antenna with a Type N female connector			<b>Antena Compatibility</b>	Any Antenna with a Type N female connector	
<b>Applications</b>	PtP, PtMP	PtP, PtMP	PtP, PtMP	<b>Applications</b>	PtP, PtMP	PtP, PtMP

# 2.4 GHz Outdoor Bridge (Wireless Radio + Antenna)



<b>2,4 Ghz</b>	<b>PBE-M2-400</b>
<b>Frequency</b>	2,4 Ghz
<b>Throughput</b>	150+ Mbps
<b>Range</b>	20+ km
<b>Gain</b>	18 dBi
<b>Dish Reflector</b>	400 mm
<b>CPU</b>	Atheros MIPS 74Kc, 560 MHz
<b>Memory</b>	64 MB DDR2, 8 MB Flash
<b>Networking Interface</b>	(1) 10/100 Ethernet Port
<b>Dimension</b>	420 x 420 x 289 mm
<b>Power Supply</b>	24V, 0,5A PoE Adapter included Passive PoE (Pairs 4, 5+; 7, 8 Return)
<b>Max Power Consumption</b>	6 W
<b>Wind Survivability</b>	200 km/h
<b>Polarization</b>	Dual-Linear
<b>Max. VSWR</b>	1.5:1
<b>Built-In Mechanical Downtilt</b>	(+20° to -10°)
<b>Enclosure</b>	Outdoor UV Stabilized Plastic (radome shield PBE-RAD-400 not included)
<b>Mounting</b>	Pole-Mount Kit Included
<b>Applications</b>	PtP, PtMP, Wireless Client



## Applications



# 2.4 GHz Basestation Wireless Radios



2,4 Ghz	PICOM2HP	Rocket M2	Rocket M2 TI	UAP-Outdoor+	Unifi UAP AC Outdoor
<b>Frequency</b>	2,4 GHz	2,4 GHz	2,4 GHz	2,4 GHz	2.4 GHz & 5 GHz
<b>Thruput</b>	100+ Mbps	150+ Mbps	150+ Mbps	300 Mbps	2,4 Ghz 450 Mbps 5 Ghz 1300 Mbps
<b>Output Power</b>	28 dBm	28 dBm	28 dBm	28 dBm	28 dBm
<b>CPU</b>	Atheros MIPS 24KC, 400 MHz	Atheros MIPS 24KC, 400 MHz	Atheros MIPS 74Kc, 720 MHz	Atheros AR7240, 400Mhz AR9287 Wireless Chip	Broadcom BCM4360
<b>Memory</b>	32 MB SDRAM, 8 MB Flash	128 MB SDRAM, 8 MB Flash	128 MB SDRAM, 8 MB Flash	64 MB SDRAM, 8 MB Flash	128 MB DDR2 SDRAM, 16 MB FLASH
<b>Network Interface</b>	(1) 10/100 Ethernet Port	(1) 10/100 Ethernet	(1) 10/100/1000 Ethernet (1) 10/100 Ethernet	(2) 10/100 Ethernet Ports	(2) 10/100/1000 Ethernet Ports
<b>Dimension</b>	136x20x39mm	160 x 80 x 30 mm	160 x 80 x 44 mm	205 x 83 x 37 mm	340 x 180 x 65 mm
<b>Enclosure</b>	Outdoor UV Stabilized Plastic	Outdoor UV Stabilized Plastic	Die-Cast Aluminum	Outdoor UV Stabilized Plastic	Outdoor UV Stabilized Plastic
<b>Mounting</b>	Wall or Pole Mounting Kit (Included)	mounting kit included	mounting kit included	Wall and Pole Mount Kit included	Wall and Pole Mount Kit included
<b>Antena Connector</b>	External RP-SMA	(2) RP-SMA (Waterproof)	(2) RP-SMA (Waterproof)	(2) RP-SMA (Waterproof)	none
<b>Antena</b>	(1)External, 2dBi Omni Antenna (Included)	sold separate	sold separate	(2) External 5 dBi Omni Antennas Included	2,4 Ghz Integrated 5 dBi Omni (Supports 3x3 MIMO with Spatial Diversity), 5 Ghz Integrated 5 dBi Omni (Supports 3x3 MIMO with Spatial Diversity)
<b>Range</b>	Indoor Up to 200 m Outdoor Up to 500 m	depends on external antenna used	depends on external antenna used	183 m	183 m
<b>Max Power Consumption</b>	8W	6.5W	6.5W	8 W	22 W
<b>Power Supply</b>	15V, 0.8A PoE Power Adapter (Included)	24V, 1A PoE Adapter Passive PoE (Pairs 4, 5+; 7, 8 Return)	48V, 0.5A PoE Adapter included Passive PoE (Pairs 4, 5+; 7, 8 Return) 802.3af Compliant	48V, 0.5A PoE Adapter (Included) Passive Power over Ethernet (48V), 802.3af Supported	48V, 0.5A PoE Gigabit Adapter (Included) Passive Power over Ethernet (48V), 802.3at Supported
<b>Applications</b>	Wireless AP or Wireless Client	PtP, PtMP (AP or Basestation)	PtP, PtMP (AP or Basestation)	PtP, PtMP (AP or Basestation)	PtP, PtMP (AP or Basestation)
<b>Antena Compatibility</b>	2dBi Omni Antenna Included	AM-V2G-Ti AM-2G15-120 AM-2G16-90 RD-2G24 AMO-2G10 AMO-2G13	AM-V2G-Ti AM-2G15-120 AM-2G16-90 RD-2G24 AMO-2G10 AMO-2G13	AM-V2G-Ti AM-2G15-120 AM-2G16-90 RD-2G24 AMO-2G10 AMO-2G13	NA





