

Base Unit Datasheet

MobileAccess' Base Unit (BU) is a wideband device located at the head-end. It performs the RF to optical conversion for signals transmitted between the Radio Interface Unit (RIU) and the remote-end equipment (e.g. RHU, MobileAccess**2000** TSX, etc.).

There are two models of the Base Unit as follows:

- Four Port Unit – Supports up to four optical connections between the RIU and the remote modules.
- Eight Port Unit – Supports up to eight optical connections between the RIU and the remote modules.

Features & Benefits

- Supports RF to optical conversion of all mobile services supported by the MobileAccess Distributed Antenna System.
- Option to support up to 8 Remote Units.
- Proactive, centralized end-to-end monitoring and management provided by MobileAccess' centralized management system.
- Supports dry contact alarms.
- Provides local indicators for optical link status.
- Multimode and Single-mode fiber versions available.



Four Port Base Unit



Eight Port Base Unit

Absolute Maximum Rating

Total Input RF Power to BU	10dBm
Power Supply	60VDC

Optical Specifications

Optical Output Power	<3.0mW
Max. Optical Budget	2 dB for fiber + 1 dB for Connectors (assumed) = 3 dB total. 300 m Multi-mode
Optical Loss per Mated-pair Connectors	0.5dB (max)
Optical Connector	SC/APC
Fiber Type	Single-mode: 9/125um Multi-mode: 50/125 um or 62.5/125um (Minimum qualifications with ANSI/TIA/EIA-568-B series, EN50173-1 or ISO/IEC 11801)
Wavelength	1310±10nm
Maximum Distance Between Base Unit and Remote Cabinet	2km (Single Mode Fiber)

Temperature Specifications

Operating	0°C to +50°C (32°F to 122°F)
Storage	-20°C to 85°C (-4°F to 185°F)

Standards and Approvals

Laser Safety	CDRH 21 CFR 1040.10, 1040.11 (Except for deviations per notice No.50, July 26, 2001) IEC 60825-1, Amendment 2 (January 2001) EN 60825-1
CE	<u>Radio Equipment and Systems</u> EN 301 502 – for GSM / EGSM Frequency Bands EN 300 609 – for DCS Frequency Band EN 301 908 – for UMTS Frequency Band EN 300 328 – for WLAN 802.11b/g 2.4 GHz Frequency Band EN 301 893 – for WLAN 802.11a 5 GHz Frequency Band <u>EMC</u> EN 301 489
FCC	<u>Radio Equipment and Systems</u> FCC 47 CFR Part 2, 15, 22, 24, 27, 90 <u>EMC</u> FCC 47 CFR Part 15 Subpart B
Safety	EN 60950UL 60950 CAN/CSA-C22.2 No.60950 UL 2043



Component Specifications

Four Port Base Unit

Supported Services	All mobile services supported by the MobileAccess DAS
Ports	Optical Port to Remote-End Modules: Four SC/APC To RIU or Passive BTS: N-type Female, 50 ohm
Power	Input Power: 20 to 48V DC Typical Power Consumption: 14W
Physical Characteristics	Dimensions: 48.26 cm x 4.44 cm x 29.97 cm (19" x 1.75" x 11.8") Weight: 2.8 Kg (6.2 Lb)

Eight Port Base Unit

Supported Services	All mobile services supported by the MobileAccess DAS
Ports	Optical Port to Remote-End Modules: Eight SC/APC To RIU or Passive BTS: N-type Female, 50 ohm
Power	Input Power: 20 to 48V DC Typical Power Consumption: 14W
Physical Characteristics	Dimensions: 48.26 cm x 4.44 cm x 29.97 cm (19" x 1.75" x 11.8") Weight: 2.8 Kg (6.2 Lb)

Multimode Fiber Qualifications

50/125 or 62.5/125um complying with ANSI/TIA/EIA-568-B series, EN50173-1 or ISO/IEC 11801, may be used up to 300 meters in length assuming the following qualifications:

- Both the Base Unit and Remote Hub must be multimode capable.
- All fiber in a given length of fiber must be of the same core diameter.
- All Bulkhead Adapters must be Single-mode SC/APC (Green) adapters.
- All terminations cross connections or patches must be direct fusion splice or MobileAccess specified patch cords listed below.

900 Micron Patchcord for Splicing, 2 Meters, 2xSC/APC

62.5/125/900	Diamond p/n ENC/1045341	FiberNext p/n OEM-629002-MAN
50/125/900	Diamond p/n ENC/1045340	FiberNext p/n OEM-509002-MAN

Zipcord Patchcord, 4xSC/APC, 50/125/900/2000/4500 Micron

1 Meter	Diamond p/n ENC/1045342	FiberNext p/n OEM-50ZIP1-MAN
3 Meter	Diamond p/n ENC/1045343	FiberNext p/n OEM-50ZIP3-MAN

Zipcord Patchcord, 4xSC/APC, 62.5/125/900/2000/4500 Micron

1 Meter	Diamond p/n ENC/1045344	FiberNext p/n OEM-62ZIP1-MAN
3 Meter	Diamond p/n ENC/1045345	FiberNext p/n OEM-62ZIP3-MAN



Ordering Information

Base Units

Part Number	Description
WB-B8U	Wide-band Base 8 Unit Supporting 8 RHUs
WBM-B8U	Wide-band Base 8 Unit Supporting 8 RHUs over MMF
WB-B4U	Wide-band Base 4 Unit Supporting 4 RHUs
WBM-B4U	Wide-band Base 4 Unit Supporting 4 RHUs over MMF

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