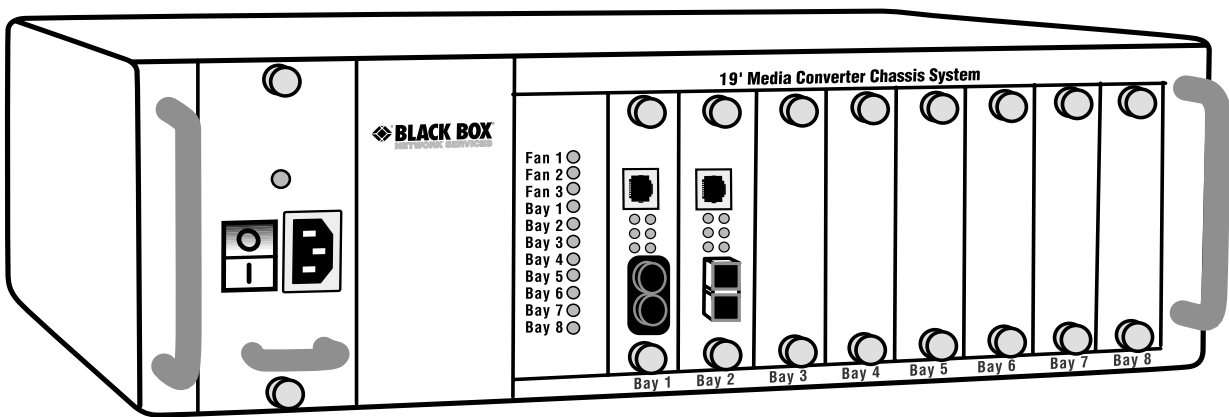


Management Media Converter Chassis



LMCS4000A-16M

Managed 16 Slot Media Converter Center Chassis

Key Features

- ▶ Versatile chassis for multiple converter installations
- ▶ Sixteen front panel slots for Media Converters
- ▶ 19-inch Rack Mount
- ▶ SNMP and Web Management support
- ▶ Optional redundant power supply
- ▶ Plug and Play Operation
- ▶ LED Indication for Management Module
- ▶ LED Indication for Primary and Secondary Power Supplies
- ▶ LED Indication for Converters
- ▶ Metal Case

The LMCS4000A-16M Chassis is a 19-Inch rack mountable conversion center, capable of serving up to 16 media conversion modules. The base unit supplies SNMP and WEB management to any of the installed modules. In addition to the internal power supply, a back up supply is available as an optional extra. This unit and all conversion modules are CE and FCC-Class B approved and they also conform to CCITT specifications.

Available Converter Modules:

The 100Base-FX converters are usually supplied with SC connectors but ST or MTRJ connectors are also available for multimode converters. All 1000Base-SX converters are available only with an SC connector. The LMCS4000A-16M-Chassis is a versatile, flexible and cost effective solution for fiber conversion installations particularly when many fibers are terminated in one 19-inch rack and when management is required.

Specifications

Model	Slots	Management Protocol	Interface	Redundant Power Supply	LEDs	Temp.	Power	Dimensions (WxDxH)mm	Weight	EMI
LMCS4000A-16M	16	Console Telnet, TFTP	DB-9 (DTE) FJ-45(IEEE 802.3)	Optional	6	0-50°C	100-240VAC	2.25U/2U	6.6kg (net Weight)	FCC class B, CE
LMCS4000A-16	16	n/a	n/a	Optional	4	0-50°C	100-240VAC	2.25U/2U	6.6kg (net Weight)	FCC class B, CE

LMCS4000A-2M

Managed 2 Slot Media Converter Center Chassis

Key Features

- ▶ Versatile chassis for multiple converter installations
- ▶ Two front panel slots for Media Converters
- ▶ Slim Size
- ▶ SNMP and Web Management support
- ▶ Optional redundant power supply
- ▶ Plug and Play Operation
- ▶ LED Indication for Management Module
- ▶ LED Indication for Primary and Secondary Power Supplies
- ▶ LED Indication for Converters

The LMCS4000A-2M Chassis is compact, manageable converter center for serving 1 to 2 Slide-in converters. This 2 slot chassis is designed for managed remote applications of small unmanaged two card applications, by select and install from among of various slide-in converters, user now may upgrade or extend network easily.

