

Base Unit (BU)

A Corning
MobileAccess
Solutions Product

features and benefits |

Supports RF to optical conversion of all mobile services supported by Corning MobileAccess Distributed Antenna Systems

Option to support up to eight remote units

Proactive, centralized end-to-end monitoring and management provided by Corning MobileAccess' centralized management system

Supports dry contact alarms

Provides local indicators for optical link status

Multimode and single-mode fiber versions available

Corning MobileAccess' Base Unit (BU) is a wideband device located at the headend. It performs RF to optical conversion for signals transmitted between the Radio Interface Unit (RIU) and the remote-end equipment (e.g. RHU, MobileAccess2000 TSX, etc.).

There are two models of the base unit as follows:

- **4-Port Unit:** Supports up to four optical connections between the RIU and the remote modules.
- **8-Port Unit:** Supports up to eight optical connections between the RIU and the remote modules.



4-Port Base Unit | Figure 1



8-Port Base Unit | Figure 2

system specifications |

Absolute Maximum Rating

Total Input RF Power to BU 10 dBm

Power Supply 60 VDC

Optical

Optical Output Power < 3.0 mW

Maximum Optical Budget 2 dB for fiber + 1 dB for Connectors (assumed) = 3 dB total.
300 m multimode

Optical Loss per Mated-pair Connectors 0.5 dB (max)

Base Unit (BU)

system specifications | (continued)

Optical

Optical Connector	SC/APC
Fiber Type	Single-mode: 9/125 μm , Multimode: 50/125 μm or 62.5/125 μm (Minimum qualifications with ANSI/TIA/EIA-568-B series, EN50173-1 or ISO/IEC 11801)
Wavelength	1310 \pm 10 nm
Maximum Distance Between Base Unit and Remote Cabinet	2 km (single-mode fiber)

Temperature

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

Standards and Approvals

Laser Safety	<ul style="list-style-type: none">• 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	
Radio Equipment and Systems	<ul style="list-style-type: none">• EN 301 502 – for GSM / EGSM Frequency Bands• EN 300 609 – for DCS Frequency Band• EN 301 908 – for UMTS Frequency Band
EMC	EN 301 489

Base Unit (BU)

system specifications | (continued)

Standards and Approvals

FCC

Radio Equipment and Systems	FCC 47 CFR Part 2, 15, 22, 24, 27, 90
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EMC	FCC 47 CFR Part 15, Subpart B
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Safety

- EN 60950UL 60950
 - CAN/CSA-C22.2 No.60950
 - UL 2043
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component specifications |

4-Port Base Unit

Supported Services

All mobile services supported by the Corning MobileAccess DAS

Ports

- Optical port to remote-end modules: 4 SC/APC
- To RIU or Passive BTS: N-type female, 50 ohm

Power

Input power: 20 to 48 V DC, typical power consumption: 14 W

Physical Characteristics

- Dimensions (H x W x D): cm (in) 48.26 x 4.44 x 29.97 (19 x 1.75 x 11.8)
 - Weight: kg (lb) 2.8 (6.2)
-

8-Port Base Unit

Supported Services

All mobile services supported by the Corning MobileAccess DAS

Ports

- Optical port to remote-end modules: 8 SC/APC
- To RIU or passive BTS: N-type female, 50 ohm

Power

Input power: 20 to 48 V DC, typical power consumption: 14 W

Physical Characteristics

- Dimensions (H x W x D): cm (in) 48.26 x 4.44 x 29.97 (19 x 1.75 x 11.8)
 - Weight: kg (lb) 2.8 (6.2)
-

Base Unit (BU)

component specifications | (continued)

Multimode Fiber Qualifications

50/125 or 62.5/125 μm 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 Corning MobileAccess specified patch cords listed below.

900 μm Patch-Cord for Splicing, 2 Meters, 2 x SC/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 Patch-Cord, 4 x SC/APC, 50/125/900/2000/4500 μm		
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 Patch-Cord, 4 x SC/APC, 62.5/125/900/2000/4500 μm		
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	Wideband Base 8 Unit supporting eight RHUs
WBM-B8U	Wideband Base 8 Unit supporting eight RHUs over MMF
WB-B4U	Wideband Base 4 Unit supporting four RHUs
WBM-B4U	Wideband Base 4 Unit supporting four RHUs over MMF

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CMA-186-AEN / December 2011

DS_Base Unit_28FEB11