



Atlas FOX™

M5580M-FSU Subscriber Unit

Next Generation Broadband Wireless CPE



The Atlas FOX Subscriber Unit (SU) represents a breakthrough in price and performance. The Atlas FOX is the 3rd generation SU to emerge from the highly successful and reliable FOX Series. The Atlas FOX delivers a robust 10 Mbps and enables WISPs, for the first time, to compete head-to-head against cable and DSL providers, thus eliminating the final obstacle toward nationwide deployments of fixed broadband wireless networks capable of serving millions of users coast to coast.

Product Highlights

» SPEED

The M5580M-FSU harnesses the full power of the Access5830™ wireless broadband platform, delivering 10 Mbps up to 10 miles.

» LONG RANGE

The M5580M-FSU features Trango's innovative dual-polarized antenna technology for superior performance and longer range. The 5.8 GHz M5580M-FSU can be deployed up to 2 miles from the access point with 10 dB fade margin to spare, or with an optional external dish antenna provides a range of up to 10 miles. Reference range chart for more details.

» FLEXIBILITY

The SU provides a host of configuration options which are vital for interference mitigation including full control over channels, antenna polarization and power levels. In addition, it offers Automatic Repeat Request (ARQ), which automatically retransmits packets to mask RF errors to higher layer protocols.

» MANAGEABILITY

The M5580M-FSU is fully manageable locally (via the Ethernet port), or over-the-air via the access point. The Atlas FOX supports SNMP and features an easy-to-use browser interface as well as a full command line interface. The Atlas FOX's remote manageability reduces the need for costly truck rolls.

» DURABILITY, EASE OF INSTALLATION



The M5580M-FSU is a fully weatherized, outdoor unit designed for quick installation. The compact form factor features a universal mounting bracket, a built-in LED alignment tool, and Power-over-Ethernet to minimize deployment costs.

» AFFORDABILITY

The M5580M-FSU is priced aggressively to help service providers achieve a quick ROI.

- Industry-leading price point
- Reliable 3rd generation FOX SU
- Up to 10 Mbps

ANTENNA / RANGE CHART

SU Model	Part Number	Max Range from AP	User Data Throughput	Antenna Gain	Beamwidth	
					Azimuth	Elevation
 Atlas FOX stand-alone	M5580M-FSU	2 miles (10 dB fade margin)	10 Mbps	8 dBi	60°	60°
 Atlas FOX with optional dish	M5580M-FSU	10 miles (14 dB fade margin) (requires AD5800-25 dish)	10 Mbps	25 dBi	9°	9°

Note: Ranges listed assume line-of-sight. Fade margin is included to account for typical rain and other conditions. Actual maximum ranges may be greater depending on site conditions.

Specifications

RADIO PARAMETERS	
Frequency of Operation	5.725 GHz to 5.850 GHz
Channels	6 non-overlapping channels Channel width 20MHz
Antenna Polarization	Horizontal/Vertical (software switchable)
Antenna Beam Width	60 x 60 degrees
Modulation Format	11 Mbps CCK Spread Spectrum
Certification/Compliance	FCC 15.109, FCC 15.203, FCC 15.205, FCC 15.207, FCC 15.209, FCC 15.247, Class B Digital device verification
Receiver Sensitivity (1E10-6 BER)	-88 dbm (with ARQ enabled)
EIRP Max	+30dBm (8 dBi patch antenna) +46dBm using reflector AD5800-25 (with M5580M-SU only)
DATA AND OPERATIONAL PARAMETERS	
Access Point Compatibility	Access5830 AP
User Data Throughput	10 Mbps
Format	10/100 Base T
Network Protocols	All IEEE 802.3/802.3u compliant protocols
Configuration and Management	Telnet, SNMP, TFTP, HTTP
Upstream/Downstream Throughput	Dynamic, automatically adjusts to suit demand
Bandwidth Control	Committed Info Rate (CIR) and Maximum Info Rate (MIR) setting per subscriber unit
PHYSICAL INTERFACES	
Ethernet (via shielded RJ45)	10/100 BaseT, auto-sense, auto-negotiate
Reset Switch	Resets radio to factory defaults: IP address, subnet mask, gateway and password
LED Indicators	7 LEDs, including 4 RSSI
POWER PARAMETERS	
Power Method	Power-over-Ethernet (PoE) via DC voltage injected at PoE J-box
Voltage Input Limits into Radio	10.5 VDC to 24 VDC max
Standard Power supply	90 - 120 VAC
PoE Cat-5 max cable Length	300 feet on 24AWG STP Cat-5 cable
Current Draw/Power	600 mA
PHYSICAL AND ENVIRONMENTAL	
Radio enclosure	All-weather, polycarbonate
Mounting Provision	Mounts to wall or pole (1" diameter or greater)
Temperature Range	-40 to 60 deg C (-40 to 140 deg F)
Radio Dimensions	9.2" x 4.25" x 3.1"
Radio Weight	1 lb. (.45 kg)
User Interface	RJ45 (shielded)

All specifications are typical and subject to change without notice. Trango may alter products or features (current or planned) at any time.

WWW.TRANGOBROADBAND.COM

Trango Broadband Wireless
14118 Stowe Drive, Suite B
San Diego, Poway, CA 92064

Tel.: +1 (858) 391-0010
Fax: +1 (858) 391-0020
Email: sales@trangobroadband.com



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