The LMCS4000A-2M Chassis has built-in management module, network administrator administrator may monitor the system and any installed

slide-in converter status through SNMP or WEB remotely. In addition, LMCS4000A-2M Chassis also supports hot-swap function, user may replace the slide-in converter on-line without the need to shut down the whole system.

This compact and versatile LMCS4000A-2M Chassis is easy to install and use, together with other fiber series products, provides you the best cost effective solution for fiber deployment.

Specifications

Model	Slots	Management Protocol	Interface	Redundant Power Supply	LEDs	Temp.	Power	Dimensions (WxDxH)mm	Weight	EMI
LMCS4000A-2M	2	Console Telnet, TFTP	DB-9 (DTE) FJ-45(IEEE 802.3)	n/a	3	0-50°C	100-240VAC	151x186x98	1.7kg (net Weight)	FCC class B, CE
LMCS4000A-2	2	n/a	n/a	n/a	1	0-50°C	100-240VAC	151x186x98	1.7kg (net Weight)	FCC class B, CE

LMCS4013C-MSSC10

1000BASE-SX (Singlemode) To 1000BASE-SX (Multimode) Manageable Converter

Key Features

- ▶ One 1000Base-SX (FO-SC) Singlemode Interface
- ▶ One 1000Base-SX (FO-SC) Multimode Interface
- ▶ Comply to IEEE 802.3z Gigabit Ethernet Standards
- ▶ LED Indication: Power / Link / Activity
- ▶ Extended Fiber Optic Distance up to 500m (Multimode)
- ▶ Extended Fiber Optic Distance up to 5,000m (Singlemode)
- ▶ Plug and Play Operation

The LMCS4013C-MSSC10 is a Gigabit Ethernet (1000Base-SX) multimode to singlemode Ethernet converter module designed for use with the CCT-Chassis.

The unit is fully compliant with IEEE standard 802.3z. The LMCS4013C-MSSC10 provides a total bandwidth of up to 1000Mbps for a complete link distance of up to 5km.

The LMCS4013C-MSSC10 is also compatible with any other product featuring a 1000Base-SX interface.

Management of this unit may be supported through the management module incorporated in the LMCS4000A-16M Chassis.

The LMCS4013C-MSSC10 with its single mode fiber interface, extends the distance of a Gigabit application by up to 5,000m.

Installation of the LMCS4013C-MSSC10 is simple and straightforward - just push the unit into a vacant slot in the LMCS4000A-16M Chassis.

