

10G Chassis with Line Card

10G CHASSIS OVERVIEW

10G CHASSIS is a complete and versatile solution for the applications such as FTTx, CWDM, and carrier Ethernet. By the diversified speeds of 1,000Mbps and 10G, Carelink provides different CL-MCL series module cards for different applications and can be applied according to your ideal network topology.

Combined with CL-MCL series module cards, 10G CHASSIS provide various interfaces such as UTP, SFP, SFP+, XFP and CX4. All these interfaces are developed to support the protocols such as 100Base-Tx, 100Base-Fx, 1000Base-T, 1000Base-X, 10GBase-T, 10GBase-LR, 10GBase-SR and 10GBase-CX4, thus making your network more complete and solid.

Also, CL-MCL series module cards support MIB Counter Report including counters such as Packet, Byte, Broadcast packet, Pause Frame, Length: 64 Bytes, Length: 65~127 Bytes, Length: 128~255 Bytes, Length: 256~511 Bytes, Length: 512~1023 Bytes, Length: 1024~1518 Bytes, Unicast packet, Multicast packet, CRC Error, IP Checksum Error, Under size packet, and Over size packet.

All CL-MCL series module cards are equipped with real-time LEDs which display the status of each port, thus allowing users to view network status easily.

10G CHASSIS provides an easy-to-access Management Webpage, allowing users to view system status, counters, upgrading firmware/FPGA and network statistics. Moreover, CL-MCL-M module card allows you to cascade multiple 10G CHASSIS for managing these chassis at the same time.

With various interfaces, 10G CHASSIS provides different conversions between fibers and copper wires in 10G Ethernet.



FCC Part 15, Class A
CISPR 22 Class A



Supports 3R (Re-generation, Re-timing, Re-shaping) Performance



FEATURES

- Diversified interfaces including SFP, SFP+, UTP, XFP and CX4
- Supports 3R (Re-generation, Re-timing, Re-shaping) Performance
- Supports Jumbo Frame
- Supports D/D (Digital Detection) functioned optical transceivers and overload protection
- Support easy-to-use Management Webpage that allows users to view system status, counters, upgrading firmware/FPGA and network statistics
- Multiple 10G CHASSIS chassis can be cascaded for system management
- Replaceable power modules for AC & DC power
- Supports Link Loss Forwarding
- Optional Fan Tray (CL-MC-FAN) which can be placed under 10G CHASSIS chassis for ventilation

KEY ADVANTAGES

- Fast connection with multi-function
- Provide reliable long-distance connection
- Port supported: SFP, SFP+, UTP, XFP and CX4




MAIN APPLICATIONS

- Media converter for network backbone
- Connection between fiber to copper or fiber to fiber 10G Ethernet equipment
- Can be applied in Telecommunication room, R&D laboratory, Data center, and etc.

DIREKTRONIK

Direktronik AB tel. 08-52 400 700 www.direktronik.se








10G CHASSIS SPECIFICATION

Model	10G CHASSIS	
Slot	16 Slots for Installing CL-MCL Series Module Cards	
Dimension	441 mm x 310 mm x 88 mm	
Temperature	➤ Operating: 0°C ~ 40°C (32°F ~ 104°F)	➤ Storage: 0°C ~ 50°C (32°F ~ 122°F)
Humidity (non-condensing)	➤ Operating: 0% ~ 85% RH	➤ Storage: 0% ~ 85% RH
Built-in Sensors	Detecting system temperatures, rotation speed of fans, and system voltage	
Power Module		
Model	 CL-MCLP-AC-300 & CL-MCLP-AC-100	 CL-MCLP-DC-300 & CL-MCLP-DC-100
Power Source	➤ 300W AC Redundant SPS (Vin 90~240VAC) ➤ 100W AC Redundant SPS (Vin 90~240VAC)	➤ 300W DC Redundant SPS (Vin 36~72VDC) ➤ 100W DC Redundant SPS (Vin 36~72VDC)
Power Jack	Male IEC 320 Receptacle	3 Terminal Connectors
Optional Fan Tray		
Model	 CL-MC-FAN	
Power Source	2 Mini-DIN 9-Pin Ports or 1 12V DC Power Jack	
Dimension	441 mm x 310 mm x 29 mm	

