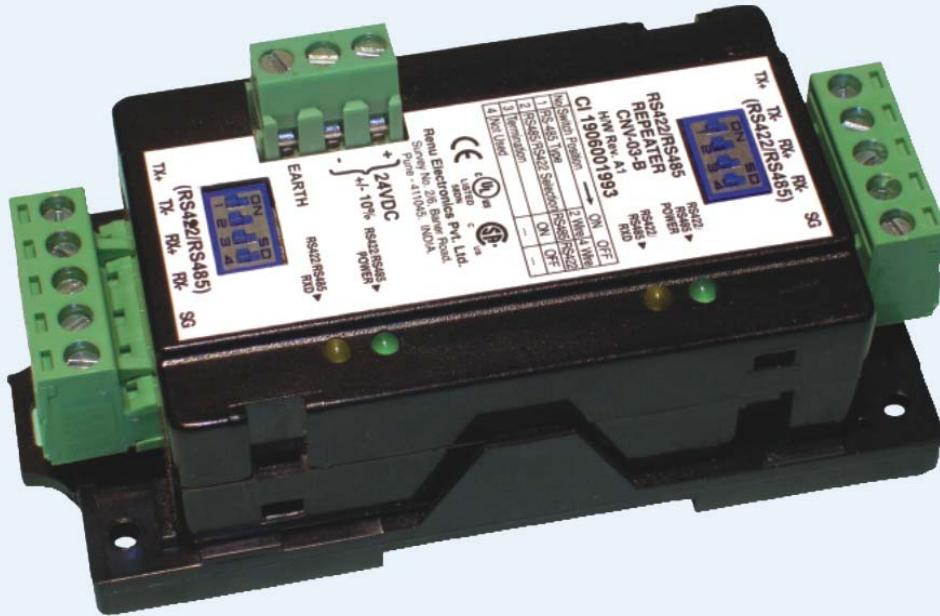


Universal Repeater RS422/RS485



CNV-03-B

Universal RS422 / RS485 Repeater:

- DIN rail or panel mounted compact Repeater
- External powered design
- Isolation of power and communication ports
- Automatic detection of communication baud rate
- Automatic control of transceiver direction
- CE / CSA with UL certification
- Easy to use plug and play device (no configuration software required)

Specifications

Power Supply	: 24 VDC +/- 10 %, 2 Watt max	Immunity to ESD	: Level 3 as per IEC1000-4-2
Communication	: Two ports as follows: COM1: RS422 / RS485 COM2: RS422 / RS485	Immunity to Transients	: Level 3 as per IEC1000-4-4
Data Rates	: Up to 115.2 kbps.	Radiated Susceptibility	: Level 3 as per IEC1000-4-3
Distance (1200m)	: Unit transmits data up-to 4000 ft	Immunity to Conducted RF	: Level 3 as per IEC1000-4-6
Temperature	: Operating: 0° to 60 °C	Emissions	: EN55011 CISPR A
Storage	: - 40° to 90 °C	Certifications	: CE and CSA
Power port Isolation	: 1 KV Isolation between communication ports and Power supply, through DC-DC coupler	Dimensions	: 101mm (L) X 40mm (D) X 51mm (W) (DIN RAIL mounting)
COM port Isolation	: 1KV Isolation between COM1 & COM2 through opto-isolation	Mounting	: Back Panel DIN Rail
Humidity	: 10% to 90% (Non condensing)	Weight	: 125 gms approximately

