BDM2/BDM2m

6+12 with 204 MHz Bidirectional Module (BDM)



FEATURES

- Supports full DOCSIS® 3.1/3.1E capacities: 4 x 192 MHz OFDM downstream blocks and up to 2 x OFDMA upstream blocks along with multiple SC-QAM channels per connector port.
- High split capable with upstream up to 204 MHz
- BDM2m provides identical capabilities as the BDM2 card but uses a different packet processor.
- High density chassis: A C100G with redundancy can support 66 SGs in a 13RU C100G chassis.
- Operational Cost Effectiveness: Industry's lowest total cost of ownership per DOCSIS 3.0/ DOCSIS 3.1 channel. The BDM2 delivers very low power consumption for high bandwidth, multimedia applications.

CommScope's award-winning C100G CCAP solution combines CMTS and MPEG video Edge-QAM in a high-density, high-availability 13RU platform. Deployed by some of the world's leading service providers, the C100G's software-defined architecture, industry-leading density, and integrated video capabilities provide a clear competitive edge in the delivery of ultra-broadband services.

A long-time leader in developing products that can enhance or expand CCAP channel density, CommScope has introduced the BDM2/2m with multiple I/O options. The CommScope® BDM2/2m 6+12 supports 6 downstream and 12 upstream ports to increase CCAP channel density in either the high-density C100G or the mid-density C40G. The BDM2/2m also supports DOCSIS 3.1*E*, DOCSIS 3.1, DOCSIS 3.0, and EuroDOCSIS 3.0 standards for maximum operational flexibility.



FEATURES AND BENEFITS

Feature	Description	
Full DOCSIS 3.1/3.1 <i>E</i> OFDM/OFDMA Support	4 OFDM (192 MHz) downstream blocks along with 64 SC-QAM downstream channels and up to 2 OFDMA (96 MHz) upstream blocks along with up to 6 ATDMA upstream channels per RF connector port. This allows service providers to deliver the faster speeds needed to meet customer and competitive demands. Full spectrum support for DOCSIS3.1E, DOCSIS 3.1, DOCSIS 3.0, and EuroDOCSIS 3.0.	
Configuration	6 downstream ports and 12 upstream ports with MCX connectors	
Density	High-density design. A C100G equipped with BDMs in a 1:2 (DS:US) configuration with 11:1 line card redundancy supports 66 SGs in a 13RU C100G chassis	
Affordability	Low total cost of ownership per DOCSIS $3.0/3.1/3.1E$ channel. With the BDM2/2m, CommScope continues to deliver the lowest power consumption solutions for high bandwidth multi-media applications.	

TECHNICAL SPECIFICATIONS

Characteristics	Specification
Standards Supported	DOCSIS 3.1E, DOCSIS 3.1, DOCSIS 3.0, EuroDOCSIS 3.0
Downstream Capacity	Per port support for up to four (4) 192 MHz downstream OFDM blocks along with 64 SC-QAM channels
Upstream Capacity	Per port support for two (2) 96 MHz upstream OFDMA blocks (R8.6.4+) along with 6 ATDMA SC-QAMs channels
RF Connector Ports and Frequency Ranges	BDM2/2 m with 6+12 IO Card: • 6 downstream ports • 12 upstream ports • Upstream: 5 MHz to 204 MHz (multiple frequency split variations) • Downstream: 108 MHz to 1218 MHz (multiple variations)
I/O Connector Type	MCX-connector
Redundancy	11+1 for the C100G 3+1 for the C40G
Total Power	300 W
Downstream	
Annex Support	Annex A, B, or C
QAM Modulations	64, 128, and 256 QAM
DOCSIS 3.1 OFDM Modulations	QPSK, BPSK, 8, 16, 32, 64, 128, 256, 512, 1024, 2048, 4096 QAM
Data Rates (DOCSIS 3.0)	27 Mbps @ 64 QAM 38 Mbps @ 256 QAM
Data Rates (EuroDOCSIS)	36 Mbps @ 64 QAM 51 Mbps @ 256 QAM
Data Rates (DOCSIS 3.1 full OFDM Block)	1.5 Gbps @ 1024 QAM 1.8 Gbps @ 4096 QAM
Frequency Step Size	1 Hz
Maximum Output Power (Sum of All Channels)	60 dBmV @ 1 ch/port 59 dBmV @ 2 ch/port 58 dBmV @ 4+ ch/port
Output Step Size	0.1 dB
Output Accuracy	± 3 ppm
Return Loss	14 dB @ 50–870 MHz 10 dB @ 870–1218 MHz
Modulation Error Rate	43 dB (equalized)
Wideband Noise	-73 dBc
Upstream	
QAM Modulations	QPSK, 8, 16, 32, 64 QAM
OFDMA Modulations	QPSK, BPSK, 8, 16, 32, 64, 128, 256, 512, 1024 QAM
QAM Data Rate/Channel	0.32–30.72 Mbps
OFDMA Data Rate/Channel	950 Mbps
Input Range	-10 to 29 dBmV- 10 Log (N)

ORDERING INFORMATION

Model Name	Description
BDM2M-W	204 MHz-capable BDM2m Line Card (Wide Open)
BDM2M-N	204 MHz-capable BDM2m Line Card (No License)

RELATED PRODUCTS

C100G Converged Cable Access Platform (CCAP)	SMM300G/SMM300Gm Switch and Management Module
C40G Converged Cable Access Platform (CCAP)	

Contact Customer Care for product information and sales:

United States: 888-944-4357International: +1-215-323-2345



 $\textbf{Note:} \ \mathsf{Specifications} \ \mathsf{are} \ \mathsf{subject} \ \mathsf{to} \ \mathsf{change} \ \mathsf{without} \ \mathsf{notice}.$

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BDM2_BDM2m_DS_RevA