

Specifications

AF-5X	
Dimensions Radio Box	224 x 82 x 48 mm (8.82 x 3.23 x 1.89") 261 x 107 x 107 mm (10.28 x 4.21 x 4.21")
Weight Radio Box	0.35 kg (0.77 lb) 1.1 kg (2.43 lb)
RF Connectors	(2) RP-SMA Weatherproof (CH0, CH1) (1) SMA Weatherproof (GPS)
GPS Antenna	External, Magnetic Base
Power Supply	24V, 1A PoE Gigabit Adapter (Included)
Power Method	Passive Power over Ethernet Pins 1, 2, 4, 5 (+) and Pins 7, 8, 3, 6 (-)
Max. Power Consumption	15W @ Max. Power/Duty Cycle
Supported Voltage Range	+18 to +54VDC ¹
Automatic Transmit Power Control (ATPC)	Yes
Mounting	airFiber X Mount (Rocket Mount Compatible) GPS Pole Mount (Included)
Certifications	CE, FCC, IC
Operating Temperature	-40 to 55° C (-40 to 131° F)

AF-5X Networking Interface	
Data Port	(1) 10/100/1000 Ethernet Port
Management Port	(1) 10/100 Ethernet Port

AF-5X System	
Processor	INVICTUS IC
Maximum Throughput	500+ Mbps ²
Maximum Range	300+ km ²
Packets per Second	1+ Million
Encryption	128-bit AES
OS	airOS F
Wireless Modes	Master/Slave
Latency Half Duplex Mode	< 2 ms at Full Throughput
MTU (Maximum Transmission Unit)	Up to 9600

¹ Full range depends on Ethernet cable length..

² Throughput and range values may vary depending on the environmental conditions..

AF-5X Radio	
Frequency Range FCC 15.407 IC RSS-210 ETSI EN 301 893, EN 302 502 Other Regions	5150 - 5350 MHz, 5470 - 5850 MHz 5470 - 5600 MHz, 5650 - 5850 MHz 5470 - 5875 MHz 5150 - 5950 MHz*
Max. Conducted TX Power	26 dBm* (Dependent on Regulatory Region)
Frequency Accuracy	± 2.5 ppm without GPS Synchronization ± 0.2 ppm with GPS Synchronization
Channel Bandwidth	10/20/30/40/50 MHz Selectable Programmable Uplink and Downlink Duty Cycles

* For region-specific details, refer to the Compliance chapter of the airFiber X User Guide at www.ubnt.com/download/airfiber

AF-5X Suggested Max. TX Power	
8x	19 - 20 dBm
6x	21 - 22 dBm
4x	23 - 24 dBm
2x	26 dBm
1x	26 dBm

AF-5X Receive Sensitivity						
Rate	Modulation	Sensitivity (10 MHz)	Sensitivity (20 MHz)	Sensitivity (30 MHz)	Sensitivity (40 MHz)	Sensitivity (50 MHz)
8x	256QAM MIMO	-66 dBm	-64 dBm	-62 dBm	-61 dBm	-60 dBm
6x	64QAM MIMO	-74 dBm	-71 dBm	-69 dBm	-68 dBm	-67 dBm
4x	16QAM MIMO	-81 dBm	-78 dBm	-76 dBm	-75 dBm	-74 dBm
2x	QPSK MIMO	-88 dBm	-85 dBm	-83 dBm	-82 dBm	-81 dBm
1x	½ Rate QPSK xRT	-90 dBm	-87 dBm	-85 dBm	-84 dBm	-83 dBm

AF-5X Capacity (Mbps)						
Rate	Modulation	Channel Width (MHz)				
		10	20	30	40	50
10x	1024 QAM MIMO	128.0	259.2	384.0	502.4	617.6
8x	256 QAM MIMO	102.4	207.3	307.2	401.8	494.1
6x	64 QAM MIMO	76.8	155.5	230.4	301.4	370.6
4x	16 QAM MIMO	51.2	103.7	153.6	200.9	247.0
2x	QPSK MIMO	25.6	51.8	76.8	100.4	123.5
1x	½ Rate QPSK xRT	12.8	25.9	38.4	50.2	61.8

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