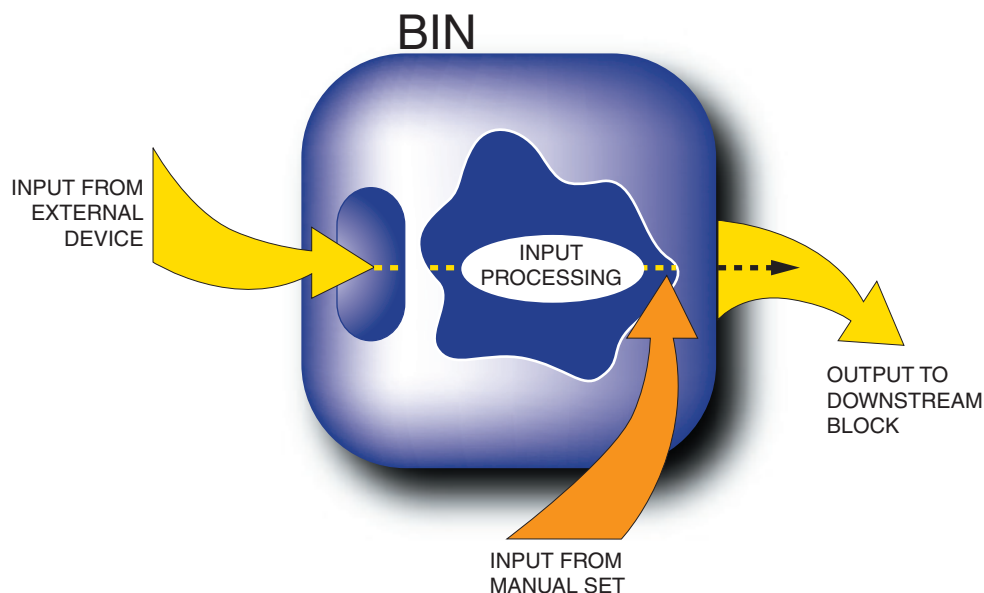


Binary Input (BIN) Block



The Binary Input (BIN) block is a Distributed Control Interface (DCI) block. (DCI blocks support connectivity of I/A Series control stations to various bus resident devices via a general purpose interface.) The BIN block provides the control strategy with the capability to read a single binary value, having two states such as ON and OFF or START and STOP, from an address in an associated Fieldbus Module (FBM).

OVERVIEW

The BIN block is used in applications where an external device provides the binary data value to the I/A Series system for use in a Display Manager or FoxView™ display or connection to a Foxboro control strategy.

The BIN block receives one binary value from the external device, whose address is specified by the parameter Point Number (PNT_NO). It presents that value at parameter BIN, whether the block mode is Auto or Manual. An additional parameter CIN is

provided with the properties of a standard output parameter. Its value is the same as that of BIN when the block is in Auto. When the block is in Manual, CIN is independent of BIN, and may be used for manual sets.

The BIN block provides alarming upon detection of a fault in the operational status of the Fieldbus Module or input channel or for any state changes (transitions).

For previous processors or CP270s with earlier versions of I/A Series software, the BIN block does not provide any alarm detection or reporting capabilities.

FEATURES

- ▶ Reads a single binary value from its associated FBM.
- ▶ Provides support for operator sets in Manual.
- ▶ Specifies the FBM source point as a device-specific string.
- ▶ Invert option inverts the value of the Fieldbus Module or input channel signal before sending it to the next block. All alarming and state change message generation will be based on this inverted value.
- ▶ Workstation lock. Set requests to any of the block's parameters (subject to the usual access rules) may be restricted to a specific workstation which locks the block.
- ▶ Quality Status output parameter provides a single source for the block's value record status, block status, and alarm status.

ADDITIONAL FEATURES

- ▶ Bad-input-point and state-change alarming of the conditioned measurement output signal. The output includes alarm indicator signals and user-defined alarm messages.
- ▶ Inhibiting of block alarm messages.
- ▶ Indication of the alarm level (1 to 5) and alarm type of the highest-priority active alarm for the block.
- ▶ Delayed alarming. A configurable timer delays alarm detection or return-to-normal messages for a specific alarm to reduce the number of alarm messages generated when a block parameter crosses back and forth over an alarm limit.