Specifications

Model	Standard	Fiber Connector Type	Wavelength	Typical Distance	Min TX PWR (dBm)	Max TX. PWR (dBm)	Sensitivity (dBm)	Link Budget (dB)	LEDs	Temp.	Power	Dimensions (WxDxH)mm	EMI
LMCS4013C-MSSC10	IEEE 802.3z	SC	MM:850nm SM:1310nm	MM:550m SM:10km	MM:-9.5 SM:-9.5	MM:-4.0 SM:-3.0	MM:13.5 SM:-14.0	MM:4.0 SM:4.5	3	0-50°	12VDC 1.0A	2.25U/2U	FCC classA, CE
on request	IEEE 802.3u	SC	1310nm	MM:2km SM: 20km	MM:-19.0 SM:-20.0	MM:-14.0 SM:-7.0	MM:-30.0 SM:-32.0	MM:11.0 SM:12.0	3	0-50°	12VDC 1.0A	2.25U/2U	FCC classA, CE
on request	IEEE 802.3u	SC	1310nm	MM:2km SM:25km	MM:-19.0 SM:-15.0	MM:-14.0 SM:-7.0	MM:-30.0 SM:-34.0	MM:11.0 SM:19.0	3	0-50°	12VDC 1.0A	2.25U/2U	FCC classA, CE
on request	IEEE 802.3u	SC	1310nm	MM:2km SM:40km	MM:-19.0 SM:-5.0	MM:-14.0 SM: 0	MM:-30.0 SM:-34.0	MM:11.0 SM:29.0	3	0-50°	12VDC 1.0A	2.25U/2U	FCC classA, CE
on request	IEEE 802.3u	SC	1310nm	MM:2km SM:60km	MM:-19.0 SM:-3.0	MM:-14.0 SM: 0	MM:-30.0 SM:-38.0	MM:11.0 SM:35.0	3	0-50°	12VDC 1.0A	2.25U/2U	FCC classA, CE
on request	IEEE 802.3u	SC	1310nm	MM:2km SM:80km	MM:-19.0 SM:-2.0	MM:-14.0 SM: 0	MM:-30.0 SM:-37.0	MM:11.0 SM:35.0	3	0-50°	12VDC 1.0A	2.25U/2U	FCC classA, CE
on request	IEEE 802.3u	SC	MM:1310nm SM:1550nm	MM:2km SM:100km	MM:-19.0 SM:-5.0	MM:-14.0 SM: 0	MM:-30.0 SM:-36.0	MM:11.0 SM:31.0	3	0-50°	12VDC 1.0A	2.25U/2U	FCC classA, CE

LMCS4011C-xx

10/100M STP to 100BASE-FX Manageable Switching Converter Module

Key Features

- ▶ LMCS4011C-MMSC: One 10/100M STP (RJ-45/STP) Interface, One 10BaseOne 100Base-FX (FO-SC) Multimode Interface
- ▶ On request: One 10/100M STP (RJ-45/STP) Interface, One 10BaseOne 100Base-FX (FO-ST) Multimode Interface
- ▶ On request: One 10/100M STP (RJ-45/STP) Interface, One 10BaseOne 100Base-FX (FO-MTRJ) Multimode Interface
- ▶ LMCS4011C-SSC20, LMCS4011C-SSC40: One 10BaseOne 10/100M (RJ-45/STP) Interface, One 10BaseOne 100Base-FX (FO-SC) Singlemode Interface
- ▶ All Converter comply to IEEE 802.3, 802.3u Standards
- ▶ LED Indication: Power / Link / Activity / FDX / SPEED
- ▶ Store and Forward Switching Mechanism
- ▶ Extended Fiber Optic Distance up to 2,000m (LMCS4011C-MMSC (FT/FMR on request))
- ▶ Extended Fiber Optic Distance up to 25,000m (LMCS4011C-SSC20)
- ▶ Extended Fiber Optic Distance up to 40,000m (LMCS4011C-SSC40)
- ▶ Extended Fiber Optic Distance up to 60,000m (LMCS4011C-SSC60 on request)
- ▶ Plug and Play Operation

The LMCS4011C-Range consists of a series of N-Way Ethernet/Fast Ethernet (10Base-T/100Base-TX) to 100Base-FX converter modules for the LMCS4000A-16M-Chassis. All units are fully compliant with IEEE 802.3 and 802.3x standards. The RJ45 (STP) port can be operated at either 10 or 100Mbps. Auto speed negotiation as well as half / full duplex operation is supported on all LMCS4011C-Modules. In full duplex configuration, the LMCS4011C-range provides a maximum bandwidth of up to 200Mbps (in 100Base-TX operation mode) or up

to 20Mbps (in 10Base-T operation mode) for distances of up to 2km using multimode fiber cable or up to 60Km when using singlemode fiber cable. Installation of the unit is simple and straight forward. The LMCS4011C-Range works well with our series of Stand Alone fiber converters. A network administrator can also monitor and manage remotely through SNMP and WEB management.

