2-channel Ethernet to Fibre Media Converter

Westermo MCI-422, MM / SM

- Two Channels 10/100 TX to 100 FX media converter
- Two 10/100 TX with 2 100 FX Fast Ethernet Fibre Switch
- Supports Auto MDI/MDI-X, Auto Negotiation
- Supports Multi-mode 2 km, Single-mode 30 km
- 3.2 Gbit/s Non-Blocking Switch Fabric
- Auto Link Loss Forwarding (LLF) for fault detection
- Power and Port event alarm
- Redundant 10~60 V DC Power inputs with DC polarity protection
- NEMA -TS2 Compliance (applying)
- Aluminum case with IP-31 grade protection
- Supports 1.5 KV Hi-Pot isolation protection
- Operating temperature –25 to 75°C for hazardous environment application (–40 ~ 75°C wide operating temperature model available by request)

CE FC RoHS

The Westermo MCI-422 is not only a compact 4-port switch, but also a 2 channel RJ45 to fibre media converter.

As a switch the MCI-422 is an industrial 4-port 10/100 Mbit/s Fast Ethernet Fibre Switch, incorporating 3.2 Gbit/s switching fabric with non-blocking store and forward technology. In converter mode it is a 2-channel 10/100 TX to 100 FX media converter, featuring remote Link Loss Forwarding technology.

The unit is simply configured as either device using a DIP switch. The LFF is also set up in this way.

The MCI-422 has dual redundant power inputs with wide DC range 10 ~ 60 V,

it also has an alarm relay to trigger an alarm signal for port or power events.

Two versions are available for either single mode or multimode fibres. The MM version for multimode fibres up to 2KM and the SM version for single mode fibre to 30km.

Proudly Distributed by Gross Automation | (877) 268-3700
www.westermosales.com | sales@grossautomation.com

Specifications

Technology	
Standard	IEEE 802.3 10Base-T
	IEEE 802.3u 100Base-TX
	IEEE 802.3u 100Base-FX
	IEEE 802.3x Flow Control and Back Pressure

Performance	
Switch Technology	3.2 Gbit/s Store and Forwarding Technology
System forwarding performance	1.19 Mega packets per second, 64 bytes packet size. (Switch Mode) 14880 pps for 10Base-T 148810 pps for 100Base-TX/ FX
Mac address	1K MAC address entries with automatic learning and aging (Switch Mode only)
Packet Buffer	512 kbits shared memory
Forwarding Technology	Store and Forward
Link Lose Forward	Supports Bi-directional Link Loss Forwarding function (Converter mode only)
Operating Mode	Converter/Switch mode selected by DIP switch Switch Mode: data exchange on 4 ports (Channel A, B exchange) Converter mode: data forwarding on independent channel (A, B)
Digital Output	Dry Relay Output with 1 A @ 24 V DC ability

Interface	
Ethernet copper port	2 × 10/100 TX ports with Auto MDI/MDI-X, Auto Negotiation
Fibre port	2 × 100 Mbit/s Fibre port, SC or ST (optioned).
	Westermo MCI-422f-mm: Multi-mode (Channel A,B)
	Westermo MCI-422f-ss : Single-mode (Channel A,B)
	Westermo MCI-422f-ms : Multi-mode (Channel A),
	Single-mode (Channel B)
Ethernet Copper Cable	RJ-45 Ethernet port : 100 meters 10Base-T: 2-pairs UTP/STP Cat-3,4 TIA/EIA 568-B cable 100Base-TX : 2/4 pairs UTP/STP Cat.5 TIA/EIA 568-B cable
Ethernet Fibre Cable	Westermo MCI-422-m: 2 km distance, 50 ~ 62.5/125 µm Multi-mode Fibre Cabel. Westermo MCI-422-s: 30 km distance, 8 ~ 10/125 µm Single-mode Fibre cable.
Diagnostic LEDs	System Power (Green on) : Power 1, 2 Relay Alarm: Active (Red) Link Loss Forwarding: Enable (Green on) Op. Mode: Convert (Green on) Fibre Ethernet Port (Channel A/B): Link/Activity (Green on/Yellow Blinking) Ethernet Port: Link/Activity (Green on/Yellow Blinking)
Reset Button	For Operating mode change & LLF function activation
DIP Switch	DIP Switch 1: CH. B Fibre link event alarm control, Enable (On) / Disable (Off) DIP Switch 2: CH. A Fibre link event alarm control, Enable (On)/ Disable (Off) DIP Switch 3: CH. B Copper link event alarm control, Enable (On)/ Disable (Off) DIP Switch 4: CH. A Copper link event alarm control, Enable (On)/ Disable (Off) DIP Switch 5: Operating mode select, Converter mode (On)/ Switch mode (Off) DIP Switch 6: Link Loss Forwarding control, Enable(On)/ Disable (Off) DIP Switch 7: Power Event Alarm Control, Enable (On) / Disable (Off)
Power Connector	Removable Terminal Block
Digital Output	Removable Terminal Block

