BALLUFF

B innovating automation
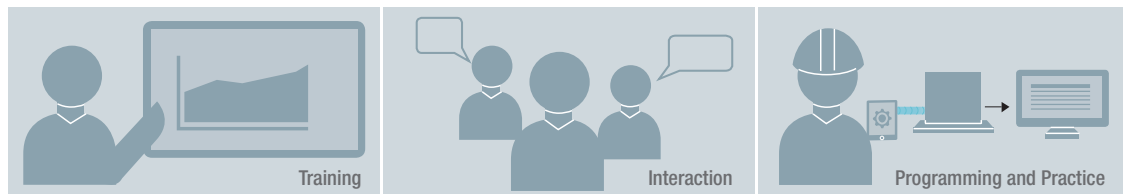
**Take advantage of in-depth
manufacturer knowledge** TRAINING

PERFORMANCE-BASED TRAINING TAILORED TO MEET YOUR SPECIFIC NEEDS.

innovating automation

Unlike other automation training that is mostly theoretical, our training emphasizes skills. We use hands-on labs to give participants the chance to learn by doing things, not just hearing things. Our instructors bring a wealth of application experience, practical tips, and best practices to make concepts come alive.

Training	Interaction	Programming and Practice

What our customers are saying

"I am glad I took this class. I feel I am more able to apply all this knowledge to select the right sensor and look forward for new technologies for future projects."
Ulices Gama, Packaging Engineer – IMS Buhrke-Olsen

"...this class was a great tool to learn and hit the ground running in configuring and monitoring IO-Link devices. The class is very detailed, the instructor is very knowledgeable and engaging, and I walked away confident in my abilities to operate IO-Link devices."
Anthony Ramsey, Jr; Electrical Design Engineer – Parker Hannifin

"The class was well worth the time and money. It covered topics in a way that was easy to understand..."
Leighton Burgess, Electrical Engineer – Engineering Innovation

"The class was very well structured....
Overall – the best training class I have ever attended!"
Randy Schaeffer, Application Engineer – HH Barnum

COURSE REGISTRATION AND INFORMATION

Register for individual courses at www.balluff.com/en-us/training.

- Select a course to discover more information and a link to the registration form.
- You will receive an email confirming your enrollment after submitting the online registration form. (Please check your spam folder if you do not receive the email.)

Course Information

- Courses are held at:
  Balluff Inc.
  7055 Industrial Road
  Florence, KY 41042

- Balluff recommended lodging:
  Homewood Suites Cincinnati Airport
  1090 Vandercar Way
  Florence, KY 41042
  (859) 283-2111
  Be sure to ask for the corporate rate.

- Meals and transportation are not provided by Balluff.

Cancellation Policy
If you cannot attend a session after registering, you have two options:
Option 1 — Send another participant in your place
Option 2 — Us the online Training Cancellation Form to cancel your enrollment.
Please cancel at least 14 days before the course start date.

Disclaimer
Balluff reserves the right to cancel seminars/training courses for any reason. A claim for damages against Balluff not yielding. Balluff assumes no liability for any errors in technical information that is transmitted verbally or in writing in the seminars or contained in the associated documents. Likewise, no liability for any resulting damage or consequential damage is taken.
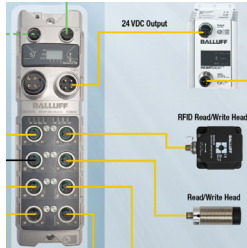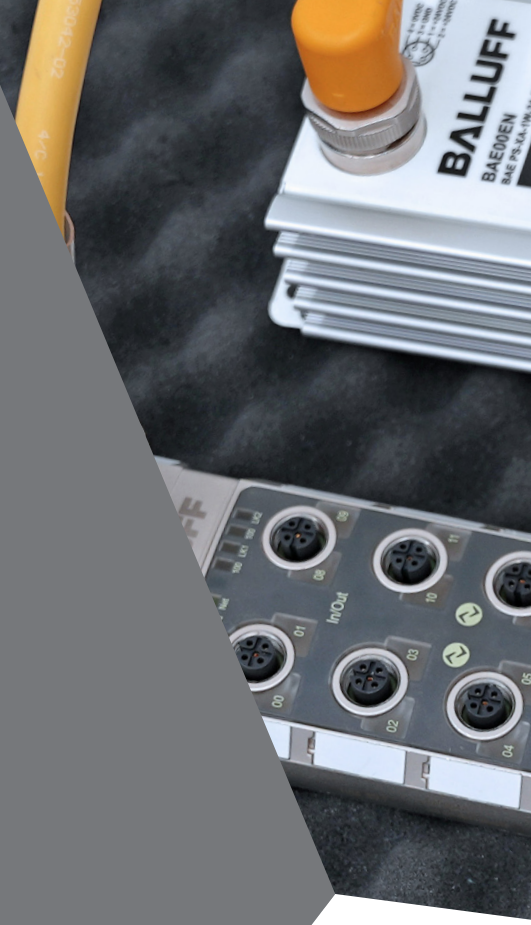
CONTENT

Professional automation training

SENSOR FUNDAMENTALS

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We deigned this course to introduce participants to a range of different sensor technologies and their connection, installation, and configuration. The Sensor Fundamentals course will enable you to select the correct sensor for a given application.

