

COMSOFT



NATIONAL INSTRUMENTS
LabVIEW™



cRIO PB

**PROFIBUS DP Master/Slave
Module for National Instruments
CompactRIO™**

National Instruments CompactRIO enabled for PROFIBUS DP

PROFIBUS DP is Europe's leading fieldbus system and is used in all sectors of the capital-goods and process industry in countless visualization and control applications. National Instruments CompactRIO is a small rugged industrial control and acquisition system for ultrahigh performance and customisation and with a wide range of industrial I/O modules available. The COMSOFT cRIO PB module connects the CompactRIO chassis directly and for the first time to PROFIBUS DP networks.

The cRIO PB module features cyclic DPVo Master class 1 services for the fast exchange of I/O data as well as acyclic DPV1 Master class 2 services for configuration and diagnosis purposes. The module additionally supports DP Slave mode for the integration in existing PROFIBUS DP networks, for example in combination with a PLC.

The small sized and rugged platform CompactRIO from National Instruments is a control and acquisition system designed for applications that require high performance and reliability. Using FPGA technology (Field Programmable Gate Arrays) the implementation of hard real-time-enabled systems is also possible.



National Instruments CompactRIO system

cRIO is a modular system and there is a wide range of industrial I/O modules available. This results in combination with the cRIO PB module in an extremely attractive solution for the realisation of PAC systems implementing high-complex

data acquisition and control functions at the same time.

A direct LabVIEW™ VI interface for a seamless integration of the cRIO PB module and a full graphical Windows based PROFIBUS DP configuration tool with built-in download and online functions are available. The PROFIBUS DP configuration is stored in Flash Type Memory.

The easy-to-use VI interface provides detailed examples including source code for DP Master and DP Slave.

Technical Data

Supported PROFIBUS Protocol Versions	DPVo/DPV1
Operation Mode	Master class 1/2 and DP Slave
Interfaces	PROFIBUS RS485 (isolated) Sub-D 9 pins SPI
Baud Rates	PROFIBUS DP 9600 Bit/s – 12000 Kbit/s SPI 4 Mbit/s
Ambient Temperature Range	0 °C – +55 °C
Power Requirements	1.9 W
Power Supply	24 VDC

Manufacturer:

COMSOFT GmbH | Wachhausstr. 5a | 76227 Karlsruhe | Germany | Tel: +49-721/9497-291 | Fax: +49-721/9497-299 | E-mail: infoicp@comsoft.de | www.comsoft.de