# 5 GHz Mimo Basestation Wireless Radios



5 Ghz	Rocket M5	Rocket M5 TI	R5AC-Lite	R5AC-PTP	Unifi UAP AC Outdoor
Frequency	5 Ghz	5 Ghz	Full-Band 5 GHz (5150 - 5875 MHz)	Mid-Band 5 GHz (5470 - 5875 MHz)	2.4 GHz & 5 GHz
Throuput	150+ Mbps	150+ Mbps	450+ Mbps	450+ Mbps	2,4 Ghz 450 Mbps
Output Power	27 dBm	27 dBm	27 dBm	27 dBm	5 Ghz 1300 Mbps
CPU	Atheros MIPS 74Kc, 720 MHz	Atheros MIPS 74Kc, 720 MHz	Atheros MIPS 74Kc, 720 MHz	Atheros MIPS 74Kc, 720 MHz	Broadcom BCM4360
Memory	128 MB SDRAM, 8 MB Flash	128 MB SDRAM, 8 MB Flash	128MB DDR2 SDRAM, 16MB NOR FLASH	128 MB DDR2 SDRAM, 16 MB NOR FLASH	128 MB DDR2 SDRAM, 16 MB FLASH
Network Interface	(1) 10/100 Ethernet	(1) 10/100/1000 Ethernet	(1) 10/100/1000 Ethernet	(1) 10/100/1000 Ethernet	(2) 10/100/1000 Ethernet Ports
Dimension	160 x 80 x 30 mm	160 x 80 x 44 mm	162 x 84 x 37 mm	198.5 x 86.4 x 44.1 mm	340 x 180 x 65 mm
Enclosure	Outdoor UV Stabilized Plastic	Die-Cast Aluminum	Outdoor UV Stabilized Plastic	Outdoor UV Stabilized Plastic	Outdoor UV Stabilized Plastic
Mounting	mounting kit included	mounting kit included	mounting kit included	mounting kit included	Wall and Pole Mount Kit included
Antena Connector	(2) RP-SMA (Waterproof)	(2) RP-SMA (Waterproof)	(2) RP-SMA (Waterproof )	(2) RP-SMA (Waterproof )	none
Antena	sold separate	sold separate	sold separate	sold separate	2,4 Ghz Integrated 5 dBi Omni (Supports 3x3 MIMO with Spatial Diversity), 5 Ghz Integrated 5 dBi Omni (Supports 3x3 MIMO with Spatial Diversity)
Range	depends on external antenna used	depends on external antenna used	depends on external antenna used	depends on external antenna used	183 m
Max Power Consumption	8W	8W	8.5W	8.5W	22 W
Power Supply	24V, 1A PoE Adapter included Passive PoE (Pairs 4, 5+; 7, 8 Return)	48V, 0.5A PoE Adapter included Passive PoE (Pairs 4, 5+; 7, 8 Return) 802.3af Compliant	24V, 0,5A PoE Adapter included Passive PoE (Pairs 4, 5+; 7, 8 Return)	24V, 0,5A PoE Adapter included Passive PoE (Pairs 4, 5+; 7, 8 Return)	48V, 0.5A PoE Gigabit Adapter (Included) Passive Power over Ethernet (48V), 802.3at Supported
Applications	PtP, PtMP (AP or Basestation)	PtP, PtMP (AP or Basestation)	PtP, PtMP (AP or BaseStation)	Access Point, Station, PtP Only	PtP, PtMP (AP or Basestation)
Antena Compatibility	AM-V5G-Ti AM-M-V5G-Ti AM-5G16-120 AM-5G17-90 AM-5G19-120 AM-5G20-90 AM-5AC21-60 AM-5AC22-45 RD-5G31-AC RD-5G30 RD-5G34 AMO-5G10 AMO-5G13	AM-V5G-Ti AM-M-V5G-Ti AM-5G16-120 AM-5G17-90 AM-5G19-120 AM-5G20-90 AM-5AC21-60 AM-5AC22-45 RD-5G31-AC RD-5G30 RD-5G34 AMO-5G10 AMO-5G13	AM-5AC21-60 AM-5AC22-45 AM-V5G-Ti AM-M-V5G-Ti AM-5G16-120 AM-5G17-90 AM-5G19-120 AM-5G20-90 RD-5G31-AC RD-5G30-LW RD-5G30 RD-5G34	RD-5G31-AC RD-5G30-LW RD-5G30 RD-5G34	NA

# Omni Antennas for Basestations

## (Antenna only, Radio not included)



2,4 GHz	AMO-2G10	AMO-2G13
Frequency	2,4 GHz	2,4 GHz
Gain	10 dBi	13 dBi
Dimension	1030 X 122 X 84	1390 X 122 X 105
Horizontal Beamwidth	360°	360°
Vertical Beamwidth	12°	7°
VSWR	1.7:1	1.7:1
Polarization	Dual-Linear	Dual-Linear
Connectors	2x RSMA female	2x RSMA female
Compatible Radio	Rocket M2	Rocket M2
Windloading	200 KM/H	200 KM/H
Mounting	Universal Pole Mount, RocketM Bracket, and Weatherproof 2x RSMA male-RSMA male - 15cm cables Included	Universal Pole Mount, RocketM Bracket, and Weatherproof 2x RSMA male-RSMA male - 15cm cables Included
Applications	Point to Multipoint	Point to Multipoint



5 GHz	AMO-5G10	AMO-5G13
Frequency	5 GHz	5 GHz
Gain	10 dBi	13 dBi
Dimension	582 X 90 X 65	799 X 90 X 65
Horizontal Beamwidth	360°	360°
Vertical Beamwidth	12°	7°
VSWR	1.6:1	1.5:1
Polarization	Dual-Linear	Dual-Linear
Connectors	2x RSMA female	2x RSMA female
Compatible Radio	Rocket M5	Rocket M5
Windloading	200 KM/H	200 KM/H
Mounting	Universal Pole Mount, RocketM Bracket, and Weatherproof 2x RSMA male-RSMA male - 15cm cables Included	Universal Pole Mount, RocketM Bracket, and Weatherproof 2x RSMA male-RSMA male - 15cm cables Included
Applications	Point to Multipoint	Point to Multipoint



AM-5G16-120	AM-5G17-90	AM-5G19-120	AM-5G20-90	AM-M-V5G-Ti	AM-V5G-Ti	AM-5AC21-60	AM-5AC22-45
5 GHz	5 GHz	5 GHz	5 GHz	5 GHz	5 GHz	5 GHz	5 GHz
				60°: 17 dBi 90°: 16 dBi 120°: 15 dBi	60°: 21 dBi 90°: 20 dBi 120°: 19 dBi		
16 dBi	17 dBi	19 dBi	20 dBi			21 dBi	22 dBi
367x63x41	367x63x41	700x135x73	700x135x70	385x149x76	721x149,1x75,7	750x173x78	750x215x94
137°(6 dB)	72°(6 dB)	123°(6 dB)	91°(6 dB)	adjustable	adjustable	60° (6 dBi)	45° (6 dBi)
118°(6 dB)	93°(6 dB)	123°(6 dB)	85°(6 dB)	adjustable	adjustable	60° (6 dBi)	45° (6 dBi)
1.5:1	1.5:1	1.5:1	1.5:1	1.7:1	1.5:1	1.5:1	1.5:1
Dual Linear	Dual Linear	Dual Linear	Dual Linear	Dual Linear	Dual Linear	Dual Linear	Dual Linear
2x RP-SMA	2x RP-SMA	2x RP-SMA	2x RP-SMA	2x RP-SMA	2x RP-SMA	2x RP-SMA	2x RP-SMA
				RocketM5-Ti Rocket M5 RocketM5 GPS	RocketM5-Ti Rocket M5 RocketM5 GPS	R5AC-Lite R5AC-PTP R5AC-PTMP	R5AC-Lite R5AC-PTP R5AC-PTMP
200 km/h	200 km/h	200 km/h	200 km/h	200 km/h	200 km/h	200 km/h	200 km/h
Outdoor UV Stabilized Plastic	Outdoor UV Stabilized Plastic	Outdoor UV Stabilized Plastic	Outdoor UV Stabilized Plastic	advanced RF isolation titanium metal	advanced RF isolation titanium metal	Outdoor UV Stabilized Plastic	Outdoor UV Stabilized Plastic
Universal Pole Mount, Rocket Bracket, and Weatherproof RF Jumpers Included							



