

M4.5720S

5GHz Subscriber Unit



The MESH4G™ M4.5720S Subscriber Unit represents a breakthrough in price and performance. It currently delivers a robust 10 Mbps, is OFDM-ready and can be upgraded to 30+ Mbps.

The M4.5720S enables WISPs to, for the first time, 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 Overview

- Up to 10 Mbps, upgradeable to 30+ Mbps
- OFDM-ready
- 3 to 13 mile range
- Reliable 3rd generation FOX SU

Speed

The M4.5720S works in conjunction with the MESH4G™ M4.5710A Access Point delivering up to 10 Mbps throughput to the subscriber.

Long Range

The M4.5720S features innovative dual-polarized, multi-element antenna technology for superior performance and longer range. It can be deployed up to 3 miles from the access point with 10 dB fade margin to spare, or with an optional external dish antenna provides a range of 13 miles. Please call us for further information.

Flexibility

The SU provides a host of configuration options which are vital for interference mitigation including full control over channels, antenna polarizations, receiver threshold, and power levels.

Manageability

The M4.5720S is fully manageable locally (via the Ethernet port), or over-the-air via the access point. The M4.5720S supports SNMP and features an easy-to-use browser interface as well as a full command line interface. The subscriber unit's remote manageability reduces the need for costly truck rolls.

Durability & Ease of Installation

The M4.5720S 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 M4.5720S is priced aggressively to help service providers achieve a quick ROI.

Robust Proprietary Access Polling

The M4.5720S is equipped with a unique and powerful prioritization scheme designed to ensure the highest quality of service, such as VoIP, to each user at the maximum assigned throughput.

The AP will poll each SU in a round-robin fashion, favoring subscribers which are busy passing traffic. For this reason this protocol is adaptive and dynamic as opposed to straight Time Division Duplex (TDD). Added control of the polling sequence is provided by the ability for network operators to specify certain subscribers as PRIORITY in which case these subscribers will be polled more frequently thus guaranteeing even lower latency for critical clients.

M4.5720S

SPECIFICATIONS

Radio Parameters

Frequency of Operation

5725 MHz to 5850 MHz

Channels

6 non-overlapping channels

Channel width 20MHz

Antenna Polarizations

Horizontal/Vertical (software switchable)

Antenna Beam Width

60 x 60 degrees

Modulation Format

11 Mbps CCK Spread Spectrum (OFDM Ready)

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

Data and Operational Parameters

Access Point Compatibility

M4.5710A Access Point

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 20 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)

* Please note- this product is not approved for use in the EU