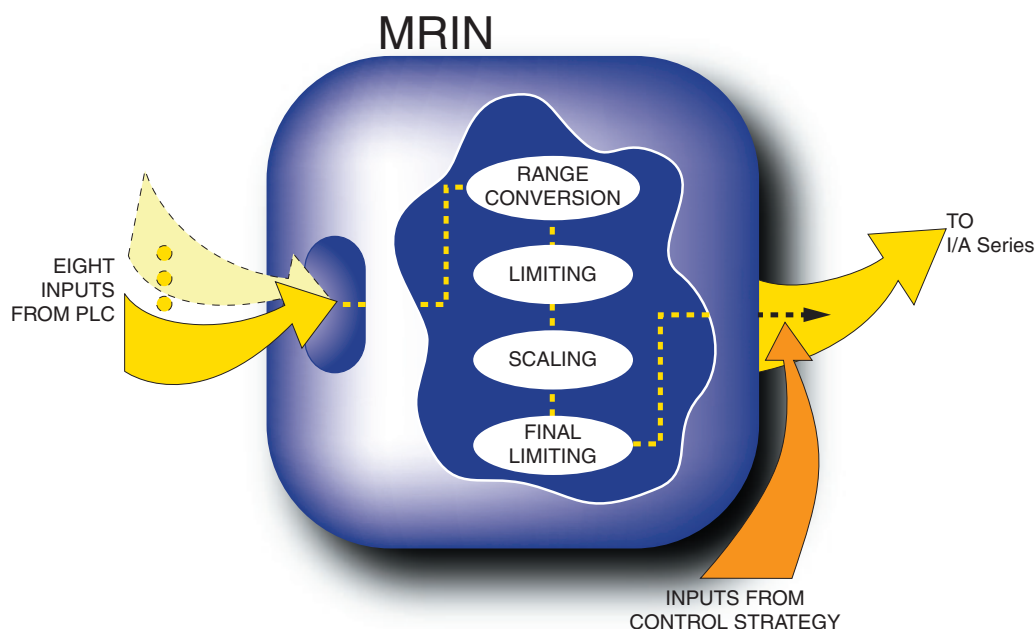


Multiple Real Input (MRIN) Block



The Multiple Real Input (MRIN) block provides the control strategy with the capability to read eight analog values from contiguous addresses in an Allen-Bradley™ Programmable Logic Controller (PLC™).

OVERVIEW

The Multiple Real Input (MRIN) block is used in applications where the PLC provides up to eight analog data values to the I/A Series system for use in Display Manager, FoxView™ displays, or connections to a Foxboro control strategy. The real data values may originate either in the PLC ladder logic or in a panel display, which is typically mounted in the process area.

The raw values from the PLC are first scaled into the I/A Series raw count range specified by the single configured Signal Conditioning Index (SCI). Then, they are limited to prevent excursions beyond the upper or lower limits of that range.

Finally, the limited I/A Series raw count value for each channel is converted into engineering units by a proportionality calculation using channel-specific high and low scale limits. After a final limiting calculation, the results, in channel-specific engineering units, are made available.

The Input/Output option determines whether the MRIN inputs are updated from the PLC or not.

MRIN does not support a Manual mode, and does not provide any alarm detection or reporting capability.

FEATURES

- ▶ Operates in Auto mode at all times
- ▶ Specification of PLC group address as a device-specific string
- ▶ Input values scaled into I/A Series raw count range before further processing
- ▶ Inputs in I/A Series raw count converted to channel-specific engineering units
- ▶ Option to inhibit taking inputs from the PLC.

PRINCIPAL PARAMETERS

Input

- ▶ 8 real inputs
- ▶ Signal Conditioning Index

Output

- ▶ 8 real outputs derived from PLC.

SUPPORT

MRIN is a PLC block which allows the following I/A Series equipment to interface Allen-Bradley PLCs:

- ▶ AW70 processors with control software
(see 70 Series Application Workstation Model AW70 [PSS 21H-4U1 B3])
- ▶ AW51 Integrators
(see 50 Series Application Workstation Model AW51 [PSS 21H-4R1 B3])
- ▶ Micro-I/A Station
(see Field Automation Subsystem Micro-I/A™ Allen-Bradley PLC5/E Remote I/O Interface [PSS 21H-6C6 B4])
- ▶ Allen-Bradley Station
(see Allen-Bradley Station [PSS 21H-1F1 B3]).

PLC blocks are supported on I/A Series software version 6.2 or later. Value points for PLC blocks are listed in Micro-I/A FoxBlock™ Integrated Control Software (PSS 21H-6C1 B4).