# Directional Antennas for PtP Bridging

## (Antenna only, Radio not included)



	2,4 GHz		5 GHz						
	<b>RD-2G24</b>		<b>RD-5G30</b>	<b>RD-5G30-LW</b>	<b>RD-5G34</b>	<b>RD-5G31-AC</b>	<b>AF-5G23-S45</b>	<b>AF-5G30-S45</b>	<b>AF-5G34-S45</b>
<b>Frequency</b>	2,4 Ghz		5 Ghz	5 Ghz	5 Ghz	5 Ghz	5 Ghz	5 Ghz	5 Ghz
<b>Gain</b>	24 dBi		30 dBi	30 dBi	34 dBi	31 dBi	23 dBi	30 dBi	34 dBi
<b>Dimension</b>	650 x 650 x 295 mm		650 x 650 x 304 mm	650 x 650 x 386 mm	1050 x 1050 x 421 mm	748 x 748 x 349 mm	378 x 378 mm	650 x 650 mm	1050 x 1050 mm
<b>HPOL Beamwidth</b>	3.8° (RX Dish) 6.6° (TX Dish)		5° (3 dB)	5.8° (3 dB)	3° (3 dB)	5° (3 dB)			
<b>VPOL Beamwidth</b>	3.8° (RX Dish) 6.6° (TX Dish)		5° (6 dB)	5.8° (3 dB)	3° (6 dB)	5° (3 dB)			
<b>F/B Ratio</b>	50 dB (RX Dish) 65 dB (TX Dish)		(-34 dB)	(-30 dB)	(-42 dB)	(-34dB)			
<b>VSWR</b>	1.6:1		1.4:1	1.6:1	1.4:1	1.4:1			
<b>Polarization</b>	Dual-Linear		Dual-Linear	Dual-Linear	Dual-Linear	Dual-Linear	45° slant 2x RSMA female	45° slant 2x RSMA female	45° slant 2x RSMA female
<b>Connectors</b>	2x RSMA female		2x RSMA female	2x RSMA female	2x RSMA female	2x RSMA female	2x RSMA female	2x RSMA female	2x RSMA female
<b>Windloading</b>	200 km/h		200 km/h	200 km/h	200 km/h	200 km/h	200 km/h	200 km/h	200 km/h
<b>Mount Kit</b>	Universal Pole Mount, Rocket Bracket, and Weatherproof RF Connectors Included		Universal Pole Mount, Rocket Bracket, and Weatherproof RF Connectors Included	Universal Pole Mount, Rocket Bracket, and Weatherproof RF Connectors Included	Universal Pole Mount, Rocket Bracket, and Weatherproof RF Connectors Included	Universal Pole Mount, Rocket Bracket, and Weatherproof RF Connectors Included	Universal Pole Mount, AF-5X Bracket, and Weatherproof RF Connectors Included	Universal Pole Mount, AF-5X Bracket, and Weatherproof RF Connectors Included	Universal Pole Mount, AF-5X Bracket, and Weatherproof RF Connectors Included
<b>Compatible Radios</b>	Rocket M2 Rocket M2 TI		Rocket M5 Rocket M5 TI	Rocket M5 Rocket M5 TI	Rocket M5 Rocket M5 TI	R5AC Lite R5AC PTP R5AC PTMP	AF-5X	AF-5X	AF-5X



# 5 GHz Point to Point Carrier Backhaul Links



5 GHz	AF-5	AF-5U	AF-5X
Frequency	Mid-Band 5 GHz (5470 - 5950 MHz)	High-Band 5 GHz (5725 - 6200 MHz)	5 GHz
Throughput	1.2+ Gbps	1.2+ Gbps	500+ Mbps
Range	100+ km	100+ km	200+ km
Dimension	938.4 x 468.4 x 281.4 mm	938.4 x 468.4 x 281.4 mm	224 x 82 x 48 mm
Max Power Consumption	40 W	40 W	15 W
Power Supply	50V, 1.2A PoE GigE Adapter (Included) Passive Power over Ethernet	50V, 1.2A PoE GigE Adapter (Included) Passive Power over Ethernet	24V, 1A PoE Gigabit Adapter (Included) Passive Power over Ethernet
Mounting	Pole Mount Kit (Included)	Pole Mount Kit (Included)	airFiber X Mount (Rocket Mount Compatible) GPS Pole Mount (Included)
Wind Survivability	200 km/hr	200 km/hr	200 km/hr
Interface	Data Port (1) 10/100/1000 Ethernet Port Config Port (1) 10/100 Ethernet Port Aux Port (1) RJ-12, Alignment Tone Port	Data Port (1) 10/100/1000 Ethernet Port Config Port (1) 10/100 Ethernet Port Aux Port (1) RJ-12, Alignment Tone Port	Data Port (1) 10/100/1000 Ethernet Port Config Port (1) 10/100 Ethernet Port
Modulation Rates	Up to 1024QAM	Up to 1024QAM	Up to 256QAM
Radio Frame Synchronization	GPS Clock Synchronization	GPS Clock Synchronization	GPS Clock Synchronization
Antenna	Integrated Split Antenna TX Gain 23 dBi RX Gain 23 dBi	Integrated Split Antenna TX Gain 23 dBi RX Gain 23 dBi	(2) RP-SMA Weatherproof connectors (antenna must be bought separate) (1) SMA Weatherproof (GPS) with external GPS antenna included
EIRP	(~50 dBm)	(~50 dBm)	
Beamwidth	6°	6°	
Front-to-Back Ratio	70 dB	70 dB	
Polarity	Dual-Slant Polarization	Dual-Slant Polarization	
Compatible Antenas	NA	NA	AF-5G23-S45 AF-5G30-S45 AF-5G34-S45 RD-5G30 RD-5G34
Applications	PTP	PTP	PTP
	Requires 2 units for a single link.		

# 24 GHz Point to Point Carrier Backhaul Links



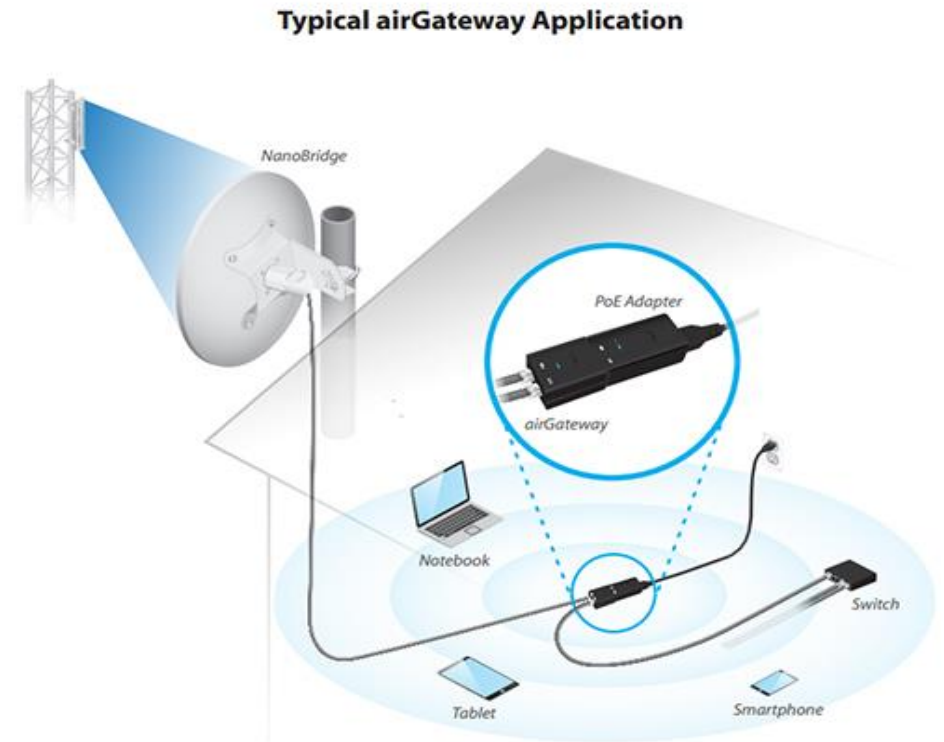
24 GHz	AF-24	AF-24HD
<b>Frequency</b>	24 GHz (24.05 - 24.25 GHz)	24 GHz (24.05 - 24.25 GHz)
<b>Throughput</b>	1.4+ Gbps	2 Gbps
<b>Range</b>	13+ km	20+ km
<b>Dimension</b>	649 x 426 x 303 mm	593 x 768 x 370 mm
<b>Max Power Consumption</b>	50 W	50 W
<b>Power Supply</b>	50V, 1.2A PoE GigE Adapter (Included) Passive Power over Ethernet	50V, 1.2A PoE GigE Adapter (Included) Passive Power over Ethernet
<b>Mounting</b>	Pole Mount Kit (Included)	Pole Mount Kit (Included)
<b>Wind Survivability</b>	200 km/hr	200 km/hr
<b>Interface</b>	Data Port (1) 10/100/1000 Ethernet Port Config Port (1) 10/100 Ethernet Port Aux Port (1) RJ-12, Alignment Tone Port	Data Port (1) 10/100/1000 Ethernet Port Config Port (1) 10/100 Ethernet Port Aux Port (1) RJ-12, Alignment Tone Port
<b>Modulation Rates</b>	Up to 64QAM	Up to 256QAM
<b>Radio Frame Synchronization</b>	GPS Clock Synchronization	GPS Clock Synchronization
<b>Antenna</b>	Integrated Split Antenna TX Gain 33 dBi RX Gain 38 dBi	Integrated Split Antenna TX Gain 33 dBi RX Gain 40 dBi
<b>EIRP</b>	~20 dBm (CE)	~20 dBm (CE)
<b>Beamwidth</b>	< 3.5°	< 3.5°
<b>Front-to-Back Ratio</b>	70 dB	70 dB
<b>Polarity</b>	Dual-Slant Polarization	Dual-Slant Polarization
<b>Applications</b>	PTP	PTP
Requires 2 units for a single link.		

