



TrangoFOX Series™

FOX5800-D2 Subscriber Unit

The low cost FOX5800-D2 Subscriber Unit with robust ARQ[±] is the industry's highest performance solution for large-scale fixed wireless deployments. The D2 can deliver 10 Mbps at up to 13 miles with a dish antenna, or up to 4 miles as a stand-alone unit. Additionally, the FOX5800-D2 provides a host of powerful provisioning and management tools in a compact, easy-to-install package.

Product Highlights

• PERFORMANCE & FLEXIBILITY

The FOX5800-D2 is a low cost subscriber unit (SU) that delivers exceptional performance featuring Trango's innovative dual-polarized antenna technology. It can be deployed up to 4 miles with a 7 dB fade margin, or easily mounted on the AD5800-25 dish antenna for up to 13-mile links with a 13 dB fade margin. The D2's integrated ARQ[±] functionality provides for robust link performance in noisy environments while delivering up to 10 Mbps of usable data throughput to the subscriber.

• MANAGEABILITY

The FOX5800-D2 SU is fully manageable either locally (via the Ethernet port), or over-the-air via the associated Access Point. It supports SNMP and features an easy-to-use browser interface as well as a full command line interface.

• DURABILITY & EASE OF INSTALLATION

The FOX5800-D2 SU is a fully weatherized, outdoor unit designed for easy and 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.

• SECURITY

The FOX5800-D2 SU utilizes direct sequence spread spectrum (DSSS) technology, providing excellent range and immunity to interference. MAC authentication, coupled with proprietary transmission scrambling, provides a high degree of over-the-air security.

• AFFORDABILITY



The FOX5800-D2 SU is aggressively priced and provides a combination of best-of-breed technology with excellent ROI. We understand our customers' needs for robust and cost-competitive solutions that drive down acquisition costs while maximizing bottom line results.

- Low Cost (Fast ROI)
- Robust interference rejection (ARQ[±])
- Up to 13-mile range
- Up to 10 Mbps

Wireless Connectivity IS Our Business

TrangoFOX™ Specifications

RANGE/DATA THROUGHPUT CHART

SU Model	Part Number(s)	Max Range from AP	User Data Throughput	Antenna Gain
 FOX5800-D2 (with antenna)	M5800S-FSU-D2 AD5800-25 (antenna)	13 miles—13 dB fade margin [‡]	10 Mbps	25 dBi
 FOX5800-D2 (without antenna)	M5800S-FSU-D2	4 miles—7 dB fade margin [‡]	10 Mbps	8 dBi

Includes: FOX5800-D2 radio (AD5800-25 antenna dish for FOX5800-D2 sold separately), Power-over-Ethernet (PoE) junction box, 20 VDC power adapter and mounting brackets.
Note: Ranges listed assume line-of-sight. Actual maximum ranges may be greater depending on site conditions.

RADIO PARAMETERS

Frequency of Operation	5725 MHz to 5850 MHz
Channels	6 non-overlapping channels
Antenna Polarizations	Horizontal/vertical (software switchable)
Modulation Format	Direct Sequence Spread Spectrum (DSSS) with RAKE
Certification/Compliance	FCC Part 15.247
Receiver Sensitivity (1E10-6 BER)	-87 dBm
EIRP Max	+32 dBm; +49 dBm with AD5800-25 dish

DATA AND OPERATIONAL PARAMETERS

Access Method	TDD with SmartPolling™
Security	Proprietary Data Scrambling
Latency	10 msec (typical)
Access Point Compatibility	Access5830 AP with version 2.0 firmware
User Data Throughput	Up to 10 Mbps
Format	10/100 Base T
Interference Rejection	ARQ [‡] (Automatic Retransmit reQuest)
Network Protocols	All IEEE 802.3/802.3u compliant protocols
Configuration and Management	Telnet, TFTP, HTTP, PPPoE, SNMP v1.0 (via AP)
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 default: IP address, subnet mask, gateway and password
LED Indicators	7 LEDs including: 4 RSSI, 1 association, 1 network, 1 activity

POWER PARAMETERS

Power Method	Power-over-Ethernet (PoE) via DC voltage injected at PoE J-box
Voltage Input Limits into Radio	10.5 VDC – 24 VDC
Standard Power Supply	120 VAC to 20 VDC adapter
PoE Cat-5 Max Cable Length	300 feet on 24 AWG STP Cat-5 cable
Current Draw/Power	400 mA max (8 W), using 20V standard adapter
Optional Power Supply	Universal Power Supply 24VDC/750mA, 90-260VAC/50-60Hz (part # PSUPPLY-4)

PHYSICAL AND ENVIRONMENTAL

Radio Enclosure	All-weather, polycarbonate
Mounting Provision	Wall/pole mount bracket (1" diameter or greater) and dish mount bracket for AD5800-25
Temperature Range	-40° to 60° C (-40° to 140° F)
Radio Dimensions	9.2" x 4.25" x 3.1"
Radio Weight	1 lb.
User Interface	RJ45 (shielded)

All specifications are typical and subject to change without notice.

[‡] ARQ available as a free firmware upgrade; must be loaded on AP and SU.