

# MA-850A1 Wi-Fi Module



*MobileAccess MA-850A1*

The MA-850A1 Wi-Fi Module enables 802.11b/g and 802.11a Wi-Fi signals to be combined with other wireless services for simultaneous distribution over the MobileAccess Universal Wireless Network.

The MA-850A1 can be deployed in a stand-alone mode for Wi-Fi only environments, or it can be connected to other MobileAccess elements (MA-1000/2000) to deliver Wi-Fi along with other wireless services including cellular/PCS, public safety, and WMTS.

Unlike traditional Wi-Fi deployments, where 802.11 Access Points (APs) are installed on ceilings and walls throughout the facility, the MA-850A1 enables organizations to cluster their 802.11 APs together in secure telecom closets.

With the clustering approach, IT managers can more easily access APs, which ultimately reduces the operational costs of managing the Wi-Fi network and minimizes disruption within the facility.

## Features

- **Multi-use infrastructure:** The same cables and antennas used for Wi-Fi can be re-purposed to simultaneously deliver other wireless voice and data services.
- **AP clustering:** 802.11 access points (APs) connect to the MA-850A1 in telecom closets where they are more secure and easier to manage than in conventional Wi-Fi deployments, where APs are installed on ceilings and walls throughout the facility.
- **Wi-Fi applications transparency:** The MA-850A1 uses discrete, passive antennas to radiate 802.11 signals, providing a coverage architecture that replicates the behaviors necessary to transparently support advanced AP features and location-sensitive Wi-Fi applications.
- **High-power:** With integral constant gain amplifiers combined with its low-loss architecture, the MA-850A1 offers scalable support for demanding applications such as wireless VoIP and 802.11a.
- **Robust system management:** Familiar SNMP-based management provides proactive visibility and control of the MA-850A1 based Wi-Fi infrastructure.

## 802.11b/g RF Parameters

Bandwidth	2400 - 2485 MHz
Output Power (on every port)	26.5 dBm
Gain	-10 to +5 dB
Gain Flatness	±1.5 dB

## 802.11a RF Parameters

Bandwidth	5150 - 5850 MHz
Insertion Loss (on every port)	5 dB
Gain Flatness	±1 dB

## UMTS Parameters

Bandwidth	1920 – 2170 MHz,
Insertion Loss (on every port)	3.0 dB
Gain Flatness	±1.5 dB
Input Power	0 to 22 dBm

## Mobile Services Parameters

Bandwidth	806 – 960 MHz, 1710 – 1990 MHz
Insertion Loss (on every port)	2.5 dB
Gain Flatness	±1.5 dB

## Management

Configuration and monitoring via both local RS232 connection and remote connection through a Web browser application

## Power

Power Supply	20 to 48 VDC; 1 to 0.42 A
Consumption	20W

## Physical Specification

Dimensions	242 mm x 279 mm x 38 mm (9.54 in x 10.98 in x 1.5 in)
Weight	2.82 kg (6.2 lb)

## Environmental Specifications

Temperature	
Operating	0°C to +50°C (32°F to 122°F)
Storage	-20°C to 85°C (-4°C to 185°C)
Humidity	
Operating	95% (non-condensing)
Storage	95% (non-condensing)

## Integration with other MobileAccess Systems

MA 850A1 can be integrated with the following MA systems: MA 1000, MA 1200, MA 2000, MA ModuLite. Each type of installation requires ordering the appropriate type of Accessory Kit (see Ordering Information).

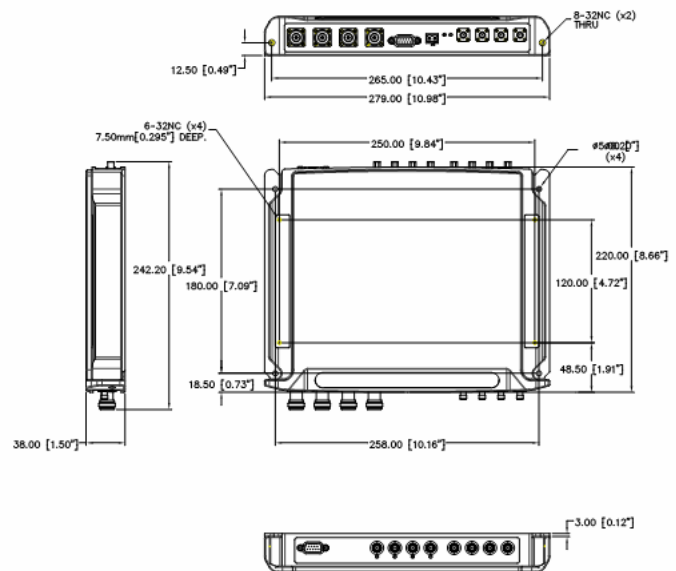
## RF Connections

Four 802.11b/g APs	SMA Female, 50 ohm
Four 802.11a APs	SMA Female, 50 ohm
Cellular Services	SMA Female, 50 ohm
Four Antenna Ports	N-type Female, 50 ohm

## Standards and Approvals

USA	FCC-47 CFR parts 2,15,22,24,90
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## Mechanical Measurements



## Ordering Information

850A1	WLAN module supporting 802.11 a/b/g
850-U	WLAN module supporting 1-4AP 802.11 a/b/g including UMTS
AK-850-1000	Accessory kit for 850 with 1000
AK-850-1200	Accessory kit for 850 with 1200
AK-850-MDLT	Accessory kit for 850 with ModuLite
AK-850-2000	Accessory kit for 850 with 2000
AK-850-SA	Accessory kit for 850 stand alone