



RS-232/RS-485/RS-422 Converters

MW10408-I

◆ 8-port cards insert Optical Isolation RS-485/422 Hub

➤ Features

- 8 ports cards insert optical isolation RS485/422 HUB
- Star structure, bi-directional Converter RS232 to RS485/422 or RS485/422 repeater
- Reach up to 3000m at the rate of 9600bps
- 600W surge protection,15KV ESD protection, built-in short circuit protection
- Each port 3000V optical isolation separately
- Support stage connection, each port support 256 nodes loopback
- Data direction auto-turnaround, no flow control is necessary



➤ Introduction

MW10408-I is a type of RS-485/422 bus division concentrator of high performance. MW10408-I adopts the unique equipotential differential isolation and bus division concentration technology to effectively such problems as ground potential difference, impedance matching and lightning strike frequently seen in engineering wiring process. Users can easily optimize the RS-485/RS-422 bus structure, divide the network section and improve the communication reliability.

The fault network section shall be isolated in case of lightning strike or equipment faults to ensure the high communication reliability of other network sections. Such performance of MW10408-I can significantly improve the reliability of existing RS-485/RS-422 network, and effectively shorten the network maintenance time. Reasonable utilization of MW10408-I can enable you to design unique RS-485/RS-422 system.

➤ Specification

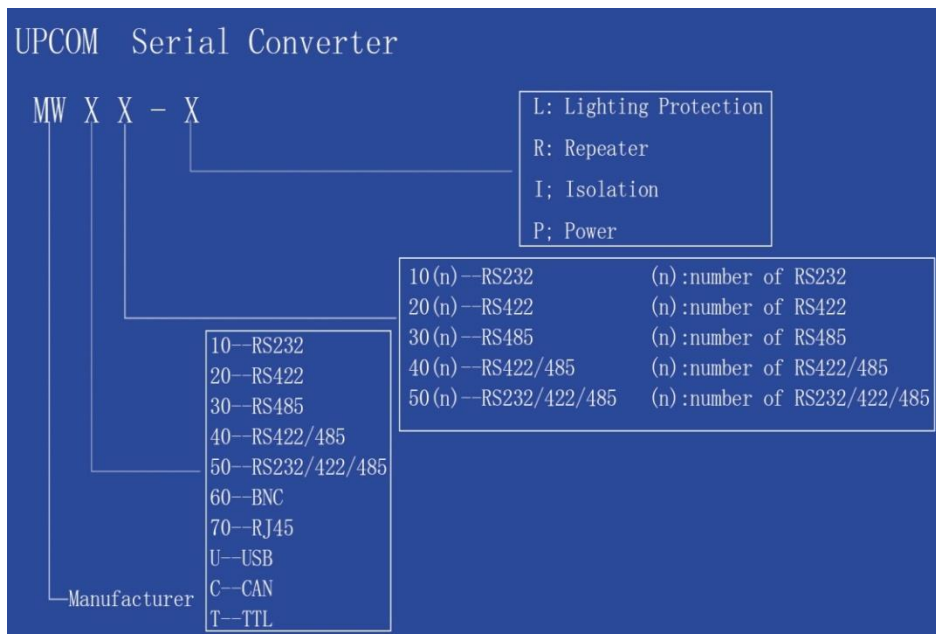
Technology	
Standards	EIA RS-232C, RS-485, RS422 standard
RS-232 signal	TX, RX, GND
RS-422 signal	T+, T-, R+, R-, GND
RS-485 signal	D+, D-, GND
Working mode	Asynchronism, point to point, 2 wire half-duplex,4 wire full duplex
Baud rate	300~115200bps, auto test serial signal rate detect signal speed automatically, zero delay time
Flow control	Data direction auto-turnaround, no flow control is required
Transfer distance	RS-485/422 side:1.8Km(9600bps),RS-232 side: no less than 15m
Loading	Support 256 nodes loopback
Optical isolation	3000V
Port protection	600W surge protection,15KV ESD protection
Connector	5 bit terminal block
Power	
Power input	220VAC
Consumption	5W
Environment	
Operating temperature	-10 ℃ to 60 ℃

