

Airmux-400P

# ODU/F54E/INT

Point-to-Point Radio

**AIRMUX**

## Description

Airmux-400P/ODU/F54E/INT is a carrier-class radio that belongs to the RAD Airmux-400 P Series and supports 5.1 to 5.8 GHz frequency range.

The Radio complies with ETSI regulations with a factory default of 5.4 GHz ETSI.

Airmux-400P/ODU/F54E/INT delivers up to 250 Mbps throughput.

The radio comes with an integrated antenna.

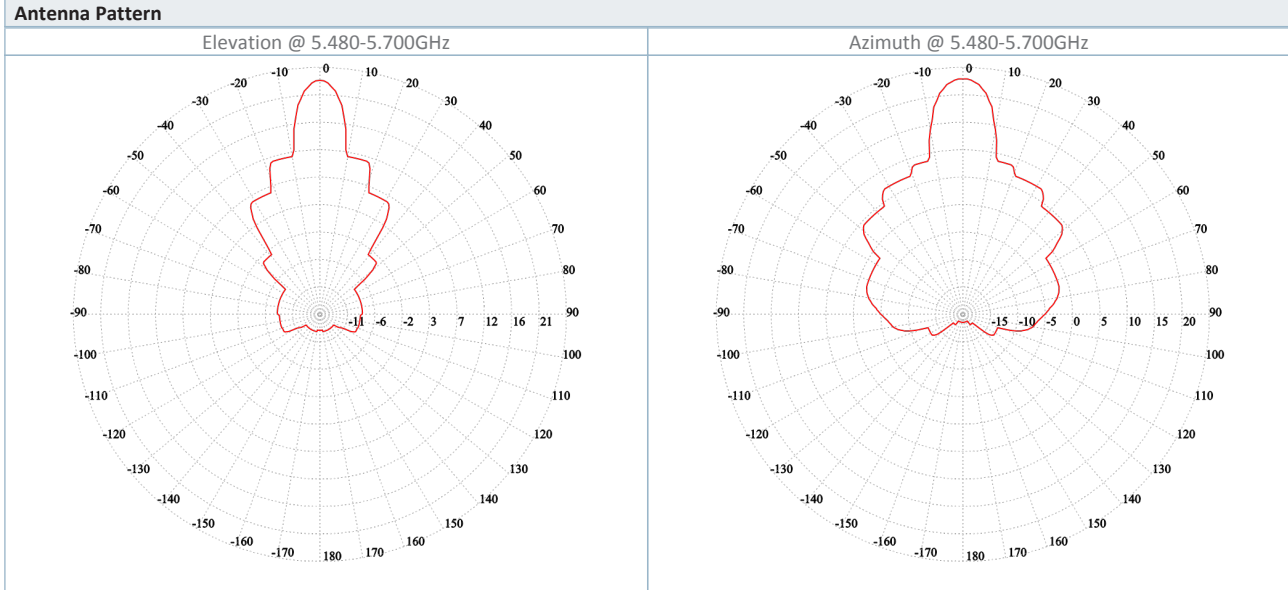
## Highlights

- 250 Mbps Ethernet net throughput
- Long range - Up to 40 km / 25 miles
- Telco-grade, extremely robust in harsh conditions
- Supports intra-site and inter-site synchronization to maximize capacity
- Configurable asymmetric throughput
- Advanced OFDM & MIMO technologies for operation in nLOS/NLOS and dense radio environments

## 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	250 Mbps net aggregate throughput				
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				
Automatic Channel Selection	Supported upon power up				
DFS	Supported (ETSI)				
Diversity	Supported				
Spectrum Viewer	Supported				
Max Tx Power	25 dBm; max EIRP 30 dBm (for the default band)				
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				
QoS	Packet classification to 4 priority queues according to 802.1P or Diffserv				
VLAN Support	802.1Q, QinQ, 4094 VLANs				
TDD Intra Site Synchronization	Supported				
TDD Inter Site Synchronization	Supported through common GPS receiver per site				
Supported Bands					
Band	CBW 10MHz [GHz]	CBW 20MHz [GHz]	CBW 40MHz [GHz]	CBW 80MHz [GHz]	Radio Compliance
5.3 GHz ETSI	5.150-5.350	5.150-5.350	-	-	EN 301 893
5.480-5.700 GHz ETSI (default)	5.475-5.705	5.470-5.710	5.490-5.720	5.490-5.650	EN 301 893
5.8 GHz ETSI	5.735-5.865	5.735-5.865	-	-	EN 302 502
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				
Humidity	100% condensing, IP67 (totally protected against dust and against immersion up to 1m)				
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-400P/ODU/F54E/INT

Airmux-400 P ODU, with an integrated antenna, supporting multi frequency bands at GHz, factory default .