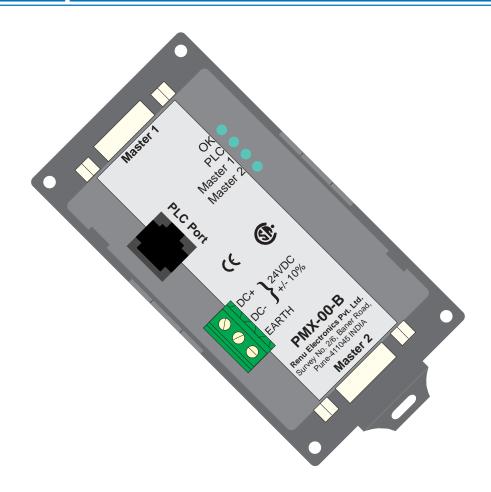
# Port Multiplexer



#### Device to connect two masters to one slave

- ▶ 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
- ldeal for PLC's / 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



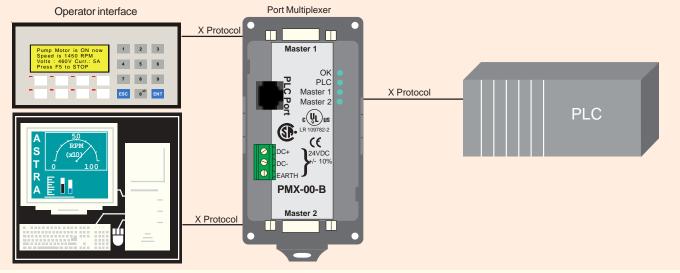




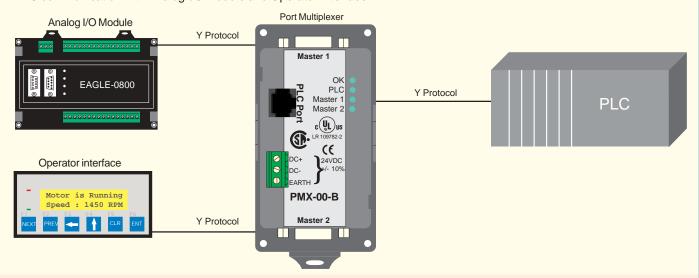
## Possible Applications

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:

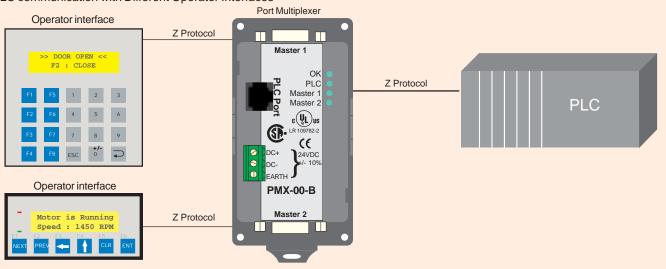
1. HMI and SCADA Communication / PLC Programming to PLC.



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



3. PLC communication with Different Operator Interfaces



Images not to scale.

### **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

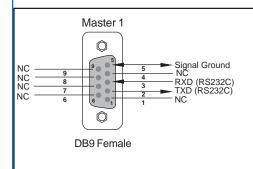
Display colors 16 bit color

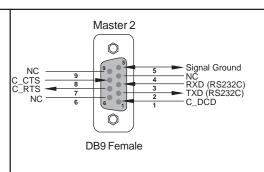
#### Other Items required for Port Multiplexer configuration:

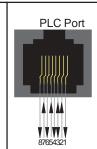
- 1. Port Multiplexer unit
- 2. Port Multiplexer Configuration Cable
- 3. Port Multiplexer Setup Software
- 4. Devices with communication cables

#### **Commuication 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:







Pin	Signals
1	RS 232 TXD
2	RS 232 RXD
3	GND
4	TX+
5	RX+
6	TX-
7	RX-
8	CMOS TXD

#### C's Supported

Port Multiplexer currently supports following PLC / Protocols:

- AB DF1 Full Duplex (Micrologix / SLC5/0x / PLC5/30)
- IDEC Micro<sup>3</sup>
- Modbus RTU

- Aromat FP Series (Mewtocol)
- Modbus ASCII
- Omron Host Link

Following PLC's / Protocols can also be supported in Port Multiplexer on request:

- ABB
- Cegelec Alspa series
- Delta DVP Series
- Honeywell
- Idec Micro 1 / FA2Jr PLCs
- Koyo
- Mitsubishi FX
- Siemens Step-7 Micro
- Taian TP02 Series
- Toshiba T series (Prog Port)
- Twido

- AB DH485 (SLC5/0x series)
- CEGELEC
- Entertron

- Baldor Drives
- GE Fanuc Series 90-30, VersaMax

Messung XMP-8 / NEXGEN 4000 / NEXGEN 5000

- IDEC MicroSMART, IDEC Open Net
- LG MasterK 80S-300S
- Modbus Slave
- Siemens-S7-200 Series
- Telemecanique TSX07/37/57
- Omron NT Link
  - Siemens S7-300 Series
  - Telemecanique 17, 47 & 67 Series

• Keyence KV Series

- Toshiba T1, T2, T3, V series (Link Port)
- USS Protocol
- Yaskawa

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

<sup>\*</sup>Do not use pin no. 6 of either of the Master ports.

<sup>\*\*</sup>Refer Portmultiplexer user manual for specific cable details

## Specifications

Power :  $\pm 24 \text{ V DC} \pm 10\%$ , 100mA max LED's :  $\pm 4 \text{ LED}$ 's for status indication Communication Ports :  $\pm 3 \text{ Communication ports}$ 

[Isolation between communication ports and Power supply,

through DC-DC coupler (isolation = 1 KV)]

PLC Port: Connects to PLC

Master 1: Connects to Master Device 1
Master 2: Connects to Master Device 2

Temperature : Operating : 0° to 50°C

Storage : -20° to 80°C

Humidity : 10% to 90% (Non condensing)

Mounting : DIN rail or back panel mounting Dimensions (DIN rail) : 105mm(L) X 40mm(D) X 51mm(W)

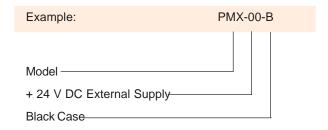
Weight : 125 gm approx.

Approvals : CE, CSA

Immunity to ESD : Level 3 as per IEC1000-4-2 Immunity to Transients : Level 3 as per IEC1000-4-4 Immunity to Radiated RF : Level 3 as per IEC1000-4-3 Immunity to Conducted RF : Level 3 as per IEC1000-4-6

Emissions : EN55011 CISPR A

#### Ordering Options



<sup>\*</sup> Units are also available with Gray case. Replace sufix 'B' by 'G' in unit part number for Gray case.

#### Dimensions

