

Airmux-5000

# SU/F58F/100M/INT

Subscriber Unit

**AIRMUX**

## Description

Airmux-5000/SU/F58F/100M/INT Subscriber Unit (HSU) provides high capacity access connectivity of up to 100 Mbps net aggregate throughput.

Airmux-5000/SU/F58F/100M/INT supports 4.9 to 5.8 GHz and complies with FCC/IC & FCC regulations.

The radio comes with an integrated antenna.

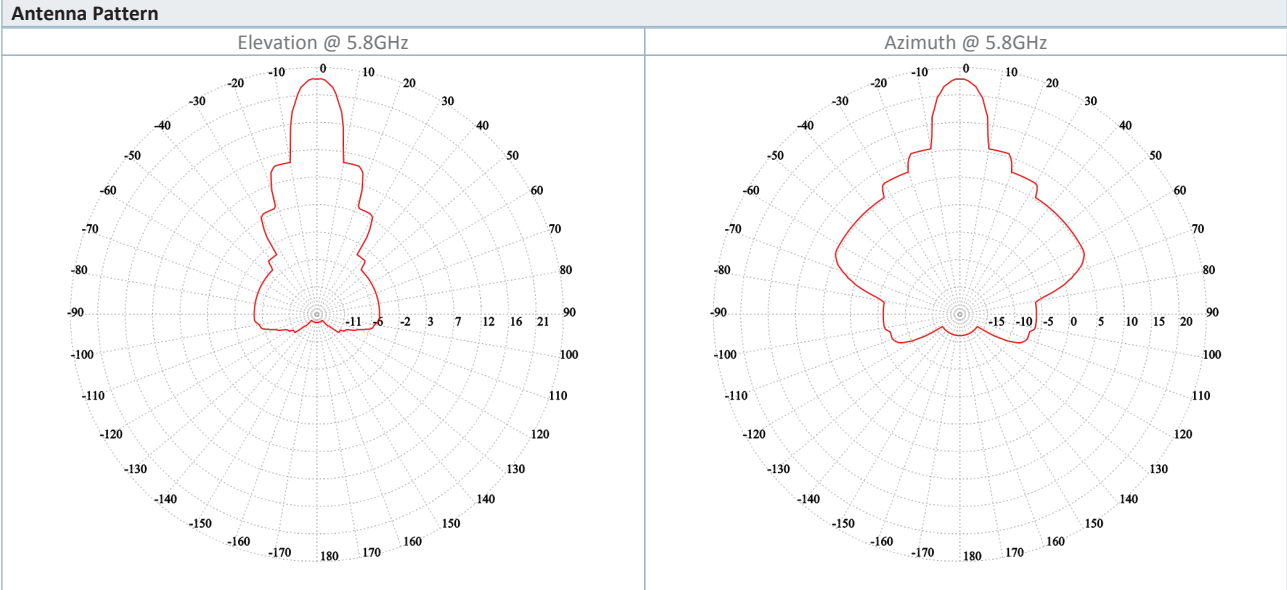
## Highlights

- Up to 100 Mbps net aggregated throughput
- Long range - Up to 40 km / 25 miles
- Guaranteed Service Level Agreement (SLA) per HSU
- Exceptional short and constant latency
- Advanced MIMO, OFDM and Diversity technologies
- Robust and reliable operation in harsh conditions, extreme temperatures and non-line-of-sight scenarios
- Ease of operation and maintenance

## Specifications

Configuration					
Architecture	Outdoor Unit with an integrated antenna				
PoE to ODU Interface	Outdoor CAT-5e; Maximum cable length: 100m for 10/100BaseT and 75m for 1000BaseT				
Radio					
Max Capacity	100 Mbps net aggregate throughput; Upgradable to 260 Mbps with license key				
Range	Up to 40 km / 25 miles				
Channel Bandwidth	Configurable: 10, 20, 40, 80 MHz (for the default band)				
Modulation	MIMO-OFDM (BPSK/QPSK/16QAM/64QAM/256QAM)				
Adaptive Modulation & Coding	Supported				
DFS	Supported (FCC/IC)				
Diversity	Supported				
Max Tx Power	25 dBm				
Duplex Technology	TDD				
Error Correction	FEC k = 1/2, 2/3, 3/4, 5/6				
Encryption	AES 128; FIPS 197				
Support Indoor units	RAD PoE devices (Airmux-PoE/GBE/ACxx)				
Uplink / Downlink Allocation	Configurable: Symmetric or Asymmetric				
Layer 2	HUB Mode				
QoS	Packet classification to 4 priority queues according to 802.1P or Diffserv				
VLAN Support	802.1Q, QinQ, 4094 VLANs				
ODU Management	IPv4/IPv6 dual-stack; SNMP v1 and v3; HTTP using web browser				
Supported Bands					
Band	CBW 10MHz [GHz]	CBW 20MHz [GHz]	CBW 40MHz [GHz]	CBW 80MHz [GHz]	Radio Compliance
5.8 GHz FCC/IC (default)	5.730-5.845	5.730-5.845	5.730-5.845	5.730-5.845	FCC 47CFR Part 15.247; IC RSS-210
5.175-5.245 GHz FCC	5.170-5.250	5.170-5.250	5.170-5.250	5.170-5.250	FCC 47CFR Part 15.407
4.9 GHz FCC/IC	4.940-4.990	4.940-4.990	-	-	FCC 47CFR Part 90 Subpart Y; IC RSS-111
5.4 GHz FCC/IC	-	5.480-5.715	5.480-5.715	5.485-5.715	FCC 47CFR Part 15.407; IC RSS-210
5.2 GHz FCC/IC	-	5.255-5.340	5.255-5.345	5.250-5.345	FCC 47CFR Part 15.407; IC RSS-210
Mechanical					
ODU Dimensions	30(w) x 30(h) x 10(d) cm				
ODU Weight	2.9 kg / 6.39 lbs				
Power					
Power Feeding	Power provided over ODU-IDU cable				
Power Consumption	<20W				
Environmental					
Operating Temperatures	-35°C to 60°C / -31°F to 140°F				
Safety					
FCC/IC (cTUVus)	UL 60950-1, UL 60950-22, CAN/CSA C22.2 60950-1, CAN/CSA C22.2 60950-22				
ETSI	EN/IEC 60950-1, EN/IEC 60950-22				
EMC					
FCC	47 CFR Class B, Part15, Subpart B				
ETSI	EN 300 386, EN 301 489-1, EN 301 489-4				
CAN/CSA-CEI/IEC	CISPR 22-04 Class B				

Integrated Antenna	
Gain	23 dBi
VSWR	1.5 :1 (typ)
3 dB Azimuth Beamwidth	10 Deg. (typ)
Polarization	Dual Linear (Vertical and Horizontal)
Sidelobes Level	ESTI EN 302 326-3 V1.1.2 DN3
Cross Polarization	ESTI EN 302 326-3 V1.1.2 DN3
F/B Ratio	-30 dB
Port To Port Isolation	30 dB (max)
Lightning Protection	DC Grounded



## Ordering

### Airmux-5000/SU/F58F/100M/INT

5A0 ODU, with an integrated antenna, supporting multi frequency bands at 5.x GHz, factory default 5.8 GHz FCC/IC.