# WISP Customer Access Point

- Acts as an indoor wireless device connecting multiple wireless clients
  - Connects to a switch to support wired clients
  - Powers the airMAX CPE on the roof



WISP Customer Wifi	airGateway	airGateway-LR
Frequency	2.4 GHz 802.11b/g/n	2.4 GHz 802.11b/g/n
Maximum TX Power	18 dBm	18 dBm
Throughput	100+ Mbps	100+ Mbps
Range	50 m	100 m
Antenna	Internal 2.4 GHz Antenna	(1) External 5 dBi
Wireless Modes	Access Point, Station	Access Point, Station
ESD/Surge protection	yes 24kV RJ-45 Interface	yes 24kV RJ-45 Interface
Power Option	PoE Adapter, 15/18/24VDC (Not Included)	PoE Adapter, 15/18/24VDC (Not Included)
Maximum Power Consumption	4 W	4 W
Processor	Atheros MIPS 24KC, 400 MHz	Atheros MIPS 24KC, 400 MHz
Memory	32 MB DDR1	32 MB DDR1
Dimension	54 x 44 x 30 mm	54 x 44 x 30 mm
Network Interface	(2) 10/100 Ethernet Ports	(2) 10/100 Ethernet Ports
Software	includes AirOS management software	includes AirOS management software



*The airGateway is deployed indoors to connect client devices.*



# Unifi Indoor Wireless PoE APs



	UAP	UAP-LR	UAP-Pro	UAP-AC
Frequency	2,4 GHz	2,4 GHz	Simultaneous Dual Band 2.4 GHz, 5 GHz	Simultaneous Dual Band 2.4 GHz, 5 GHz
Max TX Power	20 dBm	27 dBm	2.4 GHz 30 dBm 5 GHz 22 dBm	2.4 GHz 28 dBm 5 GHz 28 dBm
Throughput	300 Mbps	300 Mbps	2.4 GHz 450 Mbps 5 GHz 300 Mbps	2.4 GHz 450 Mbps 5 GHz 1300 Mbps
Range	122 m	183 m	122 m	122 m
Wif-Fi Standards	802.11 b/g/n	802.11 b/g/n	802.11 a/b/g/n	802.11 a/b/g/n/ac
Networking Interface	(1) 10/100 Ethernet Port	(1) 10/100 Ethernet Port	(2) 10/100/1000 Ethernet Ports	(2) 10/100/1000 Ethernet Ports
Antenas	Integrated 3 dBi Omni (Supports 2x2 MIMO with Spatial Diversity)	Integrated 3 dBi Omni (Supports 2x2 MIMO with Spatial Diversity)	2.4 GHz Integrated 5 dBi Omni (Supports 3x3 MIMO with Spatial Diversity) 5 GHz Integrated 4 dBi Omni (Supports 3x3 MIMO with Spatial Diversity)	2.4 GHz Integrated 5 dBi Omni (Supports 3x3 MIMO with Spatial Diversity) 5 GHz Integrated 5 dBi Omni (Supports 3x3 MIMO with Spatial Diversity)
Power Supply	24V, 0.5A PoE Adapter Included Passive Power over Ethernet (12-24V) * not compatible with 48V 802.3af/at switches	24V, 0.5A PoE Adapter Included Passive Power over Ethernet (12-24V) * not compatible with 48V 802.3af/at switches	48V, 0.5A PoE Gigabit Adapter Included Passive Power over Ethernet (48V), 802.3af Supported	48V, 0.5A PoE Gigabit Adapter Included Passive Power over Ethernet (48V), High Power 802.3at Supported
Maximum Power Consumption	4 W	6 W	12 W	22 W
Dimension	200 x 200 x 36.5 mm	200 x 200 x 36.5 mm	200 x 200 x 36.5 mm	200 x 204 x 27 mm
Mounting	Wall/Ceiling (Kits Included)	Wall/Ceiling (Kits Included)	Wall/Ceiling (Kits Included)	Wall/Ceiling (Kits Included)
Software	Unifi Controller Software with Scalable Enterprise Wi-Fi Management Included	Unifi Controller Software with Scalable Enterprise Wi-Fi Management Included	Unifi Controller Software with Scalable Enterprise Wi-Fi Management Included	Unifi Controller Software with Scalable Enterprise Wi-Fi Management Included





# Indoor 802.11n SOHO Wireless Routers

## Work as a Router or can Function as an AP



	AirRouter	AirRouter-LR
Frequency Band	2.4 GHz 802.11b/g/n	2.4 GHz 802.11b/g/n
Wireless Speed	Up to 150 Mbps	Up to 150 Mbps
Wireless Range	Up to 100+ m	Up to 200+ m
Output Power	19 dBm	28 dBm
Antenna	Integrated	External High Gain
Dimension	162 x 132 x 30 mm	162 x 132 x 30 mm
Ports	(5) 10/100 Ethernet Ports 1 USB Port 1 Power Port	(5) 10/100 Ethernet Ports 1 USB Port 1 RP-SMA Antenna Port
Software	airOS	airOS
Power Supply	5V, 2A Adapter (Included)	5V, 2A PoE Adapter (Included)
Software	includes AirOS management software	includes AirOS management software



# Switching And Routing

(EdgeRouters support 1 million+ packets per second)



