

IO-Link for Manufacturing

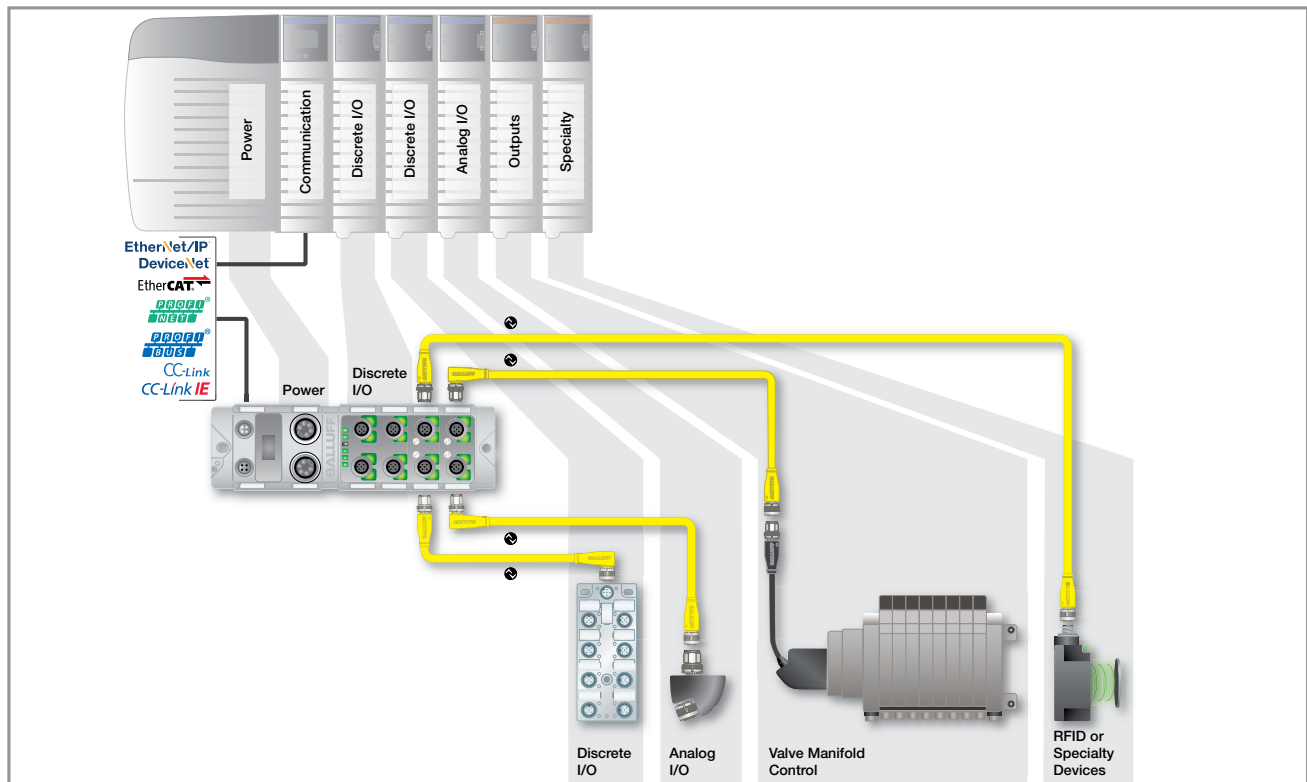
Improving Plant Floor Visibility Using Smart Sensors and Distributed Modular I/O