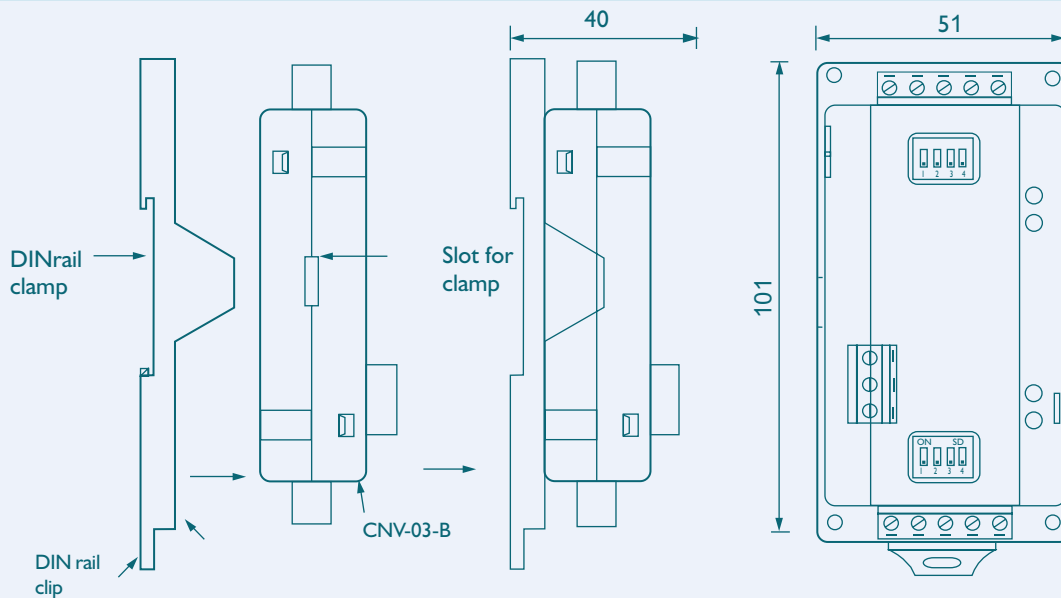
Functionality

RS485 communication levels can physically support 32 nodes up-to a maximum distance of 1200 mtrs. CNV-03-B is a RS422 / RS485 repeater. It is used where more than 32 nodes are to be connected in the RS485 network or the distance between two nodes is more than 1200 mtrs. Multiple CNV-03-B units can be used to support the maximum of 255 nodes in one network.

CNV-03-B has 2 communication ports. Both the communication ports have screw type connectors. Communication ports as well as power port are isolated. CNV-03-B supports both 2 wire / 4 wire RS485 and RS422 configuration. Switch settings select 2 wire / 4 wire communication on each COM port.

CNV-03-B operates with a 24 VDC external supply.

Dimensions



All dimensions are in mm.



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Port Multiplexer



PMX-00-B

Device to connect Two Masters to One Slave features :

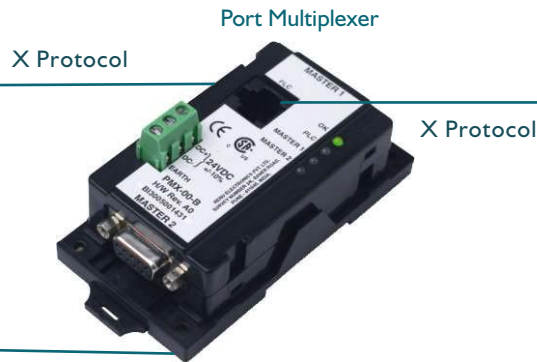
- DIN Rail or Panel Mounted compact Port Multiplexer
- Hardware with three communication ports
- RS232 support for Master Ports. PLC port with RS232 / RS422 / 2 or 4 wire RS485 / CMOS
- Connect Two Master devices to any serial device (e.g. PLC, Drive) on same protocol
- Ideal for PLCs / Drives which have only one communication port
- Same model can be configured for different supported protocols
- Free Programming software for Port Multiplexer !!
- CE marked with optional UL/ CSA certification

Possible Applications :

Port Multiplexer allows the connection of two field devices to a single controller (PLC) over a serial link on time sharing basis with same protocols. Some of possible Port Multiplexer applications include :

1. HMI and SCADA Communication / PLC Programming to PLC.

Operator interface (Master 2)



PLC

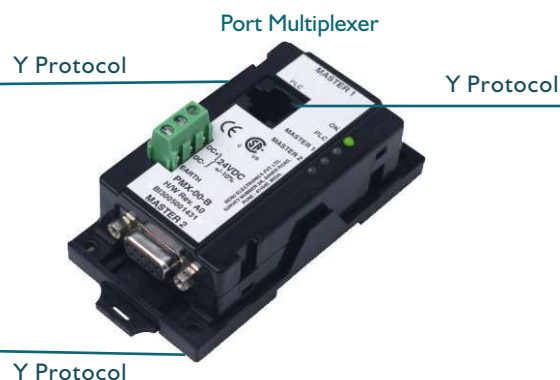


ASTRA (Master 1)

X Protocol

2. PLC communication with Analog I/O module and Operator Interface

Analog I/O Module (Master 2)