DIREKTRONIK

Direktronik AB tel. 08-52 400 700 www.direktronik.se

CL-MCL SERIES LINE CARDS SPECIFICATION

Model								
Module Card								
	CL-MCL-1000	CL-MCL-SFP+2	CL-MCL-XSFP	CL-MCL-SFP+	CL-MCL-CX4	CL-MCL-XFP2	CL-MCL-XFP	
Interface Ports								
Interface	Port A	RJ45	SFP+	SFP+	RJ45	CX4	XFP	RJ45
	Port B	SFP	SFP+	XFP	SFP+	SFP+	XFP	XFP
Maximum Data Transfer Rate	1000 Mbps	10 G	10 G	10 G	10 G	10 G	10 G	10 G
Ethernet Mode	1000Base-T 1000Base-X	10GBase-LR 10GBase-SR	10GBase-LR 10GBase-SR	10GBase-LR 10GBase-SR 10GBase-T	10GBase-LR 10GBase-SR 10GBase-CX4	10GBase-LR 10GBase-SR	10GBase-LR 10GBase-SR	10GBase-T 10GBase-LR 10GBase-SR
Jumbo Frame	Available							
System Control								
System Control	➤ Transceiver Power ON/OFF ➤ Selectable Auto/Force Media Type ➤ System Upgrade (F/W, FPGA)				➤ Link Connection Mode: Slave/Segment ➤ Loopback*			
Device Status Report								
Status Report	➤ Information ➤ Link Status ➤ Temperature Detection				➤ Module Detection ➤ Fiber Module Detection ➤ Transceiver overloading			
MIB Counter Report *								
Counter Report	➤ Packet ➤ Broadcast packet ➤ Length: 64 Bytes ➤ Length: 128~255 Bytes ➤ Length: 512~1023 Bytes ➤ Unicast packet ➤ CRC Error ➤ Under size packet				➤ Byte ➤ Pause Frame ➤ Length: 65~127 Bytes ➤ Length: 256~511 Bytes ➤ Length: 1024~1518 Bytes ➤ Multicast packet ➤ IP Checksum Error* ➤ Over size packet			

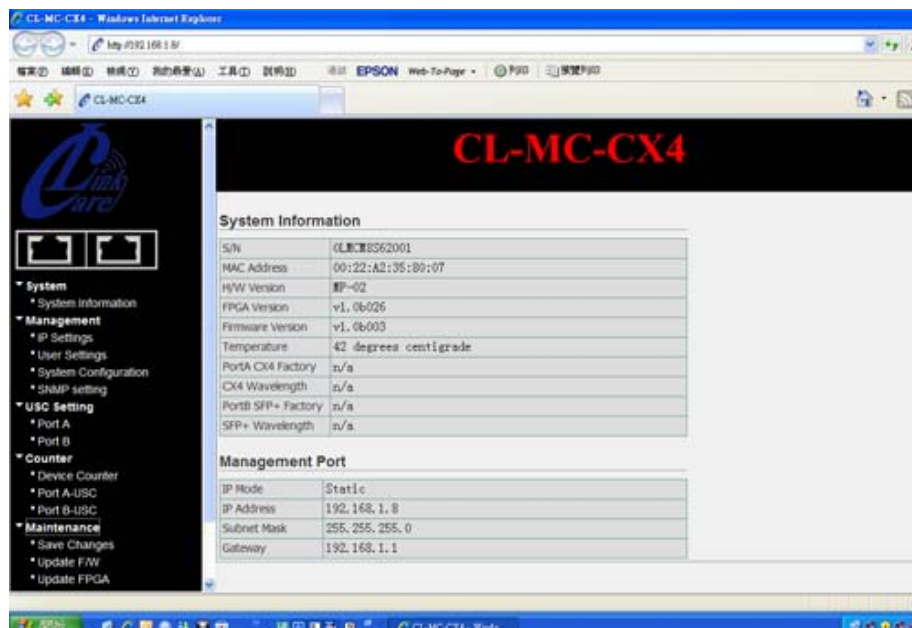
*CL-MCL-1000 Module Card does not support Loopback and IP Checksum Error functions.

DIREKTRONIK

Direktronik AB tel. 08-52 400 700 www.direktronik.se

MANAGEMENT WEBPAGE

10G CHASSIS is embedded with a Management Webpage, and can be accessed by connecting



CL-MCL-M's RJ45 Port to the network which your PC is connected to, as shown in the figure down below.

10G CHASSIS's Management Webpage allows users to configure test parameters, access counters, make system settings and upgrade system firmware/FPGA.

RELATED PRODUCTS

CL-MCL Series Module Cards

Module Cards for 10G CHASSIS



CL-MC Series Standalone Media Converter

Standalone Media Converter with Various Interfaces



DIREKTRONIK

Direktronik AB tel. 08-52 400 700 www.direktronik.se

Product Brief | 10G Chassis
