

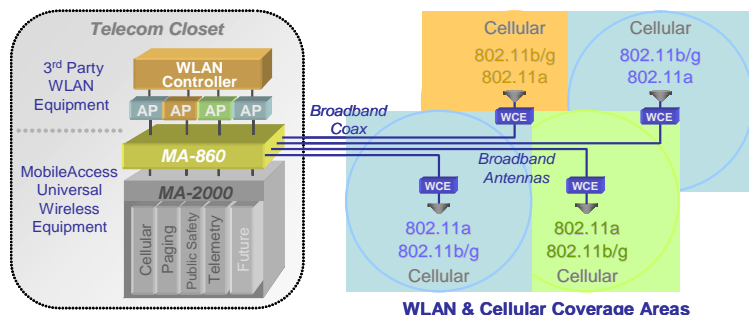
## ▶ MA-860 WLAN Solution

### MA-860 Solution Overview

The MobileAccess 860 WLAN Solution delivers pervasive WLAN coverage throughout enterprise environments using a unique multi-service wireless architecture. With the MA-860 approach, enterprises can seamlessly translate their WLAN investments and design expertise into a comprehensive, multi-service wireless solution.

The MA-860 combines WLAN services with signals from other wireless sources, including voice and data services from multiple wireless operators, public safety, and building automation applications. It then distributes the combined RF signals over a common set of broadband cables and antennas. One-Click calibration between the MA-860 module and the MobileAccess Wi-Fi Coverage Expander (WCE) ensures optimal coverage by mirroring the coverage footprint and system behavior of “AP-on-Ceiling” deployments for 802.11a and 802.11b/g WLAN services.

This Wire-it-Once™ approach spreads WLAN deployment costs across multiple wireless service needs, providing facility-wide coverage for WLAN and all other wireless services while creating a flexible infrastructure that adapts to evolving technology requirements.



In addition, the MA-860 WLAN solution locates Access Points (APs) in secure telecom closets alongside other LAN internetworking equipment, yielding significant operational benefits:

- ▶ Provides physical security of the APs
- ▶ Makes APs more accessible to IT staff
- ▶ Reduces ongoing operational expenses

### MobileAccess 860 WLAN Module



### Benefits

#### Cost-Effective Multi-Service Solution

- ▶ Delivers WLAN and other wireless RF signals over a single multi-service infrastructure
- ▶ Spreads WLAN deployment costs across multiple wireless services

#### Dependable WLAN Coverage

- ▶ MobileAccess WLAN architecture mirrors the behaviors and coverage footprint of “AP-on-Ceiling” deployment
- ▶ One-Click compensation ensures optimal 802.11b/g and 802.11a coverage
- ▶ Dedicated AP to antenna relationships ensure transparent support for WLAN applications such as VOIP and location services (RTLS)
- ▶ Redundant power option

#### Centralized & Secure AP Management

- ▶ Lowers operating expenses
- ▶ Provides physical security and simplifies management

#### Proactive End-to-End Monitoring

- ▶ Remote SNMP monitoring for status, alerting, and fault detection
- ▶ Monitoring extends to attached multi-service antennas

#### Simplified IT Deployment Model

- ▶ Uses standard WLAN design techniques



# MA-860 Product Specifications

## 802.11 RF Parameters Power

860(M/R) with Wi-Fi Coverage Expander (WCE):

	802.11a	802.11b/g
Gain TX (dB)	0	0
Output Power (dBm)	17	b: 20 g: 17
Gain RX (dB)	4	4
NF RX (dB)	5	5
Flatness (dB)	+/- 2.0	+/- 1.5

860(M/R) Module Standalone:

	802.11a	802.11b/g
Insertion Loss (dB)	3	2
Flatness (dB)	+/- 1.0	+/- 1.0

## Mobile Services Parameters

	Cell		PCS
Band (MHz)	698-960		1710-1990
Insertion Loss (dB)			
MA-860	1.0		2.5
WCE	1.2		3.5
System	2.2		6.0

## RF Connections

860(M/R)

802.11 b/g	(4) SMA Female, 50 ohm
802.11 a	(4) SMA Female, 50 ohm
Mobile Services	(4) SMA Female, 50 ohm
Antenna Ports	(4) N-type Female, 50 ohm

WCE

Coax (860 facing)	(1) N-type Male
Coax (Ant facing)	(1) N-type Female

## Standards and Approvals

FCC-47, CFR 15.109, Part 15 Sections B, C, and E  
 UL / IEC 60950 -1  
 UL1950 Fire Safety requirements  
 UL2043 Fire/Plenum (WCE)  
 CE EN 60950  
 CAN/CSA C22.2 No 60950

## Management

The 860(M/R) can be configured and monitored through either a local RS-485 connection or a Web browser application via an RJ-45 Ethernet connection

Power

2 DC Power Inputs  
 DC-1 = 28V Mandatory DC Power, 66 Watts  
 DC-2= 9.8V Optional Redundant Power, 40 Watts

## Physical Specifications

Dimensions 860(M/R): 242 mm x 279 mm x 38 mm  
 (9.54 in x 10.98 in x 1.5 in)  
 WCE: 130 mm x 120 mm x 20 mm  
 (5.12 in x 4.73in x 0.8 in)

Weight 860(M/R): 2.82 kg (6.2 lb)  
 WCE: 0.80 kg (1.8 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)

## Ordering Information

860M 860 WLAN Module  
 860R 860 WLAN Module  
 - Redundant Power Supply Option  
 WCE Wi-Fi Coverage Expander

Accessory Kits for mounting 860(M/R):

AK-860-1000	860 with MA-1000
AK-860-1200	860 with MA-1200
AK-860-MDLT	860 with ModuLite
AK-860-2000	860 with MA-2000
AK-860-SA	860 stand alone
AK-860-2000L	860 with MA-2000 Lite
AK-860-PWR	Redundant Power Supply

## Wiring Diagram