PLC

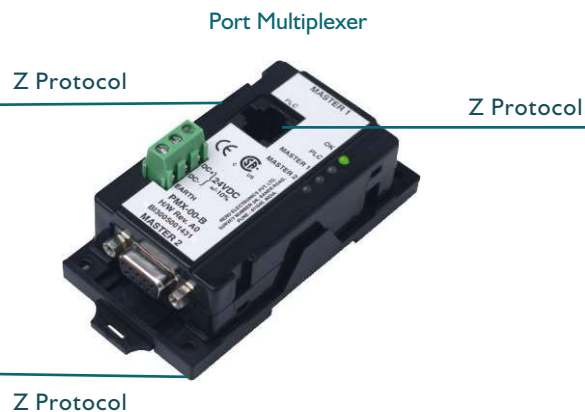


Operator interface (Master 1)

Y Protocol

3. PLC communication with Different Operator Interfaces

Operator interface (Master 2)



PLC



Operator interface (Master 1)

Z Protocol

Basic Port Multiplexer Operation :

Port Multiplexer is a Port Switch for devices like PLCs, Inverters, Controllers etc. Port Multiplexer has three serial ports that connect with three different devices that support same protocol. Port Multiplexer communicates with the PLC to get the information required by two master devices.

Windows® based Port Multiplexer Setup software helps the user to configure unit.

Once the Application is defined in Setup Software the configuration is downloaded in the Port Multiplexer.

The Unit can now communicate with the connected devices and transfer data between them.

System requirements for Port Multiplexer Setup Software are:

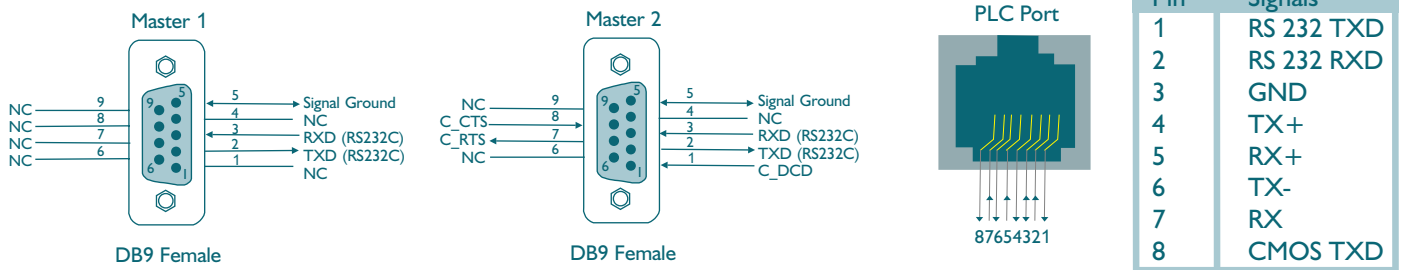
Windows Version	:	Microsoft Windows 9x / NT / 2000 / XP
Processor	:	PENTIUM or higher
Hard disk Space	:	5 MB or more
Mouse	:	Required
RAM	:	16 MB or more
Display resolution	:	800 X 600 (VGA) or better
Display colors	:	16 bit color

Other Items required for Port Multiplexer configuration:

1. Port Multiplexer unit
2. Port Multiplexer Configuration Cable
3. Port Multiplexer Setup Software
4. Devices with communication cables

Communication Ports :

Port Multiplexer has two identical communication ports Master1 and Master2 and third port to connect a PLC. Master ports are compatible to RS232 signal levels and PLC port supports RS232 / RS422 / 2 or 4 wire RS485 / CMOS signal levels. Pin details are given below:



*Do not use pin no. 6 of either of the Master ports.

**Refer Portmultiplexer user manual for specific cable details

PLCs Supported :

Port Multiplexer currently supports following PLC / Protocols:

- AB Df1 Full Duplex (Micrologix / SLC5/0x / PLC5/30)
- Aromat FP Series (Mewtocol)
- IDEC Micro3
- Modbus ASCII
- Modbus RTU
- Omron Host Link

Following PLCs / Protocols can also be supported in Port Multiplexer on request:

