

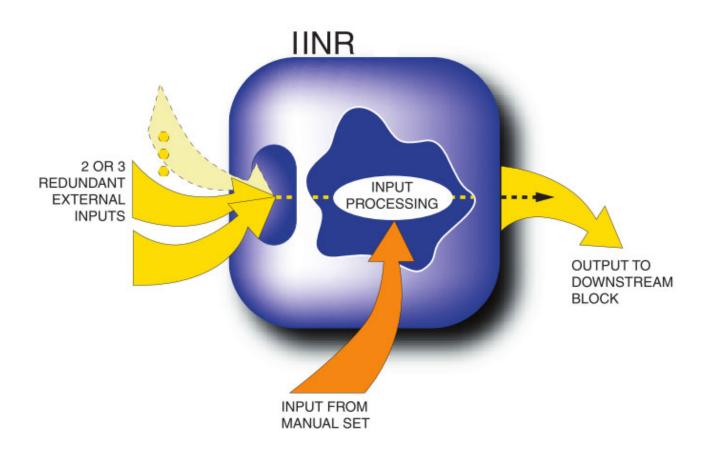
Foxboro[™] DCS

Redundant Integer Input (IINR) Block

PSS 41S-3IINR

Product Specification

April 2019





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Overview

The Redundant Integer Input (IINR) block enables the control strategy to read a single integer value selected from multiple points in the same or different field devices.

The Redundant Integer Input (IINR) block is a Distributed Control Interface (DCI) block that runs on the EcoStruxure™ Foxboro™ DCS Field Control Processor 280 (FCP280) and Field Device Controller 280 (FDC280). The IINR block is primarily used to support point redundancy with Foxboro DCS Field Device System Integrator (FDSI) and FDC280 devices; however, the block supports connectivity of the FCP280 to various other bus-resident devices via its general purpose interface.

The sources of the value can be specified as either two or three redundant inputs in the same device or in different devices. The status of each of the redundant inputs is evaluated before the block's selection algorithm is invoked to determine which of the two or three inputs is set into the block's output parameter.

The actual receipt and processing of this value is subject to the conditions established by the Simulation Option and the Auto/Manual mode of the block.

In addition, the IINR block supports BAD alarming, including the alarm reprioritization feature and the alarm message regeneration feature via the AMRTIN parameter. BAD alarming can be enabled when the block is in the Auto and manual mode of operation, or just when the block is in Auto.

Features

The IINR block provides the following features:

- Reads one integer input value from redundant inputs in the same or different field devices
- Option to select two or three redundant sources
- In Auto mode, copies its output to the LIN parameter
- In Manual mode, enables manual setting of the LIN parameter
- Time stamps the selected value
- Provides alarm detection and reporting for BAD alarms
- Enables simulation of block input without acquiring value from the field

Principal Parameters

Input

- · One integer input selected from two or three redundant sources
- · Switches for Auto and Manual control modes

Output

 1 real output, derived from the field in Auto mode, or set by operator in Manual mode

Support

The IINR block is supported on the FCP280 hosting FDSI FBMs and/or other DIN rail mounted FBMs.

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The block can be used by other DIN rail mounted FBMs that support the DCI blocks. Refer to following product specifications for details:

- FBM230 Field Device System Integrator Module, Four Serial Ports, Single (PSS 41H-2S30)
- FBM231 Field Device System Integrator Module, Four Serial Ports, Redundant (PSS 41H-2S31)
- FBM232 Field Device System Integrator Module, 10/100 Mbps Ethernet, Single (PSS 41H-2S32)
- FBM233 Field Device System Integrator Module, 10/100 Mbps Ethernet, Redundant (PSS 41H-2S33).
- Field Device Controller 280 (FDC280) (PSS 41H-2FDC280)

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WARNING: This product can expose you to chemicals including lead and lead compounds, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.p65warnings.ca.gov/.

Schneider Electric Systems USA, Inc. 38 Neponset Avenue Foxborough, Massachusetts 02035–2037 United States of America

Global Customer Support: https://pasupport.schneider-electric.com

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