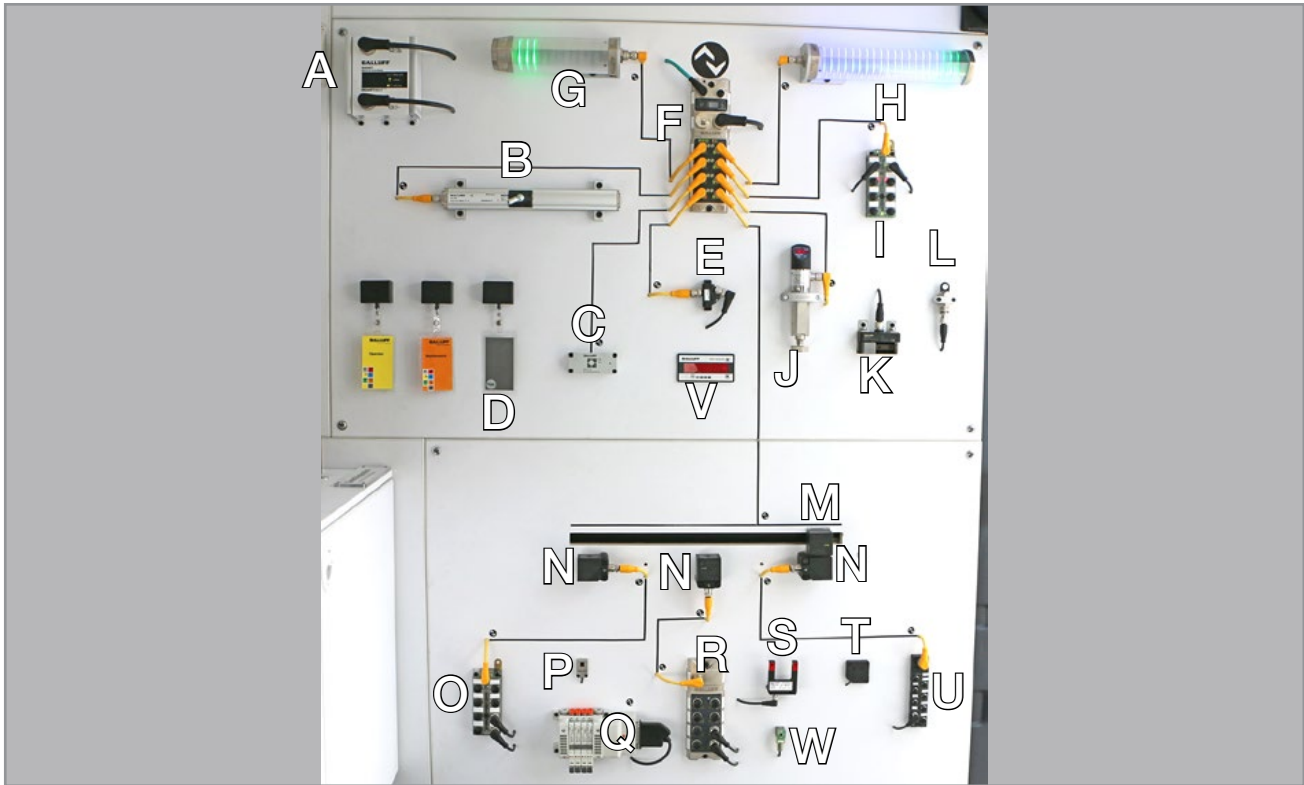
From stack lights to solenoid valves to proxies to measurement devices, a variety of inputs and outputs are required to make a production line run and flexibly operate. IP20 slice style I/O solutions require a collection of other products like terminals, circuit breakers and controls cabinets. By utilizing IO-Link, a machine can have dramatically reduced wiring, smaller electrical cabinets and provide diagnostics that allow for quick troubleshooting of I/O problems.

- Use existing equipment infrastructure and networks
- IO-Link Masters are available with 4, 8, and 16 ports
- Discrete I/O, analog I/O, valve manifold control
- Any vendor's IO-Link device can be utilized

Think of a remote "slice" I/O solution. In a typical application, the communication head and the power supply sit on the left hand side and are followed along the backplane by the individual I/O devices, such as discrete 24V input cards or 0-10V analog cards. Usually there are a limited number of slots available in the backplane and individual slices of control components can be inserted.

In a similar fashion, a Distributed Modular I/O system with IO-Link has a communications head that talks over the desired industrial network on the left side and the right side acts as the backplane. Then each device is connected to the backplane with a sensor cable. With the ability to be installed within a 20 meter radius from the master, I/O devices can be easily distributed across the machine.





Letter	Order Code	Description
A	BAE00ET	IP67 Power Supply
B	BTL1AR0	Micropulse BTL6 linear position sensor, PF low profile housing, 150 mm stroke length, IO-Link interface, BAM014H magnet for BTL
C	BIS012N	RFID M Processor, IO-Link, Access control
D	BIS012H	Tamperproof label tag
E	BNI004C	IO-Link to Analog output, 14-bit resolution, 4...20mA
F	BNI006A	8-port IO-Link Master over EtherNet/IP
G	BNI008A	3 segment multi-purpose LED tower SmartLight with buzzer module
H	BNI0082	5 segment multi-purpose LED tower SmartLight without buzzer module
I	BNI0007	4-channel Analog input, IO-Link, 4...20mA, 8 digital PNP inputs
J	BSP0087	Pressure sensor, Rotatable 320°, 4-digit display, IO-Link, -1 bar to 10 bar
K	BIP0005	Inductive position sensor, 40 mm stroke range, 4...20mA output
L	BUS0053	90° angle M18 Ultrasonic sensor, 120...1000 mm sensing range, analog 4...20mA

Letter	Order Code	Description
M	BIC0070	Inductive coupler base, 40x40x63 mm, Range= 5 mm, IO-Link, Bidirectional
N	BIC0071	Inductive coupler remote, 40x40x63 mm, Range= 5 mm, Bidirectional
O	BNI007Z	8-port (16 Channel) M12 configurable I/O hub, IO-Link, Expansion port, PNP
P	BOS021K	Photoelectric sensor, Cable connection, ROI, PUR, Sn= 100 mm, PNP, NO, LED, Diffuse
Q	BNI006P	IO-Link to 25pin D-sub valve connector for SMC 24 Valve position control
R	BNI003A	8-port (16 Channel) M12 configurable I/O hub, IO-Link, Metal body, IP67, PNP
S	BGL0016	30 mm Slot through-beam sensor, Connector, 3 pin, Red-light
T	BCS00TP	Capacitive sensor, Cable, PUR, 2m
U	BNI001Y	8-port (8 Channel) input M8 I/O hub (plastic), IP67, IO-Link, PNP
V	BAE004R	LED digital display, 5-digit, 0..10V/4...20mA input
W	BCC04N8	Valve connector, DIN C