- ABB
- AB DH485 (SLC5/0x series)
- Baldor Drives
- Cegelec Alspa series
- CEGELEC
- Crouzet
- Delta DVP Series
- Entertron
- GE Fanuc Series 90-30, VersaMax
- Honeywell
- IDEC MicroSmart, IDEC Open Net
- Idec Micro 1 / FA2jr PLCs
- J-BUS
- Keyence KV Series
- Koyo
- LG MasterK 80S-300S
- Messung XMP-8 / NEXGEN 4000 / NEXGEN 5000
- Mitsubishi FX
- Modbus Slave
- Omron NT Link
- Siemens Step-7 Micro
- Siemens-S7-200 Series
- Siemens S7-300 Series
- Taian TP02 Series
- Telemecanique TSX07/37/57
- Telemecanique 17, 47 & 67 Series
- Toshiba T series (Prog Port)
- Toshiba T1, T2, T3, V series (Link Port)
- Twido
- USS Protocol
- Yaskawa

We welcome an opportunity to develop new, custom drivers and customization of Port Multiplexer products.

Specifications :

Power	:	+ 24 V DC \pm 10%, 100mA max	Mounting	:	DIN rail or back panel mounting
LED's	:	4 LED's for status indication	Dimensions (DIN rail)	:	105mm(L) X 40mm(D) X 51mm(W)
Communication Ports	:	3 Communication ports	Weight	:	125 gm approx.
(Isolation between communication ports and Power supply, through DC-DC coupler is 1 KV)			Approvals	:	CE, CSA
PLC Port	:	Connects to PLC	Immunity to ESD	:	Level 3 as per IEC1000-4-2
Master 1	:	Connects to Master Device 1	Immunity to Transients	:	Level 3 as per IEC1000-4-4
Master 2	:	Connects to Master Device 2	Immunity to Radiated RF	:	Level 3 as per IEC1000-4-3
Temperature	:	Operating : 0° to 50°C	Immunity to Conducted RF	:	Level 3 as per IEC1000-4-6
		Storage : -20° to 80°C	Emissions	:	En55011 CISPR A
Humidity	:	10% to 90% (Non condensing)			

Ordering Options :

Example: **PMX-00-B**

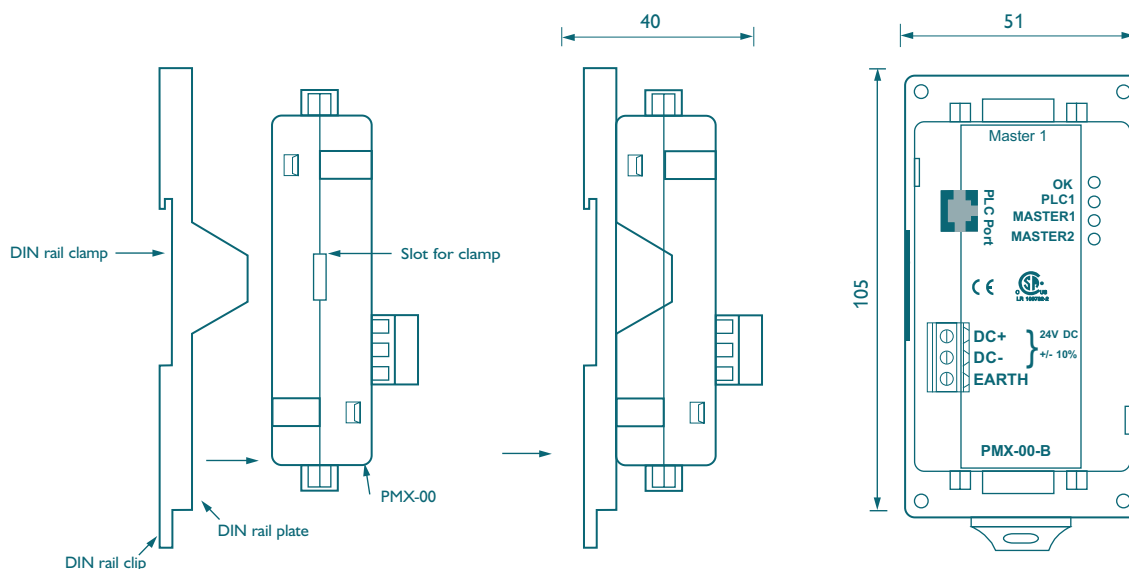
Model

+ 24 V DC External Supply

Black Case

* Units are also available with Gray case. Replace suffix 'B' by 'G' in unit part number for Gray case.

Dimensions :



All dimensions are in mm.



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