Edge Routers	ERLite-3	ERPoe-5	ER-8	ERPro-8
<b>Performance</b>	1 million packets per second for 64-byte packets	1 million packets per second for 64-byte packets	2 million packets per second for 64-byte packets 8 Gbps for packets 512 bytes or larger in size	2 million+ packets per second for 64-byte packets 8 Gbps for packets 512 bytes or larger in size
<b>Networking Interface</b>	(3) 10/100/1000 Ethernet Ports (1) RJ45 Serial Console Port	(5) 10/100/1000 Routing Ports (3) ports configurable for switching all (5) are configurable for PoE	(8) 10/100/1000 Ethernet Ports (1) RJ45 Serial Console Port	(8) 10/100/1000 Ethernet Ports with 2 shared SFP slots (shared w/Ports 7,8) (1) RJ45 Serial Console Port
<b>PoE</b>	NA	Supports 24V or 48V* PoE 48V available when using 48VDC Power Adapter (not included). 24V Power adapter included. Max. PoE Wattage Output Combined for All 5 Data Ports 50W	NA	NA
<b>Dimension</b>	200 x 90 x 30 mm	200 x 90 x 30 mm	484 x 164 x 44 mm	484 x 164 x 44 mm
<b>Max. Power Consumption</b>	7 W	60 W	35 W	35 W
<b>Power</b>	12VDC, 1A Power Adapter (Included)	24VDC, 2.5A Power Adapter (Included)	Internal AC/DC Power Adapter, 60 W (24V, 2.5A), Schuko Power cable included	Internal AC/DC Power Adapter, 60 W (24V, 2.5A), Schuko Power cable included
<b>Processor</b>	Dual-Core 500 MHz, MIPS64	Dual-Core 500 MHz, MIPS64	Dual-Core 800 MHz, MIPS64	Dual-Core 800 MHz, MIPS64
<b>System Memory</b>	512 MB DDR2 RAM	512 MB DDR2 RAM	2 GB DDR3 RAM	2 GB DDR3 RAM
<b>On-Board Flash Storage</b>	2 GB	2 GB	4 GB	4 GB
<b>Management</b>	EdgeOS web interface for routing, , switching, security, and management	EdgeOS web interface for routing, , switching, security, and management	EdgeOS web interface for routing, , switching, security, and management	EdgeOS web interface for routing, , switching, security, and management
<b>Mounting</b>	Wall Mountable	Wall Mountable	Rack Mount	Rack Mount

# Tough Switch PoE

## Advanced Power Over Ethernet Switches



Tough Switch POE	TS-5-POE	TS-8-PRO	TS-16-CARRIER
<b>Ports</b>	(5) 10/100/1000 Ethernet Ports (1) 10/100 Ethernet Management Port	(8) 10/100/1000 Ethernet Ports (1) 10/100 Ethernet Management Port	(2) 8-Port TOUGHSwitch PoE PROs in 19" 1U rackmount case (16) 10/100/1000 Ethernet Ports (2) 10/100 Ethernet Management Ports
<b>PoE</b>	24V Passive PoE	24V/48V Passive PoE (power selectable in web interface)	24V/48V Passive PoE (power selectable in web interface)
<b>Dimension</b>	197 x 87.5 x 27.3 mm	210 x 185 x 41 mm	480 x 44.5 x 186 mm
<b>Power Input</b>	24VDC, 2.5A Power Adapter (Included)	210-230VAC, schuko power cord included	(2) 210-230VAC, schuko power cords included
<b>Max. PoE Power Output</b>	60 W	150 W	300 W
<b>PoE Out Voltage Range</b>	22-24VDC	45-48VDC / 22-24VDC	45-48VDC / 22-24VDC
<b>Max. PoE Wattage Per Data Port</b>	11.5 W	11.5 W (24 V), 23 W (48V)	11.5 W (24 V), 23 W (48V)
<b>Processor</b>	MIPS 24K, 400 MHz	MIPS 24K, 400 MHz	MIPS 24K, 400 MHz
<b>System Memory</b>	64 MB	64 MB	64 MB
<b>Management</b>	Toughswitch Layer2 Management Web Interface	Toughswitch Layer2 Management Web Interface	Toughswitch Layer2 Management Web Interface
<b>Mounting</b>	Wall Mountable	Desktop Full Metal/Rubber Casing	1U 19" Rackmount Kit Included



# EdgeSwitches

## Managed POE+ Gigabit Switches with SFP (EdgeMax Software Management Interface)



EdgeMax Switches	ES-24-250W	ES-24-500W	ES-48-500W	ES-48-750W
<b>Network Interface</b>	(24) 10/100/1000 Mbps RJ45 Ethernet Ports (2) 1 Gbps SFP Ethernet Slots (24) RJ45 Ports are configurable for PoE	(24) 10/100/1000 Mbps RJ45 Ethernet Ports (2) 1 Gbps SFP Ethernet Slots (24) RJ45 Ports are configurable for PoE	(48) 10/100/1000 Mbps RJ45 Ethernet Ports (2) 10 Gbps SFP+ Ethernet Ports (2) 1 Gbps SFP Ethernet Ports (48) RJ45 Ports are configurable for PoE	(48) 10/100/1000 Mbps RJ45 Ethernet Ports (2) 10 Gbps SFP+ Ethernet Ports (2) 1 Gbps SFP Ethernet Ports (48) RJ45 Ports are configurable for PoE
<b>Total Non-Blocking Throughput</b>	26 Gbps	26 Gbps	70 Gbps	70 Gbps
<b>Switching capacity:</b>	52 Gbps	52 Gbps	140 Gbps	140 Gbps
<b>Forwarding rate:</b>	38.69 Mpps	38.69 Mpps	104.16 Mpps	104.16 Mpps
<b>Max. PoE Power Output</b>	250W	500W	500W	750W
<b>Dimension</b>	485.04 x 44.45 x 285.6 mm	485.04 x 44.45 x 285.6 mm	485.04 x 44.45 x 347.6 mm	485.04 x 44.45 x 347.6 mm
<b>Power Input</b>	AC/DC, Internal, 250W DC, schuko power cord included	AC/DC, Internal, 500W DC, schuko power cord included	AC/DC, Internal, 500W DC, schuko power cord included	AC/DC, Internal, 750W DC, schuko power cord included
<b>PoE Interfaces</b>	POE+ IEEE 802.3af/at (Pins 1, 2+; 3, 6-) 24VDC Passive PoE (Pins 4, 5+; 7, 8-) auto detects 802.3af or at or user selectable for 24V	POE+ IEEE 802.3af/at (Pins 1, 2+; 3, 6-) 24VDC Passive PoE (Pins 4, 5+; 7, 8-) auto detects 802.3af or at or user selectable for 24V	POE+ IEEE 802.3af/at (Pins 1, 2+; 3, 6-) 24VDC Passive PoE (Pins 4, 5+; 7, 8-) auto detects 802.3af or at or user selectable for 24V	POE+ IEEE 802.3af/at (Pins 1, 2+; 3, 6-) 24VDC Passive PoE (Pins 4, 5+; 7, 8-) auto detects 802.3af or at or user selectable for 24V
<b>Max. PoE+ Wattage per Port</b>	34.2W	34.2W	34.2W	34.2W
<b>Max. Passive PoE Wattage per Port</b>	17W	17W	17W	17W
<b>Management</b>	EdgeMax User Interface Web Managed advanced Layer2+ switching and Layer 3 Routing Capability	EdgeMax User Interface Web Managed advanced Layer2+ switching and Layer 3 Routing Capability	EdgeMax User Interface Web Managed advanced Layer2+ switching and Layer 3 Routing Capability	EdgeMax User Interface Web Managed advanced Layer2+ switching and Layer 3 Routing Capability
<b>Mounting</b>	1U 19" Rackmount Kit Included	1U 19" Rackmount Kit Included	1U 19" Rackmount Kit Included	1U 19" Rackmount Kit Included