Structure of the Course
The Sensor Fundamentals course uses a hands-on approach. Participants will use a sensor demo which inductive, capacitive, ultrasonic, photoelectric type sensors, and all the necessary media and power supplies.

Course Content
- Overview of sensor families and operating technology
- Selecting the correct sensor
- Connecting sensors

Target Audience
Anyone who would like to learn the fundamentals of sensors

Prerequisite
None

Duration
1 day

Order Number and Price
Sensor Fundamentals
BSS EDU-I-220-001
$500 per individual

Please sign up promptly, this course is limited to 5 participants.

Manage signals intelligently and cost-effectively

IO-LINK

B *innovating automation*

Wed designed this course to introduce participants to the basic functionality, capabilities, operating principles, and benefits of IO-Link. Participants will configure IO-Link devices including master devices and expansion devices, as well as how to use IO-Link to make analog, digital, and transducer data available to an existing fieldbus network.

Structure of the Course
Our partner uses a hands-on approach. Participants will use a laptop equipped with the software needed for the class. Students will also use a workstation with an Allen-Bradley controller, an IO-Link master, several IO-Link devices, and all the necessary media and power supplies.

Course Content
- IO-Link overview
- Configuring and using an IO-Link master
- Using add-on listructions, user-defined data types and tags
- SmartLight overview and configuration
- Using an IO-Link linear transducer
- Using a valve manifold
- Using an analog input
- Using an expansion hub
- Using a pressure sensor

Target Audience
Engineers and integrators or anyone interested in IO-Link technology

