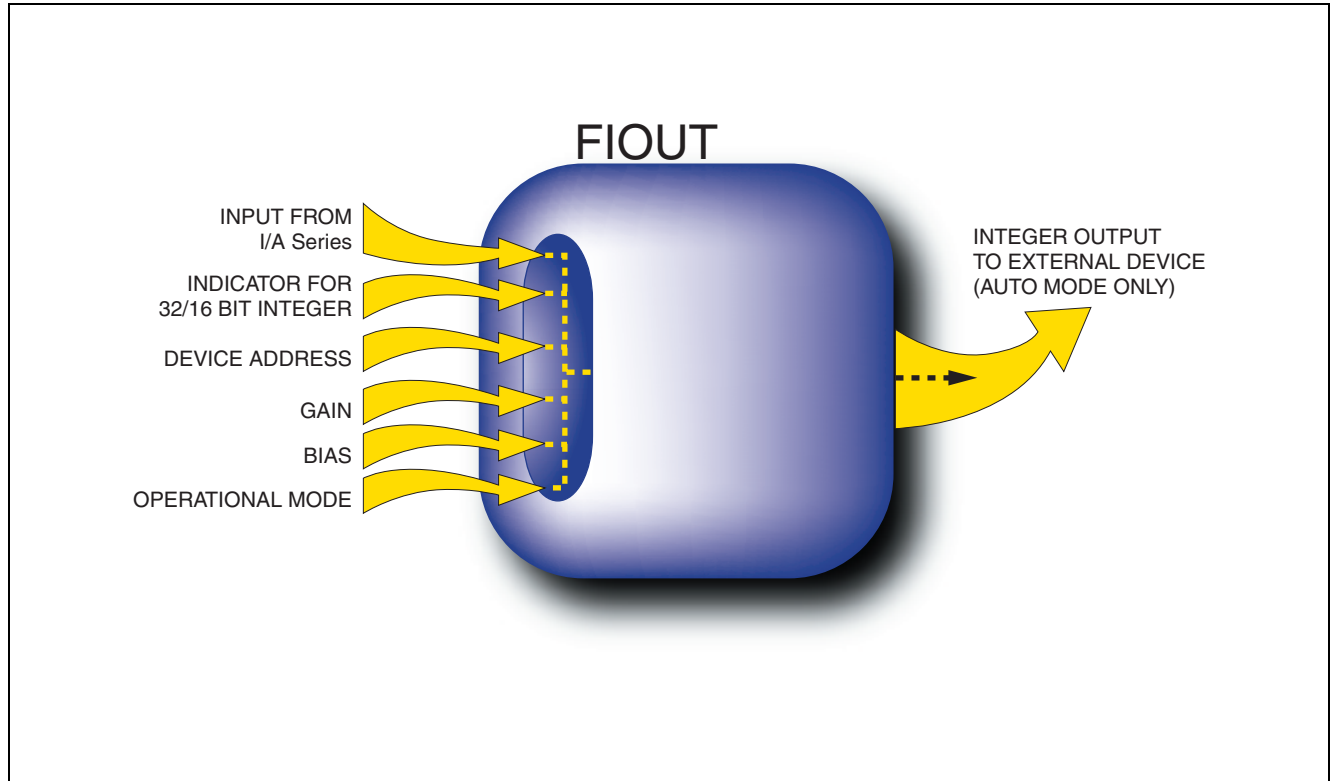# I/A Series® Software
Foreign Device Integer Output (FIOUT) Block

The Foreign Device Integer Output (FIOUT) block provides the control strategy with output capability for a single 16- or 32-bit integer value in real-time to a PROFIBUS™-DP or Modbus™ remote I/O device via a Micro-I/A™ Station, or to a foreign device via an I/O gate. The block supports Auto/Manual control.

OVERVIEW

The Foreign Device Integer Output (FIOUT) block sends the 16- or 32-bit integer value received from the I/A Series control strategy to its applicable field device in real-time, only when it receives a changed value. The block can be configured to perform output once, change driven only, or during every execution regardless of input changes.

FIOUT can provide values to:

- PROFIBUS-DP or Modbus remote I/O devices via a Micro-I/A Station

- foreign (third-party) devices[1] via an I/O gate.

The input value can be scaled if desired, and the output is modified accordingly.

As long as the block is in Auto and no error conditions exist, the value is moved from the block's connectable input parameter and sent to the Micro-I/A Station or I/O gate for delivery to the field device.

When the block is in Manual, processing of I/A Series data is suspended, and the input is not sent to the field device by the block.

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(1) Refer to *DDE I/O Gate* (PSS 21S-3A4 B3) for an explanation on how an I/O gate interfaces foreign devices.

Features

- Sends a single 16- or 32-bit integer value to applicable field device

- Gain and bias terms for scaling input

- Manual/Auto control of the block output signal; can be initiated by a host process or another block

- Supports a series of validation checks to ensure process is on-line before block initialization

- Specification of source point for a PROFIBUS-DP or Modbus remote I/O device, or for a foreign device.

Principal Parameters

Input

- 1 integer (16- or 32-bit) input, derived from I/A Series control strategy

- Manual/Auto control mode switching

- Gain and Bias (real inputs for scaling)

Output

- 1 integer (16- or 32-bit) output to applicable field device, in Auto mode.

SUPPORT

FIOUT allows the following equipment to interface the applicable field devices:

- AW70 processors with control software
  (see *70 Series Application Workstation Model AW70* [PSS 21H-4U1 B3])

- AW51 processors
  (see *50 Series Application Workstation Model AW51* [PSS 21H-4R1 B3])

- Micro-I/A Station
  (see *Field Automation Subsystem Micro-I/A PROFIBUS-DP Remote I/O Interface* [PSS 21H-6C4 B4] or
  Field Automation Subsystem Micro-I/A Modbus Remote I/O Interface [PSS 21H-6C5 B4])

- I/O gate
  (see *DDE I/O Gate* [PSS 21S-3A4 B3]).

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