



ABR Series Barcode Reader I/O Data AOI Instruction Guide

The ABR I/O Data Add-on Instruction (AOI) is a function block, a piece of PLC programming that provides an easy way to establish EtherNet/IP communications between an ABR and a Rockwell Automation CompactLogix or ControlLogix PLC. This AOI gives the PLC a tag structure with clear names for each piece of data, as well as the PLC code to perform the handshaking required to keep the latest result data flowing from the ABR.

It is optional but recommended to also use the **ABR Series EDS File** available on BannerEngineering.com.

Instructions on how to use the EDS file and the AOI can be found in the product **Instruction Manual**, available on BannerEngineering.com or packaged with this document, in the Industrial Ethernet Overview chapter.

Components

Banner_ABR_AOI_IO_Data_2_0.L5X

UDT's Packaged with the AOI

Banner_ABR_IO_Data_Type

The file ABR_on_L71_AOI_v2.ACD file packaged with the AOI is an example complete PLC project with the AOI already imported, just as shown in the manuals. This file is not required, just a helpful reference.

Alternative smaller AOI "Banner ABR AOI SMALL IO DATA 1 0.L5X"

New at this time is the addition of a smaller version of the AOI that only transfers 128 characters or less for each result, and ignores any data after the 128th character of a longer string. This version consumes only about 3kbytes of PLC memory instead of about 20kbytes, and never takes more than one PLC poll to transmit a single result string.

Components

Banner_ABR_AOI_SMALL_IO_Data_1_0.L5X

UDT's Packaged with the AOI

Banner_ABR_SMALL_IO_Data_Type

The file ABR_on_L71_AOI_SMALL_IO_DATA_v1.ACD file packaged with the AOI is an example complete PLC project with the AOI already imported, just as shown in the manuals. This file is not required, just a helpful reference.