

Features

- IPC/AB PLC Direct-Link Interface Card
- Communicates with PLCs at speeds up to 230.4 kilobaud
- DMP data transfers
- Concurrent network access by multiple application tasks
- Allows peer-to-peer networking
- FORTRAN subroutine library for read/write and data conversion functions
- Subhandler and Data Highway Interface software
- Compatible with single or redundant networks
- Dual port access available for redundant CPU configurations
- User interface windows display handler, driver, and card statuses
- Includes off-line network analyser software
- Easy upgrade from AB PLC Symbiont
- Use with MAX IV, revision F.0 or later, or MAX 32, revision B.0 or later

IPC

3520/21 PLC Interface for Allen-Bradley

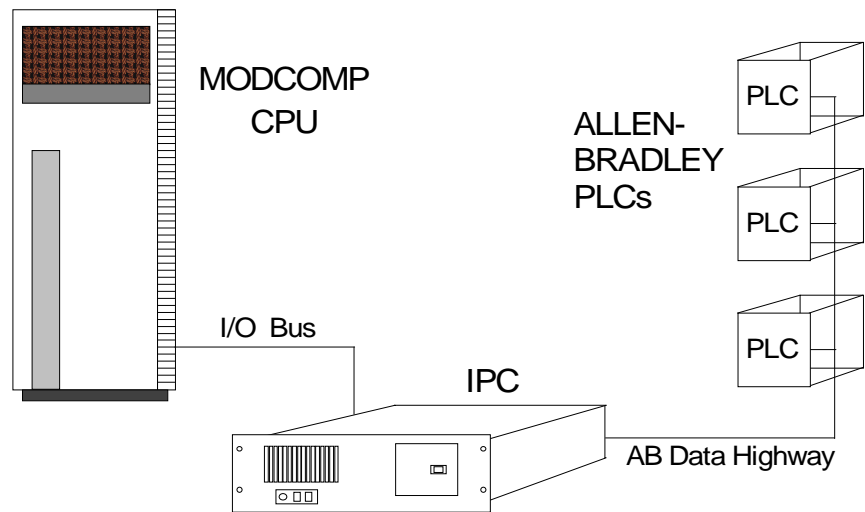


Figure 1: Interface to Allen-Bradley System

The Model 3520/21 PLC Interface for Allen-Bradley provides high-speed communications between a MODCOMP computer and one or more Allen-Bradley PLC 2, 3, 5 or SLC-500 systems. The PLC interface plugs into an IPC and connects directly to the Allen-Bradley Data Highway or Data Highway Plus. The IPC attaches to the MODCOMP I/O bus, allowing efficient DMP transfers of PLC data. Formatting and coordination of the Allen-Bradley protocol is performed within the IPC for optimum MODCOMP performance.

The Model 3520 is an advanced hardware interface that supports speeds of 64, 128, and 230.4 kilobaud. Model 3521 provides the

software subroutines, handlers, and drivers for the MODCOMP and IPC to interface applications with the PLCs. This insulates applications from the interface protocol and supports popular Allen-Bradley transactions. MODCOMP applications access the interface through standard MODCOMP BIOS I/O calls.

The IPC/AB PLC Interface permits multiple tasks to interface with PLCs on the highway without confusion. The number of operations the interface will allow to be outstanding for each PLC interface highway can be set in the IPC configuration file; 40 operations per highway are automatically handled by default.

3520/21 PLC Interface for Allen-Bradley

Multiple MODCOMP systems may be connected to one IPC for concurrent access to the PLC network in redundant CPU configurations. Multiple MODCOMP systems, each equipped with its own IPC/PLC Interface, can be attached to the PLC network at different locations.

Figure 2 shows a schematic representation of the IPC/AB PLC Interface. Application programs communicate with the IPC/AB PLC device through subroutines that queue write or read operations to the device and define the type of transaction and destination PLC using an extended UFT and data buffer. The IPC manages the data highway interface and coordinates I/O requests from MODCOMP applications. The interface card maintains the transfer protocol, relieving both the MODCOMP and IPC from protocol processing. Applications using the AB symbiont from LDC are upwardly compatible and can run the IPC interface without modifications.

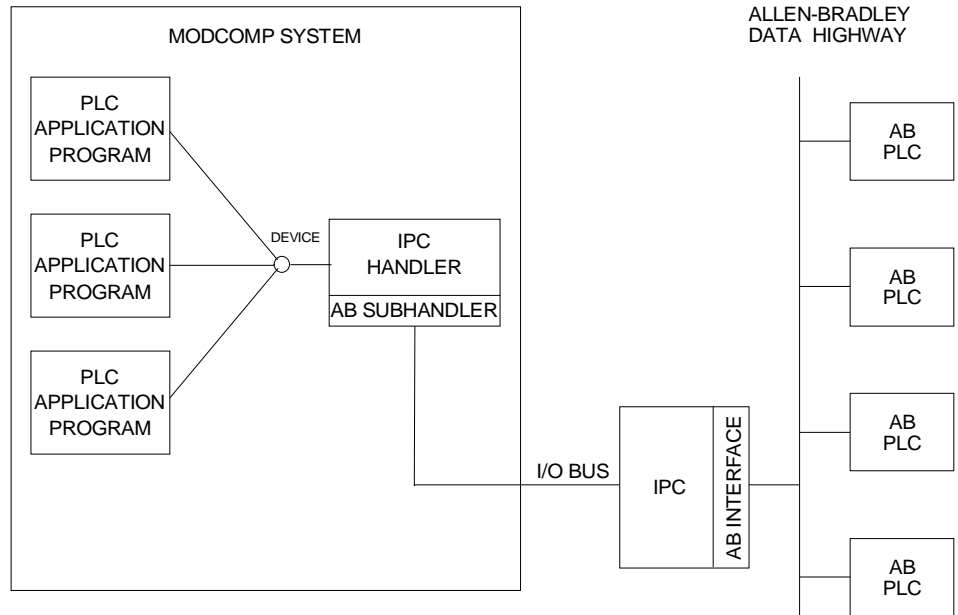


Figure 2: IPC/AB PLC Interface Architecture

The IPC software provides two windows for users of the IPC/AB PLC Interface. The first displays the AB PLC Direct-Link Interface Card status, Data Highway station statuses, and Data Highway global data. The second window displays MODCOMP node statuses, AB Handler data,

and configuration, initialization, and/or run-time messages.

Additional PC-based software is included with the interface card to allow the IPC to function as a PLC network monitor when operated off-line from the MODCOMP system.

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