Prerequisite
None

Duration
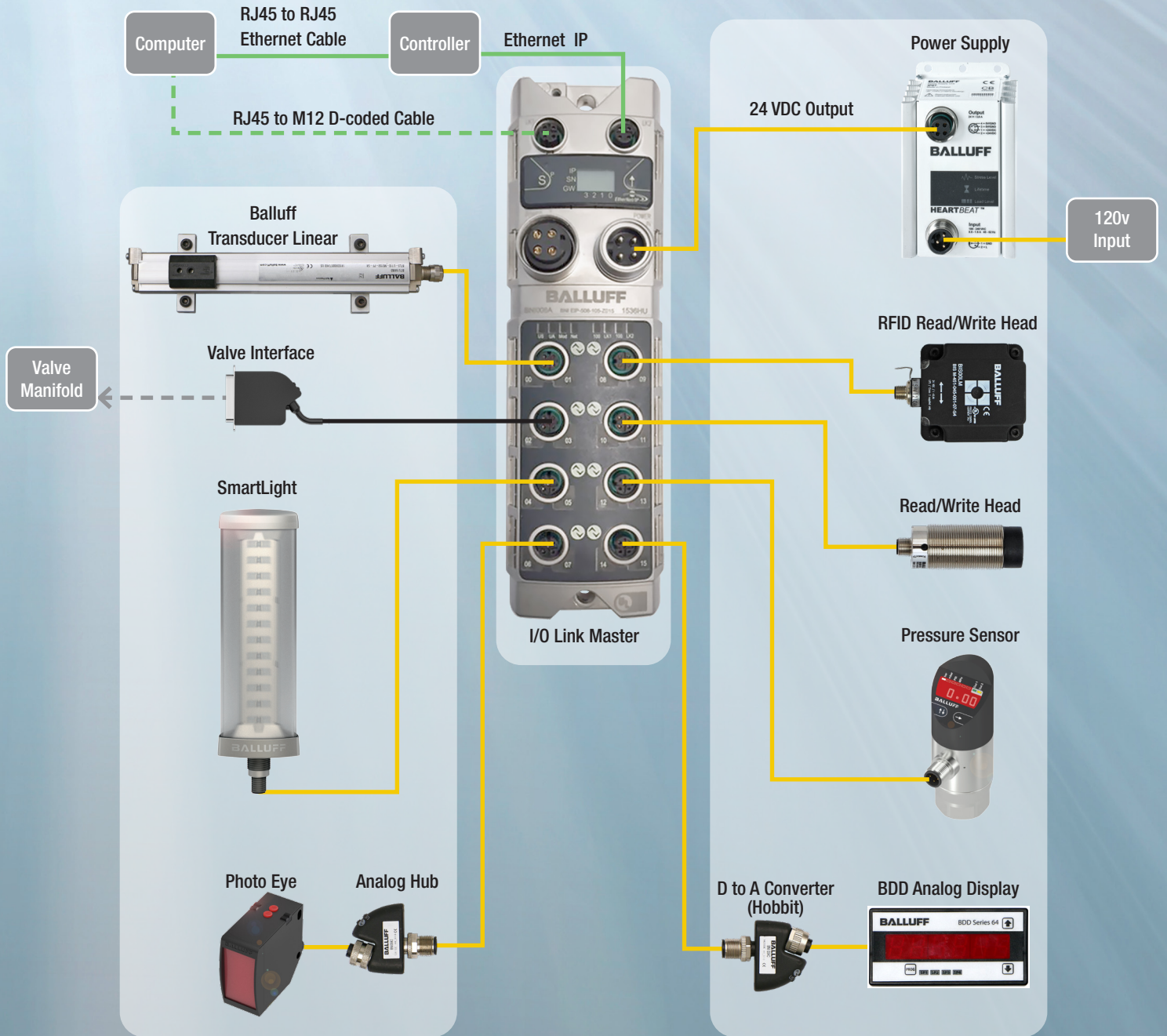3 days

Order Number and Price
IO-Link
BSS EDU-I-250-001
$1500 per individual

Please sign up promptly, this course is limited to 5 participants.

Computer

RJ45 to RJ45
Ethernet Cable

Controller

Ethernet IP

RJ45 to M12 D-coded Cable

Power Supply

24 VDC Output

120v
Input

Balluff
Transducer Linear

RFID Read/Write Head

Valve Interface

Valve
Manifold

Read/Write Head

SmartLight

Pressure Sensor

I/O Link Master

Photo Eye

Analog Hub

D to A Converter
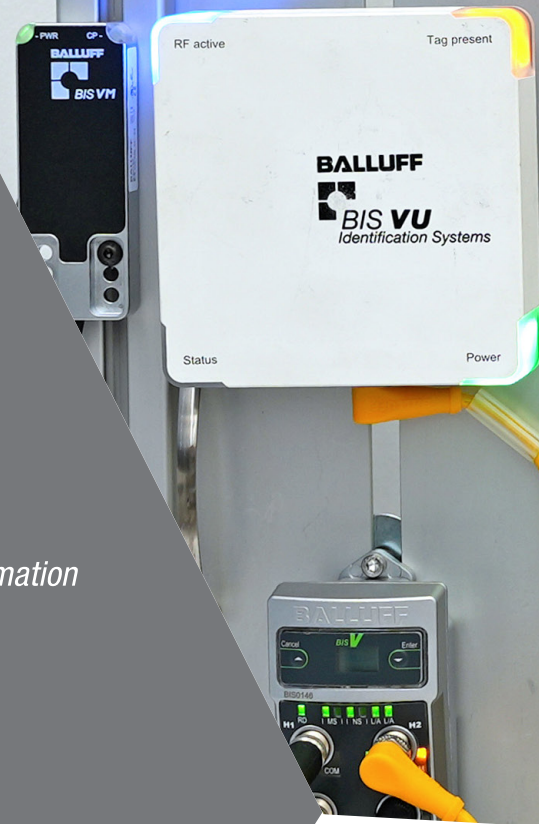(Hobbit)

BDD Analog Display

Industrial identification

RFID ARCHITECTURE AND IMPLEMENTATION

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We designed this course to prepare someone to commission RFID systems, add or replace devices, configure the components, and access RFID data in a controller.

Structure of the Course
Our trainer uses a hands-on approach. Participants will use a laptop equipped with the Dashboard, UHF manager, and Studio 5000 software needed for the class. Students will also use a workstation with a controller, RFID components, and all the necessary media and power supplies.

Course Content
- Fundamentals of RFID
- Processors
- Read/Write heads
- Physical characteristics of tags
- Factors that affect range
- Using an IO-Link master
- Using add-on instructions, user-defined data types and tags
- Adding an IO-Link expansion device to a Studio 5000 project
- Implementing RFID on IO-Link
- Implementing a BIS-V processor
- Implementing an all-in-one processor
- Implementing a UHF one-channel processor
- Implementing the USB reader

Target Audience
Anyone who would like to learn the basics of RFID architecture and implementation

Prerequisite
None

Duration
3 days

Order Number and Price
RFID Architecture and Implementation
BSS EDU-0-260-002
$1500 per individual

Please sign up promptly, this course is limited to 5 participants.

HOW TO REACH US

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