

# BLM 1500 GPON Access Terminal (Chassis)



## DESCRIPTION

The BLM 1500 chassis is engineered with a high capacity, modular design that enables incremental growth to match changing service requirements, reducing capital and operating expenditures. Any application board can be inserted in any of the universal slots, providing a highly versatile platform.

The BLM 1500 chassis provides dedicated control and data paths from each of the sixteen universal slots to each of two slots reserved for high-capacity switch fabric boards. Together, the two fabric boards provide redundant switch fabrics, node controllers, and management ports to guarantee high availability and seamless failover protection.

This dual star architecture allows the BLM 1500 to offer 99.999% reliability with no single point of failure on common equipment. The chassis is completely serviceable from the front, with the air intake vent in the lower front and the air exhaust vent in the upper back. The chassis pulls air in at the lower front of the chassis and exhausts it out the upper back.

## ORDERING INFORMATION

### Calix BLM 1500 Platform

000-00737..... BNDL, 17RU ANSI/ETSI rear exhaust chassis

### Calix BLM 1500 System Recommended Spare Components

- 100-03644..... BLM 1500 17RU chassis r/e
- 100-03643..... FRU, fan tray, BLM 1500 17RU chassis
- 100-03539..... 17U chassis fiber management shelf (FMS)
- 100-03642..... FRU, line filter, BLM 1500 17RU chassis
- 100-03707..... BNDL, 17RU chassis spare HW install kit
- 100-03640..... FRU, air filter, 10.4X16.6, NEP CHAS
- 100-03541..... CBL, wire, Y cable, RJ21 plug-2X RJ21 RE

## SPECIFICATIONS

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### RACK MOUNT OPTIONS

#### SUPPORTED RACK AND CABINET TYPES

ETSI cabinets and racks (600 mm depth recommended to allow for cabling and cooling)  
ANSI racks (allow additional depth per local practice for cabling and desired clearances)  
19-in or 23-in EIA rack  
19-in or 23-in unequal flange rack

#### CONNECTION ACCESS

Completely serviceable from front of chassis

#### CABLE ROUTING OPTIONS

Fiber optic cabling can be routed upward from the chassis through the FMS, which attaches to the front of the chassis

#### MOUNTING DEPTHS

Flush mount: Front edge of chassis flush with front edge of rack rail  
Mid-mount: Front edge of chassis 1.8 in (4.4 cm) forward of rack rail  
Forward mount: Front edge of chassis 2.8 in (7.0 cm) forward of rack rail

#### COOLING REQUIREMENTS

The chassis has a maximum heat dissipation of 2040W (6960 BTU/hr)  
The fan tray has six variable-speed DC fans. Each fan has a throughput of 190 CFM (323 cubic meters per hour).

### RACK SPACE REQUIREMENTS

#### CHASSIS

17 RU (29.75 in/75.6 cm)  
Fiber Management Shelf (FMS)  
Attaches to front of chassis and does not consume rack height

### GENERAL FEATURES

#### CHASSIS RESOURCES

Two slots in the center of the chassis for redundant fabric boards  
16 universal slots for any combination of BLM 1500 320G system boards  
Two redundant -48 VDC power terminal blocks with fieldreplaceable input power line filters for standard central office -48 VDC power supplies  
Hot-swappable fan tray with bottom-to-top air flow  
Hot-swappable air filter to remove dust from incoming air

#### DIMENSIONS

Height: 17 RU (29.75 inches/75.6 cm)  
Width: 17.3 inches (43.9 cm)  
Depth: 11.8 inches (30 cm); ground plate extends an additional 0.7 inches (1.8 cm)  
Weight: Chassis only (no fan tray or boards) 70 lbs (32 kg)  
Maximum configuration (fan tray, two fabric boards, 16 boards), with no cabling: 130 lbs (60 kg)

#### CHASSIS CAPACITY

18 slots (16 boards and two fabric boards)

#### PHYSICAL INTERFACES

A/B power terminals

#### POWER

Total Power: Requirement depends on the number of boards installed and the services delivered.

#### VOLTAGE

Minimum startup: -43 VDC  
Minimum operating: -40 VDC  
Nominal operating: -48 VDC  
Maximum operating: -60 VDC

### CURRENT

Maximum current input: 48 Amps

### GROUND

Power source must be grounded. Each chassis must be grounded through the equipment rack to a building/enclosure ground, in accordance with local standards.  
Stranded copper wire rated for a maximum of 50A and a maximum length of 5 ft (1.53m); a gauge of 6 AWG (13.3 mm<sup>2</sup>) is recommended.

### ENVIRONMENTAL REQUIREMENTS

#### TEMPERATURE

Long term operation: 41°F - 104°F (5°C - 40°C)  
Short term operation: 23°F - 131°F (-5°C - 55°C)  
Storage environment limits: -40°F + 158°F (-40°C -70°C)

#### HUMIDITY

Long term operation: 5% to 85% (non-condensing)  
Short term operation: 5% to 90% (non-condensing), not to exceed 0.024 kg water per 1.000 kg of dry air  
**Note:** Short term is defined as a maximum of 96 consecutive hours and a maximum of 15 days per year, as stated in GR-63.

#### ALTITUDE

200 ft (61m) below sea level to 13,100 ft (4,000m) above

#### SAFETY

UL 60950  
CAN/CSA-C22.2 No. 60950-00  
EN 60950  
IEC 60950