# Unifi Switches

## Managed POE+ Gigabit Switches with SFP (Unifi Controller Software Management Interface)



Unifi Switches	US-24-250W	US-24-500W	US-48-500W	US-48-750W
<b>Network Interface</b>	(24) 10/100/1000 Mbps RJ45 Ethernet Ports (2) 1 Gbps SFP Ethernet Slots (24) RJ45 Ports are configurable for PoE	(24) 10/100/1000 Mbps RJ45 Ethernet Ports (2) 1 Gbps SFP Ethernet Slots (24) RJ45 Ports are configurable for PoE	(48) 10/100/1000 Mbps RJ45 Ethernet Ports (2) 10 Gbps SFP+ Ethernet Ports (2) 1 Gbps SFP Ethernet Ports (48) RJ45 Ports are configurable for PoE	(48) 10/100/1000 Mbps RJ45 Ethernet Ports (2) 10 Gbps SFP+ Ethernet Ports (2) 1 Gbps SFP Ethernet Ports (48) RJ45 Ports are configurable for PoE
<b>Total Non-Blocking Throughput</b>	26 Gbps	26 Gbps	70 Gbps	70 Gbps
<b>Switching capacity:</b>	52 Gbps	52 Gbps	140 Gbps	140 Gbps
<b>Forwarding rate:</b>	38.69 Mpps	38.69 Mpps	104.16 Mpps	104.16 Mpps
<b>Max. PoE Power Output</b>	250W	500W	500W	750W
<b>Dimension</b>	485.04 x 44.45 x 285.6 mm	485.04 x 44.45 x 285.6 mm	485.04 x 44.45 x 347.6 mm	485.04 x 44.45 x 347.6 mm
<b>Power Input</b>	AC/DC, Internal, 250W DC, schuko power cord included	AC/DC, Internal, 500W DC, schuko power cord included	AC/DC, Internal, 500W DC, schuko power cord included	AC/DC, Internal, 750W DC, schuko power cord included
<b>PoE Interfaces</b>	POE+ IEEE 802.3af/at (Pins 1, 2+; 3, 6-) 24VDC Passive PoE (Pins 4, 5+; 7, 8-) auto detects 802.3af or at or User selectable for 24V	POE+ IEEE 802.3af/at (Pins 1, 2+; 3, 6-) 24VDC Passive PoE (Pins 4, 5+; 7, 8-) auto detects 802.3af or at or User selectable for 24V	POE+ IEEE 802.3af/at (Pins 1, 2+; 3, 6-) 24VDC Passive PoE (Pins 4, 5+; 7, 8-) auto detects 802.3af or at or User selectable for 24V	POE+ IEEE 802.3af/at (Pins 1, 2+; 3, 6-) 24VDC Passive PoE (Pins 4, 5+; 7, 8-) auto detects 802.3af or at or User selectable for 24V
<b>Max. PoE+ Wattage per Port</b>	34.2W	34.2W	34.2W	34.2W
<b>Max. Passive PoE Wattage per Port</b>	17W	17W	17W	17W
<b>Management</b>	Unifi Controller Software Managed advanced Layer2+ switching and Layer 3 Routing Capability	Unifi Controller Software Managed advanced Layer2+ switching and Layer 3 Routing Capability	Unifi Controller Software Managed advanced Layer2+ switching and Layer 3 Routing Capability	Unifi Controller Software Managed advanced Layer2+ switching and Layer 3 Routing Capability
<b>Mounting</b>	1U 19" Rackmount Kit Included	1U 19" Rackmount Kit Included	1U 19" Rackmount Kit Included	1U 19" Rackmount Kit Included



# Unifi Security Gateway Router

## WAN/LAN/VoIP



Unifi Security Gateway Router	USG
Performance	Combines high performance routing 1 million packets per second for 64-byte packets with advanced security features like VLAN, VPN, QOS for VoIP
Networking Interfaces	(1) 10/100/1000 WAN Ethernet Port (1) 10/100/1000 LAN Ethernet Port (1) 10/100/1000 VoIP Ethernet Port (1) RJ45 Serial Console Port
Dimension	135 x 135 x 28.3 mm
CPU	Dual-Core 500 MHz, MIPS64
Memory	512 MB DDR2 RAM
On-Board Flash Storage	2 GB
Max. Power Consumption	7W
Power Supply	12VDC, 1A Power Adapter (Included)
Management	Configured through Unifi Controller Management Software Included



# Surveillance Unifi IP Cameras



Cameras	UVC	UVC-Dome	UVC-Pro	AirCam	AirCam Dome
Use	Indoor	Indoor	Outdoor/Indoor Weatherproof housing	Indoor	Indoor
Resolution	720p HD (1280 x 720) 1 MP	720p HD (1280 x 720) 1 MP	1080p Full HD (1920x1080) 2 MP	720p HD (1280 x 720) 1 MP	720p HD (1280 x 720) 1 MP
Maximum Frame Rate	30 FPS	30 FPS	30 FPS	30 FPS	30 FPS
Lens	3.6 mm/F1.8	1.96 mm/F2.0	3x Optical Zoom, F=3-9 mm	4.0 mm / F1.5	1.96 mm / F2.0
Sensor	Progressive Scan RGB ¼" CMOS Image Sensor	1/4" CMOS	1/3" WDR Sensor	Progressive Scan RGB CMOS ¼"	Progressive Scan RGB CMOS ¼"
Microphone	Built-in	Built-in	NA	NA	Built-In
Dimensions	225 x 75 x 75 mm	111 x 96 x 96 mm	322 x 100 x 100 mm	264 x 61.5 x 58.5 mm (with mounting arm)	100 x 94 mm
Ports	(1) 10/100 Ethernet Port, microSD Card Slot	(1) 10/100 Ethernet Port, microSD Card Slot	(1) 10/100 Ethernet	(1) 10/100 Ethernet	(1) 10/100 Ethernet, MicroSD Card Slot
Night Mode	IR LED with Mechanical IR Cut Filter	IR LED with Mechanical IR Cut Filter	IR LED with Mechanical IR Cut Filter	NA	NA
Power	Passive Power over Ethernet (12-24V) 24V, 0.5A PoE Adapter Included	Passive Power over Ethernet (12-24V) 24V, 0.5A PoE Adapter Included	Passive Power over Ethernet (48V, 0.5A) 802.3af compatible 48V, 0.5A PoE Adapter Included	Passive Power over Ethernet (12-24V) 24V, 0.5A PoE Adapter Included	Passive Power over Ethernet (12-24V) 24V, 0.5A PoE Adapter Included
Maximum Power Consumption	4.5 W	4 W	12.5 W	2.4 W	3.5 W
Mounting	Pole/Wall/Ceiling bracket included	Ceiling Mount	Pole/Wall/Ceiling Adapter Kit Included	Wall/Ceiling Adapter Kit Included	Ceiling Mount
Video Compression	H.264	H.264	H.264	H.264	H.264
Processor	ARM 1136J-S, 528 MHz	ARM 1136J-S 528 MHz	ARM 1136J-S 528 MHz	ARM-Based 32-Bit RISC	ARM-Based 32-bit RISC
Memory	256 MB DDR3	256 MB DDR3	256 MB DDR3, 256 MB Flash	128 MB DDR2 SDRAM, 8 MB Flash	128 MB DDR2 SDRAM, 8 MB Flash
Viewing Angle	56.14° (H) 36.86° (V) 64.33° (D)	88.8° (H) 63.0° (V) 98.2° (D)	44.4° W - 15.7° T (V) 81.0° W - 27.9° T (H) 94.0° W - 32.1° T (D)	47° (H) 31° (V) 54° (D)	90° (H) 62° (V) 101° (D)
Software	Unifi Video Software Included	Unifi Video Software Included	Unifi Video Software Included	Unifi Video Software Included	Unifi Video Software Included