Specifications

Model	Standard	Fiber Connector Type	Wavelength	Typical Distance	Min TX PWR (dBm)	Max TX. PWR (dBm)	Sensitivity (dBm)	Link Budget (dB)	LEDs	Temp.	Power	Dimensions (WxDxH)mm	EMI
LMCS4011C-MSSC	IEEE 802.3 802.3u	SC/ST	1310nm	MM: 2km	-19.0	-14.0	-30.0	11.0	6	0-50°	12VDC 1.0A	2.25U/2U	FCC classA, CE
on request	IEEE 802.3 802.3u	MT-RJ	1310nm	MM: 2km	-19.0	-14.0	-30.0	11.0	6	0-50°	12VDC 1.0A	2.25U/2U	FCC classA, CE
LMCS4011C-SSC20	IEEE 802.3 802.3u	SC	1310nm	SM: 20km	-20.0	-7.0	-32.0	12.0	6	0-50°	12VDC 1.0A	2.25U/2U	FCC classA, CE
LMCS4011C-SSC25	IEEE 802.3 802.3u	SC	1310nm	SM: 25km	-15.0	-7.0	-34.0	19.0	6	0-50°	12VDC 1.0A	2.25U/2U	FCC classA, CE
LMCS4011C-SSC40	IEEE 802.3 802.3u	SC	1310nm	SM: 40km	-5.0	0	-34.0	29.0	6	0-50°	12VDC 1.0A	2.25U/2U	FCC classA, CE
LMCS4011C-SSC60	IEEE 802.3 802.3u	SC	1310nm	SM: 60km	-3.0	0	-38.0	35.0	6	0-50°	12VDC 1.0A	2.25U/2U	FCC classA, CE
LMCS4011C-SSC80	IEEE 802.3 802.3u	SC	1310nm	SM: 80km	-2.0	3.0	-37.0	35.0	6	0-50°	12VDC 1.0A	2.25U/2U	FCC classA, CE
LMCS4011C-SSC100	IEEE 802.3 802.3u	SC	1550nm	SM:100km	-5.0	0	-36.0	31.0	6	0-50°	12VDC 1.0A	2.25U/2U	FCC classA, CE

LMCS4012C-xx

100BASE-TX to 100BASE-FX Manageable Redundant Converter

Key Features

- ▶ LMCS4012C-MSC:
Two 100Base-TX (RJ-45/STP)
Interfaces, One 10BaseTwo
100Base-FX (FO-SC) Multimode
Interfaces
- ▶ On request:
Two 100Base-TX (RJ-45/STP)
Interfaces, One 10BaseTwo
100Base-FX (FO-ST) Multimode
Interfaces
- ▶ On request:
Two 100Base-TX (RJ-45/STP)
Interfaces, One 10BaseTwo
100Base-FX (FO-MTRJ) Multimode
Interfaces
- ▶ LMCS4012C-SSC25 (X-SSC40 and
X-SSC-60 on request):
One 10BaseTwo 100Base-TX (RJ-
45/STP) Interfaces, One 10BaseTwo
100Base-FX (FO-SC) Singlemode
Interfaces
- ▶ All Converter comply to IEEE 802.3u
Fast Ethernet Standards
- ▶ LED Indication: Power / Primary /
Secondary / Link / Activity
- ▶ Switch for FDH/HDX operation
- ▶ Extended Fiber Optic Distance up to
2,000m (LMCS4012C-MSC)
- ▶ Extended Fiber Optic Distance up to
25,000m (LMCS4012C-SSC25)
- ▶ Extended Fiber Optic Distance up to
40,000m (on request)
- ▶ Extended Fiber Optic Distance up to
60,000m (on request)
- ▶ Plug and Play Operation