Proudly Distributed by Gross Automation | (877) 268-3700
www.westermosales.com | sales@grossautomation.com

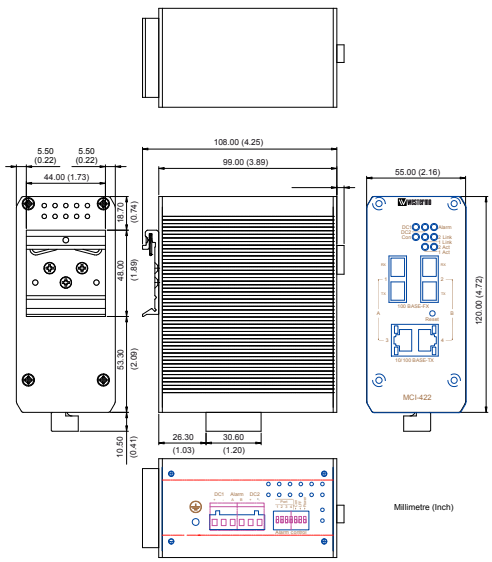
Power Requirements	
System Power	DC 10~60V with polarity reverses correction. Supports Positive / Negative power system
System power consumption	6 Watts / DC 24 V

Mechanical	
System Installation	DIN Rail installation
Enclosure protection	Ingress Protection code – 31
Dimensions	99 (D) x 55 (W) x 120 (H), unit: mm (without Din-rail kit)
Weight	?? kg with package
	?? kg without package

Environmental	
Operating Temperature	–25 ~ 75°C / –40 ~ 75°C (wide operating temperature model)
Operating Humidity	0% ~ 95%, (non-condensing)
Storage Temperature	–40 ~ 75°C
Storage Humidity	0% ~ 95%, (non-condensing)

Regulatory Approvals	
EMI:	CE/EN 55022 class A, FCC Class A, Compliance with EN 50155 EMI EN 61000-3-2:2006, EN 61000-3-3, EN 61000-6-2
EMS	CE/ EN 55024, EN 61000-6-4, Compliance with EN 50155 EMS, IEC 61000-4-2, IEC61000-4-3, IEC61000-4-4, IEC61000-4-5, IEC61000-4-6, IEC61000-4-8
Safety	Hi-pot Testing – AC 1.5 KV
Shock	IEC 60068-2-27
Vibration	IEC 60068-2-6
Free Fall	IEC 60068-2-32

Dimensions (Unit – mm / In)



Ordering Information	
Art.no	**Description**
3624-0100	Westermo MCI-422-MM-SC2, 2 km
	Quick Installation Guide
Art.no	**Description**
3624-0110	Westermo MCI-422-SM-SC15, 15 km
	Quick Installation Guide

Proudly Distributed by Gross Automation | (877) 268-3700
www.westermosales.com | sales@grossautomation.com