# Smart I/O Ethernet Header – XEL-BSSA







Smart I/O (Ethernet) is a new highly expandable, modular I/O system for the i3 controllers. It can be used to expand the I/O capacity of i3 controllers with built in Ethernet by merely a few points or potentially thousands of points.

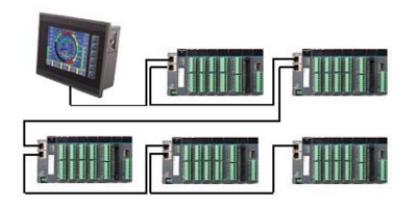
#### Modular

Smart I/O is a modular IO system which can add up to 8 I/O modules per base with a wide variety of digital and analog I/O to choose from. Digital I/O includes DC inputs, DC outputs, and Relay outputs. Analog I/O includes 0(4)-20mA/0-10V inputs and outputs, Thermocouple Inputs and RTD Inputs. Modules are available with inputs only, inputs and outputs, and outputs only.

#### **Compact**

Smart I/O is very compact, with a flexible footprint that only grows as you add modules. The Smart I/O Base is 3.5"H x 2.375"W — with a depth of only 1.75". Each I/O module adds only about 34" of width. Using 16 point modules, the Smart I/O can support 128 I/O points in a footprint of less than 3.5"H x 8.75"W.

IO expansion up to maximum of 2048 digital and 512 analog using multiple Ethernet bases.



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### **Highly Expandable**

With digital I/O densities ranging from 8 points to 32 points per module, and an analog density of 4 channels per module – Smart I/O can support as many as 256 digital I/O points and 32 analog I/O points per base. Adding multiple bases to a single i3 control system is very easy. This can allow the number of I/O to grow to literally the limits of the i3 I/O memory space (Digital-2048, Analog-512). Multiple bases can also be used to distribute the I/O to locations closer to the sensors and actuators, saving wiring costs.

### **Easy to Setup and Configure**

Unlike many I/O systems that are complex and difficult to use, Smart I/O is simply configured using i3 Configurator programming software. Smart I/O Ethernet bases utilize i3 Configurator Hardware Configuration menu and a "plug and play" approach.

#### **Convenient Features**

Smart I/O has all the features you need. The Ethernet Base has a built-in 10-100 switch, to make cabling and expansion simple and less expensive. All Smart I/O modules have removable terminals strips. Digital I/O modules have ON/OFF state LED indication. Analog I/O modules have fault LEDs to indicate sensor errors.

550mA @ 24 VDC
19.2 – 28.8 VDC
1500mA @ 5 VDC
5 to 95%
$-5^{\circ}\text{C to } +50^{\circ}\text{C}$
$-40^{\circ}$ C to $+75^{\circ}$ C
As Per IEC1131-2
As Per IEC1131-2, IEC61000-4-2, IEC61000-4-3, IEC61000-4-4
CE, UL
10/100 Mbps

<sup>\*</sup>Limited to the memory and application of i3 controller

# Smart I/O Ethernet Header – XEL-BSSA



Part Numbers**	Description
XEL - BSSA	Smart I/O Ethernet Header
XBE-DC16B	Expansion Module 16 Point, (9-30)VDC Input
XBE-DC32A	Expansion Module 32 Point, 24VDC
XBE-DR16A	Expansion Module 8 Point 24VDC Input, 8 Point Relay Output
XBE-RY16A	Expansion Module 16 Point Relay Output
XBE-TP16A	Expansion Module 16 Point Transistor Output (Source )
XBE-TP32A	Expansion Module 32 Point Transistor Output (Source)
XBF-AD04A	Expansion Module 4 Analog Input
XBF-AH04A	Expansion Module 2 Analog Input, 2 Analog Output
XBF-RD04A	Expansion Module 4 PT100 Inputs

<sup>\*\*</sup> Ask IMO representative for more types of expansion modules.

The XEL-BSSA is compact (45mm W x 90mm H x 60mm D), and mounts on DINrail. Each XEL-BSSA base requires 24VDC power, and an appropriate Earth Ground connection for normal operation.

