



# FAQs

## PROFIBUS DP Gateway modules

### Is this a new product?

The PLX51-PBM and PLX51-PBS are upgrades to our protocol gateway family, built upon our 15 years-plus of providing PROFIBUS DP products.

These new gateways provide features and functionality that will allow for some of the fastest data transfer between PROFIBUS DP and EtherNet/IP™ devices of any device, and also ease commissioning, programming, and troubleshooting.

### What are the main benefits of these new modules?

- 1.** The PLX51-PBM module can operate as either a PROFIBUS DP Master or PROFIBUS DP Multi-Slave device. This is selectable through the configuration of the module.
- 2.** The PLX50 Configuration Utility provides the ability to build custom L5X files for easy import into Rockwell Automation® Studio 5000 applications. This saves valuable time for the setup and configuration of the units, reducing PLC programming.
- 3.** The Multi-Slave support of the module will allow the module as a PROFIBUS DP slave to emulate between 1 and 10 slave devices on the network, greatly increasing the amount of Cyclic I/O data that can be transferred on a PROFIBUS DP network from a single device.
- 4.** The built-in PROFIBUS DP packet capture utility provides a powerful troubleshooting tool for the network that saves time when doing setup and commissioning of a PROFIBUS DP network.
- 5.** With support for Device Level Ring (DLR) networks or an embedded 2-port switch, you have flexibility for either a high-availability DLR network or utilizing the module as a 2-port switch to daisy-chain to other Ethernet devices.
- 6.** Optional SD card for storage of configuration and disaster recovery (future firmware release).
- 7.** Hardware switch to prevent remote configuration of the module on an operating network

## **What's the benefit of this solution over competitive solutions?**

The PLX51-PBM module provides you the flexibility to select either PROFIBUS DP master mode, PROFIBUS DP Multi-Slave mode, or Quiet Mode. This will provide the user with a single solution for instances where a user may not be certain what mode of operation is needed.

For Slave-only applications, there is the PLX51-PBS module that provides the Multi-Slave functionality at a lower list price.

The ability to generate custom Studio 5000 L5X user programs minimizes setup and configuration, and with a built-in PROFIBUS DP packet capture utility, any issues on the network can be quickly recognized without additional troubleshooting hardware.

## **What is Multi-Slave mode?**

Multi-Slave mode is the ability of the module to emulate between 1 and as many as 10 nodes on a PROFIBUS DP network.

With many applications, if you need to transfer more than 244 bytes of input data or 244 bytes of output data to a PROFIBUS DP master device, you have to set up DPV1 Read and Write messages in the master device. With multi-slave mode, the PLX51-PBx module can emulate multiple slaves on the network, so transferring more than 244 bytes of Input or Output data can be done simply by setting the module up to emulate an additional slave.

This reduces the configuration of DPV1 Read/Write messaging, and instead the user just adds another slave in the master configuration and the data is transferred as Cyclic I/O data. This allows for the full 1536 Bytes of Input and 1536 Bytes of Output data to be transferred on the PROFIBUS DP network using the high speed cyclic I/O data transfer.

## **What is Quiet Mode?**

Quiet Mode allows the module to sit on a PROFIBUS DP network and take advantage of the built-in PROFIBUS DP packet capture utility. This is a valuable troubleshoot tool if you want to monitor communications of devices on an existing network.

Typically this requires stand-alone PROFIBUS DP packet capture tools, but instead this functionality is built into a powerful gateway module.

## **Why is the packet capture utility so important?**

PROFIBUS DP is known as a network that is easy to set up and configure, but occasionally things don't work as desired... With the built-in packet capture utility, you have the ability to monitor all of the communications on the PROFIBUS DP network. Traditionally, this required separate hardware that had to be installed on the PROFIBUS DP network, but with all of this built into a powerful gateway device, you now have the ability to do protocol conversion and network troubleshooting with the same device. This packet capture utility works in Master, Multi-Slave, and Quiet modes of operation.

## **Is this module a drop-in replacement of other ProSoft gateway modules?**

At this time the module is not a drop-in replacement for our legacy gateway modules. For PROFIBUS DP Master applications, you must build the configuration file in the new PLX50 Configuration Utility.