# Surveillance Network Video Recorder



Video Recorder	UVC-NVR
Dimension	135 x 190 x 25 mm
Processor	Intel D2550
Memory	4 GB
Hard Drive	Built-in 500 GB hard drive
Ports	(1) 10/100/1000 Ethernet
Power Supply	65 W, 19V, 3.42A included
Software	UniFi Video software is pre-installed
Approx Recording Hours	1200 recording hours at 480p resolution or 400 recording hours at 720p resolution (numbers can vary depending on the frame rate).
NVR Camera Support	Recommended for up to 20 UniFi Video Cameras
Media Format	MP4 (H.264/AAC)
Scheduling	Day/Time/Camera Scheduled Video Recording/Motion Detection/Email Alerts
Views	Custom Views of Multiple Cameras Full Screen Capability





# IP Power Controlled Schuko Outlets

Remote controllable power outlets with Wi-Fi capability.

Can be configured to operate on a schedule with customizable power on/off rules. Energy Monitoring.



Controlable Power Outlets	mPower mini	mPower	mPower PRO
Dimension	110.8 x 71 x 67.7 mm	241.3 x 116.9 x 41.27 mm	250.37 x 116.7 x 42 mm
Mounting	Wall	Wall (Kit Included)	Wall (Kit Included)
Power	220 - 250VAC, 50 Hz, 10A	220 - 250VAC, 50 Hz, 16A Per Outlet, 16A Total	220 - 250VAC, 50 Hz, 16A Per Outlet, 16A Total
Outlets	1	3	6
Networking Interface	Wi-Fi	Wi-Fi	Wi-Fi + (1) 10/100 Ethernet Port
Memory	16 MB RAM, 8 MB Flash	16 MB RAM, 8 MB Flash	16 MB RAM, 8 MB Flash
Wi-Fi	802.11b/g/n	802.11b/g/n	802.11b/g/n
Management	Mfi controller Software included	Mfi controller Software included	Mfi controller Software included

# Connect mFi Sensors to Mport to create IP Network Smart Home Automation



mFi interface	mPort	mPort-S
Network Interface	(1) 10/100 Ethernet Port Wi-Fi	(1) 10/100 Ethernet Port Wi-Fi
Ports	(2) mFi RJ45 Ports (1) mFi Terminal Block Port	(1) DB9 Serial Port (1) Terminal Block Serial Port
Antenna	(1) Internal	(1) Internal (1) External
Output Power	18 dBm	18 dBm
Wi-Fi Standards	802.11b/g/n	802.11b/g/n
Memory	16 MB RAM, 8 MB Flash	16 MB RAM, 8 MB Flash
Power Supply	24V, 0.5A Surge Protection Integrated PoE Adapter (Included)	24V, 0.5A Surge Protection Integrated PoE Adapter (Included)
Max. Power Consumption	3W	3W
Software	Includes mFi advanced management software	Includes mFi advanced management software
Dimension	100 x 60 x 36.5 mm	100 x 60 x 36.5 mm
Mounting	Wall-Mount Bracket (Included)	Wall-Mount Bracket (Included)
Works With	Connect mFi sensors to Mport to create IP network smart automation	

# mFi Smart Home Automation IP Sensors



mFi Sensors	mFi-MSC
Description	Ceiling Mount Motion Detector
Dimension	134.5 x 134.5 x 30.5 mm
Angle of View	360°
Cone of Detection	110° Wide Angle
Ports	(1) mFi RJ45 Port
Mounting	Ceiling-Mount Bracket (Included)
Mounting Height	Up to 4.5 m
Operating Temperature	0 to 50° C



mFi Sensors	mFi-MSW
Description	Wall Mount Motion Sensor
Dimension	146 x 66 x 52 mm
Detection Range	10 x 10 m
Ports	(1) mFi RJ45 Port
Mounting	Wall/Ceiling-Mount Bracket (Kits included)
Mounting Height	2.3 m Typical
Operating Temperature	(-10° to 45° C)



mFi Sensors	mFi-THS
Description	Temperature Sensor
Dimension	100 x 85 x 27.8 mm
Temperature Range	(-10 to 50° C)
Ports	(1) mFi RJ45 Port
Operating Temperature	(-25 to 60° C)



mFi Sensors	mFi-DS
Description	Door Sensor
Dimension	50 x 9.5 x 7.7 mm
Contact Form	Form A (SPST)
Maximum Rating	1.0A @ 28VDC
Initial Contact Resistance	0.3 Ω Maximum
Operating Range	20 mm (Typical)
Wiring	Screw Terminal
Mounting	Adhesive or Screws (Included)
Operating Temperature	(-10 to 60° C)



mFi Sensors	mFi-CS
Description	Current Sensor
Dimension	32 x 57 x 22 mm
Size of Opening	13 x 13 mm
Ports	(1) mFi RJ45 Port
Input Current	0 to 100A
Load	Linear
Dielectric Strength	6000VAC/1 min.
Operating Temperature	(25 to 70° C)



# Scalable Internet Telephony Network



VoIP Phones	UVP	UVP-PRO	UVP-Executive
<b>Display</b>	5" (Diagonal), 640 x 960, 231 ppi, Multi-Touch, Full Color	5" (Diagonal), 640 x 960, 231 ppi, Multi-Touch, Full Color	7" (Diagonal), 1024 x 600, 170 ppi, Multi-Touch, Full Color
<b>Camera</b>	No	1.0 MP (HD720p)	1.0 MP (HD720p)
<b>Bluetooth</b>	No	Bluetooth 4.0	Bluetooth 4.0
<b>Wi-Fi</b>	No	Wi-Fi 802.11 a/b/g/n	Wi-Fi 802.11 a/b/g/n
<b>Dimension</b>	166 x 140 x 182.5 mm	166 x 140 x 182.5 mm	254.6 x 135 x 182.5 mm
<b>Handset</b>	Dynamic Receiver 32 ohm/101 dB/30mW Microphone Omni-Directional/-36 dB/2.2K ohm	Dynamic Receiver 32 ohm/101 dB/30mW Microphone Omnidirectional/-36 dB/2.2K ohm	Dynamic Receiver 32 ohm/101 dB/30mW Microphone Omnidirectional/-36 dB/2.2K ohm
<b>Power Input</b>	PoE 802.3.af (13W)	PoE 802.3.at (26W)	PoE 802.3.at (26W)
<b>Hands-Free Speaker</b>	Mono 2.6W	Mono 2.6W	Stereo 4.0W
<b>Connectivity</b>	(2) 10/100/1000 Ethernet Ports (1) USB 2.0 microUSB Port	(2) 10/100/1000 Ethernet Ports (1) USB 2.0 microUSB Port Bluetooth 4.0 Wi-Fi 802.11 a/b/g/n	(2) 10/100/1000 Ethernet Ports (1) USB 2.0 microUSB Port (1) USB 2.0 Type A USB Host Port Bluetooth 4.0 Wi-Fi 802.11 a/b/g/n
<b>Headset Support</b>	3.5 mm Audio Jack	3.5 mm Audio Jack	3.5 mm Audio Jack
<b>Processor</b>	Dual-Core Cortex A9, 1.2 GHz	Dual-Core Cortex A9, 1.2 GHz	Dual-Core Cortex A9, 1.2 GHz
<b>Storage</b>	4 GB (Shared with Other Applications)	4 GB (Shared with Other Applications)	4 GB (Shared with Other Applications)
<b>RAM</b>	1 GB	1 GB	1 GB
<b>OS</b>	Android Kit Kat (Version 4.4.2)	Android Kit Kat (Version 4.4.2)	Android Kit Kat (Version 4.4.2)
<b>Voice Codec</b>	G.722/Speex/iLBC/PCMU/PCMA/GSM	G.722/Speex/iLBC/PCMU/PCMA/GSM	G.722/Speex/iLBC/PCMU/PCMA/GSM
<b>Communication Software</b>	UniFi Phone App	UniFi Phone App	UniFi Phone App
<b>Protocol</b>	SIP/SDP/RTP/RTCP/VLAN/DHCP	SIP/SDP/RTP/RTCP/VLAN/DHCP	SIP/SDP/RTP/RTCP/VLAN/DHCP