Specifications

Model	Standard	Fiber Connector Type	Wavelength	Typical Distance	Min TX PWR (dBm)	Max TX. PWR (dBm)	Sensitivity (dBm)	Link Budget (dB)	LEDs	Temp.	Power	Dimensions (WxDxH)mm	EMI
LMCS4012-MSC	IEEE 802.3u	SC/ST	1310nm	MM: 2km	-19.0	-14.0	-30.0	11.0	5	0-50°C	12VDC 1.0A	2.25U/2U	FCC classB, CE
on request	IEEE 802.3u	MT-RJ	1310nm	MM: 2km	-19.0	-14.0	-30.0	11.0	5	0-50°C	12VDC 1.0A	2.25U/2U	FCC classB, CE
LMCS4012C-SSC20	IEEE 802.3u	SC	1310nm	SM: 25km	-20.0	-7.0	-22.0	12.0	5	0-50°C	12VDC 1.0A	2.25U/2U	FCC classB, CE
LMCS4012C-SSC25	IEEE 802.3u	SC	1310nm	SM: 25km	-15.0	-7.0	-34.0	19.0	5	0-50°C	12VDC 1.0A	2.25U/2U	FCC classB, CE
LMCS4012C-SSC40	IEEE 802.3u	SC	1310nm	SM: 40km	-5.0	0	-34.0	29.0	5	0-50°C	12VDC 1.0A	2.25U/2U	FCC classB, CE
LMCS4012C-SSC60	IEEE 802.3u	SC	1310nm	SM: 60km	-3.0	0	-38.0	35.0	5	0-50°C	12VDC 1.0A	2.25U/2U	FCC classB, CE
LMCS4012C-SSC80	IEEE 802.3u	SC	1310nm	SM: 80km	-2.0	3.0	-37.0	35.0	6	0-50°C	12VDC 1.0A	2.25U/2U	FCC classB, CE
LMCS4012C-SSC100	IEEE 802.3u	SC	1550nm	SM:100km	-5.0	0	-36.0	31.0	6	0-50°C	12VDC 1.0A	2.25U/2U	FCC classB, CE

LMCS4010C-xx

2-Wavelength Single Fiber WDM Ethernet Converter Module

Key Features

- ▶ Complies to IEEE 802.3 & 802.3u Standard
- ▶ Two-Wavelength Single Fiber WDM Converter (Single-Mode 20KM/SC)
- ▶ Auto Crossover MDI/MDIX supported
- ▶ Auto Negotiation or manual setting for TP Port speed & Duplex Mode

Specifications

Model	Standard	Fiber Connector Type	Wavelength	Typical Distance	Min TX PWR (dBm)	Max TX PWR (dBm)	Sensitivity (dBm)	Link Budget (dB)	LEDs	Temp.	Power	Dimensions (WxDxH)mm	EMI
LMCS4010C-SSC20A	IEEE 802.3 802.3u	SC	TX: 1310nm RX: 1550nm	20km	-14.0	-7.0	-33.0	19.0	6	0-50°C	12VDC 1.0A	2.25U/2U	FCC classA, CE
LMCS4010C-SSC40A	IEEE 802.3 802.3u	SC	TX: 1310nm RX: 1550nm	40km	-8.0	-3.0	-33.0	25.0	6	0-50°C	12VDC 1.0A	2.25U/2U	FCC classA, CE
LMCS4010C-SSC20B	IEEE 802.3 802.3u	SC	TX: 1550nm RX: 1310nm	20km	-14.0	-7.0	-33.0	19.0	6	0-50°C	12VDC 1.0A	2.25U/2U	FCC classA, CE
LMCS4010C-SSC40B	IEEE 802.3 802.3u	SC	TX: 1550nm RX: 1310nm	40km	-8.0	-3.0	-33.0	25.0	6	0-50°C	12VDC 1.0A	2.25U/2U	FCC classA, CE