Storage temperature	-40 ℃ to 85 ℃
Humidity	5% to 95%(no condensation)
Appearance	
Dimensions	227.0mm×146.0mm×43.0mm
Material:	Plastic
Color	Black
Weight	1000g
Warranty	5 years
Approvals	FCC,CE,RoHS approvals

➤ Dimension



➤ Ordering Information



➤ Insert Card Structure

MW10408-I is a type of 8-port insert card photoelectric isolation RS-485/422 bus division concentrator, which is available for random configuration of insert card by users, and can also realize the dual conversion between RS-232 and RS-485/RS-422 as well as the RS-485/422 relay function. It is only need to replace or add insert card in case of damage and capacity expansion to effectively improve the maintenance efficiency.

➤ Photoelectric Isolation of Industrial Level

Normally, RS-485 bus is required to link up different equipments for coordinated operation in industrial control domain. Due to environmental differences, ground potential differences among equipments may affect the normal communication of

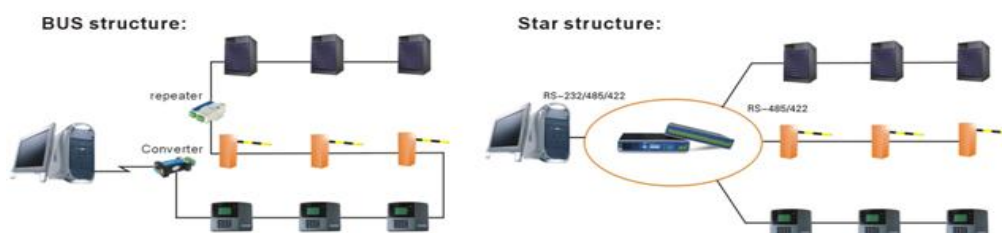
equipments. MW10408-I aims to provide photoelectric isolation above 3KV for all ports for the purpose of solving the transmission problems incurred by distance and differences in ground potential (MW10408-I can adapt to the RS-485/422 transmission mode, which is provided with 5-digit industrial terminal).

➤ Protection for Short and Open Circuits

MW10408-I is provided with protection for short and open circuits at all ports. This type of design can ensure the isolation of problem port if one of the port equipments is in failure so as to ensure the normal operation of other network sections.

➤ Star-shape Connection

Owing to the unique design, MW10408-I can provide users with RS-485/422 star-shape connection mode. This mode can change the single structure of original bus into network structure to facilitate the engineering construction significantly.

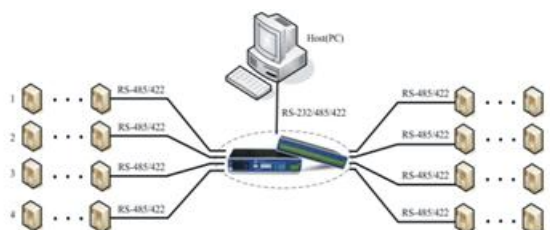


➤ Bus Division Concentration

MW10408-I can easily optimize the system bus structure for respective handling of equipments of different functions or of different regions for the purpose constituting different independent network sections without changing equipment itself. This can not only improve the system stability but can also significantly shorten the system maintenance time.

➤ Applications

MW10408-I representative exert as follows:



1. Up stream port

MW10408-I has one UP stream port, adopt 5 bit terminal block, be used to connect UP stream equipment like as Host PC. According to users different require, You can choice RS-232, RS-485 or RS-422 mold to connect main equipment,the pin is defined in the products.

2. Down stream port

MW10408-I has eight Down stream port, adopt 5 bit terminal block, be used to connect Down stream equipment like as Pos data collection equipment. According to users different require, You can choice RS-485 or RS-422 mode to connect Down stream main equipment. the pin is defined in the products.

➤ Packing List

- MW10408-I×1
- 220V power line×1
- User manual ×1