# Toughcable

## Outdoor Shielded Ethernet Cable



Toughcable	TC-PRO	TC-CARRIER
Category	CAT5e, Shielded FTP	CAT5e, Shielded SFTP
Ethernet Support	Up to 1 Gbps	Up to 1 Gbps
Conductor Wire Gauge	24 AWG	24 AWG
Conductor	Solid Bare Copper	Solid Bare Copper
Foil Shield	Yes Thick: 0.060 mm, Extent: 18 mm	Yes Thick: 0.060 mm, Extent: 20 mm
Braided Shield	No	Yes 16*8*0.16AA Density: 95%
Jacket Outer Diameter	6.0 ± 0.30 mm	6.8 ± 0.30 mm



Tough Cable Connectors	TC-CON	TC-GND
Category	Cat 5E Shielded	Cat 5E Shielded
AWG	24	24
ESD Drain wire	Yes	Yes
ESD Drain Wire Tab	No	Yes

Ethernet Surge Protector	ETH-SP
Dimension	91 x 61 x 32.5 mm
Interface Connections	(2) RJ45 Female Connectors
ESD Protection	Absorbing Transient Current with Response to Surge Voltage from 100V/s to 1kV/μs
DC Spark Over Voltage	90V @ 100V/s
Max Insulation Resistance	700V @ 1kV/μs
Max Capacitance	1.0 pF @ 1 MHz
Data Line Protection	RJ45 10/100/1000 Ethernet
802.3af PoE Support	Yes

# PoE Adapters



PoE Adapters	POE-15-12W	POE-24-12W	POE-24-12W-G	POE-24-24W
Output Voltage	15VDC @ 0.8A	24VDC @ 0.5A	24VDC @ 0.5A	24VDC @ 1.0A
Output Watts	12 W	12 W	12 W	24 W
Dimension	85.1 x 44 x 29.2 mm	87 x 84 x 29.2 mm	87 x 84 x 29.2 mm	88 x 57 x 33 mm
Lan Port	10/100 Mbps	10/100 Mbps	10/100/1000 Mbps	10/100 Mbps
Remote Reset Capability	No	Yes	Yes	Yes
2-Pair Powering	Pins 4, 5 (+) and Pins 7, 8 (-)	Pins 4, 5 (+) and Pins 7, 8 (-)	Pins 4, 5 (+) and Pins 7, 8 (-)	Pins 4, 5 (+) and Pins 7, 8 (-)
AC Connector	IEC-320 C6	IEC-320 C6	IEC-320 C6	IEC-320 C6
AC Cable	EU Schuko	EU Schuko	EU Schuko	EU Schuko



PoE Adapters	POE-24-24W-G	POE-48-24W	POE-48-24W-G	POE-50-60W
Output Voltage	24VDC @ 1.0A	48VDC @ 0.5A	48VDC @ 0.5A	50VDC @ 1.2A
Output Watts	24 W	24 W	24 W	60 W
Dimension	88 x 57 x 33 mm	88 x 57 x 33 mm	91.8 x 59.9 x 33 mm	100.95 x 60 x 33 mm
Lan Port	10/100/1000 Mbps	10/100 Mbps	10/100/1000 Mbps	10/100 Mbps
Remote Reset Capability	Yes	No	Yes	Yes
2-Pair Powering	Pins 1, 2, 4, 5 (+) and Pins 7, 8, 3, 6 (-)	Pins 4, 5 (+) and Pins 7, 8 (-)	Pins 4, 5 (+) and Pins 7, 8 (-)	Pins 1, 2, 4, 5 (+) and Pins 7, 8, 3, 6 (-)
AC Connector	IEC-320 C6	IEC-320 C6	IEC-320 C6	IEC-320 C6
AC Cable	EU Schuko	EU Schuko	EU Schuko	EU Schuko



# Instant 802.3af Adapters

802.3af Adapters allow most Ubiquiti devices to be powered by an 802.3af 48V switch.



Convert Passive PoE to 802.3af Adapters	INS-8023AF-I	INS-8023AF-O
Use	Indoor	Outdoor
Output Ethernet Cable	No	Yes
Input Power	48V, 802.3af (with Sensing Capability)	48V, 802.3af (with Sensing Capability)
Output Power	18V, 0.7A	18V, 0.7A
Output PoE Method	Positive 4, 5; Return 7, 8	Positive 4, 5; Return 7, 8
Ethernet ESD/Surge Protection	±15kV	±15kV
Dimension	93.5 x 27 x 21.5	315 x 25.8 x 24.8

# Outdoor Antenna Accessories



PAK-620	ISO-BEAM-620	PBE-RAD-400	RAD-2RD	RAD-3RD	AF-5G-OMT-S45
Precision Alignment Kit	Isolator Radome for 620 mm Dish Reflector	Protective radome for 400 mm Dish Reflector	Protective radome	Protective radome	AirFiber X Conversion Kit
Enables extremely accurate aiming to optimize airFiber and airMAX Point-to-Point (PtP) links. Optional accessory for dish antennas: airFiber AF-5G30-S45, PowerBeam PBE-5AC-620, PowerBeam PBE-M5-620, or RocketDish RD-5G30-LW.	Improved wind load performance and advanced RF energy isolation. RF-choke perimeter delivers superior noise immunity	Reduces wind load Protects antenna surfaces from nature's harshest elements Conceals antenna feed equipment from public view	Reduces wind load Protects antenna surfaces from nature's harshest elements Conceals antenna feed equipment from public view	Reduces wind load Protects antenna surfaces from nature's harshest elements Conceals antenna feed equipment from public view	The 5 GHz RocketDish to airFiber Antenna Conversion Kit converts the RocketDish RD-5G30 or RD-5G34 antenna for use with the airFiber AF-5X radio.
	Optional accessory for use with PBE-5AC-620, PBE-M5-620, RD-5G30-LW	Optional accessory available for the PBE-M2-400 and PBE-M5-400	Optional accessory available for RD-5G30	Optional accessory available for RD-5G34	



NS-WM	UB-AM	NBE-WMK
Optional Window/Wall Mount Kit for NanoStation, LocoM to quickly mount. 180° vertical or horizontal adjustment allows for custom positioning.	Optional Wall/Pole Mounting Kit designed for convenient wall or pole mounting of the NanoStationM and LocoStation. 90° tilt adjustment allows for easy positioning.	Optional Wall Mount Kit for NBE-M5-16 and NBE-M5-19, for enhanced stability when mounting the NanoBeam on a wall.