LMCS4111A-xx

10/100M STP to 100BASE-FX Manageable Switching Converter Module

Key Features

- ▶ LMCS4111A-MSC: One 10/100Base-TX (RJ-45/STP) Interface, One 100Base-FX (FO-SC) Interface
- ▶ On request : One 10/100Base-TX (RJ-45/STP) Interface, One 100Base-FX (FO-ST) Interface
- ▶ On request : One 10/100Base-TX (RJ-45/STP) Interface, One 100Base-FX (FO-MTRJ) Interface
- ▶ LMCS4111A-SSC40 (X-SSC20, X-SSC25 and X-SSC60 on request) One 10/100Base-TX (RJ-45/STP) Interface, One 100Base-FX (FO-SC) Singlemode Interface
- ▶ Comply with IEEE 802.3 & 802.3u Fast Ethernet Standards
- ▶ LED Indication: Power,FDX,TX 100,TX (Link/Act),FX 100,FX (Link/Act)
- ▶ Dual Port 10/100Mbps Switch inside
- ▶ Extended Fiber Optic Distance up to 2,000m (LMCS4111A-MSC)
- ▶ Extended Fiber Optic Distance up to 25,000m (LMCS4111A-SSC25)
- ▶ Extended Fiber Optic Distance up to 40,000m (LMCS4111A-SSC40)
- ▶ Extended Fiber Optic Distance up to 60,000m (LMCS4111A-SSC60)
- ▶ Metal Case

The LMCS4111A-X consists of a series of 10/100Base-TX to 100Base-FX media converters. This compact size, switch based converter function just like a 2 port switch rather than a traditional converter. User now may upgrade or extend their existing 100Base-TX or even 10Base-T network into fiber network easily.

All LMCS4111A-X are fully compliant with IEEE802.3 and 802.3u standards. The RJ45(STP) port of all LMCS4111A-X support auto-negotiation functions, provide a maximum bandwidth of up to 200Mbps (100M full duplex) or up to 20Mbps (10M, full duplex) for distances of up to 2Km - when using multimode fiber cable; or up to 60Km - when using singlemode

fiber cable. Installation and operation of the LMCS4111A-X is simple and straightforward. In addition, built-in power supplier eliminate the need of additional power adapter.

The LMCS4111A-X works well with LMCS4000A-16M-Chassis and most of slide-in converters as well and also complements any other products featuring a 100Base-FX interface.

Specifications

Model	Standard	Fiber Connector Type	Wavelength	Typical Distance	Min TX PWR (dBm)	Max TX. PWR (dBm)	Sensitivity (dBm)	Link Budget (dB)	LEDs	Temp.	Power	Dimensions (WxDxH)mm	EMI
on request	IEEE 802.3u	SC/ST	1310nm	MM: 2km	-19.0	-14.0	-30.0	11.0	4	0-50°C	10-240 VAC	140x135x37	FCC classA, CE
on request	IEEE 802.3u	SC	1310nm	SM: 20km	-20.0	-7.0	-32.0	12.0	4	0-50°C	10-240 VAC	140x135x37	FCC classA, CE
on request	IEEE 802.3u	SC	1310nm	SM: 25km	-15.0	-7.0	-34.0	19.0	4	0-50°C	10-240 VAC	140x135x37	FCC classA, CE
on request	IEEE 802.3u	SC	1310nm	SM: 40km	-5.0	0	-34.0	29.0	4	0-50°C	10-240 VAC	140x135x37	FCC classA, CE
on request	IEEE 802.3u	SC	1310nm	SM: 60km	-3.0	0	-38.0	35.0	4	0-50°C	10-240 VAC	140x135x37	FCC classA, CE
on request	IEEE 802.3u	SC	1310nm	SM: 80km	-2.0	3.0	-37.0	35.0	4	0-50°C	10-240 VAC	140x135x37	FCC classA, CE
on request	IEEE 802.3u	SC	1550nm	SM:100km	-5.0	0	-36.0	31.0	4	0-50°C	10-240 VAC	140x135x37	FCC classA, CE