

Your Global Automation Partner

**TURCK**

# Field Logic Controller (FLC)



# FIELD LOGIC CONTROLLER

## Functional Capabilities



Let us be so bold as to predict the death of PLCs as we know them.

Demonstrating our commitment to flexible, custom solutions, Turck has developed the next big thing for control: the field logic controller (FLC). Turck's FLC solutions are made possible by ARGEE (A Really Great Engineering Environment), a revolutionary web-based programming environment that allows users to set conditions and actions directly at the field level. By utilizing HTML5, Turck provides a complete engineering environment for users to write, run, simulate, debug, and monitor code, all without requiring the use of a PLC.

Using FLCs, Turck's multiprotocol block I/O devices can act as simple I/O devices or as standalone logic controllers. While ARGEE programming is not designed to replace a PLC outright, it can be used to change the way we think about control, allowing FLC devices to:

- Be used without a PLC in standalone applications
- Perform arithmetic functions, timers, counters and even toggle bits
- Share data with a PLC via assigned I/O variables

**ARGEE challenges what an I/O device can do by creating a hybrid between simple block I/O and higher level PLCs. The result – Turck's FLC.**

# FLC DEVICES

## What Devices Are Compatible With ARGEE?

### Say Hello to Field Logic Controllers (FLCs)

Turck's ARGEE technology brings PLCs to the field level. Introducing a simple programming environment that runs on Turck's multiprotocol Ethernet platforms, Turck's FLC devices introduce users to the next step of control, allowing program control and configuration to be done anywhere, anytime, using something as simple as your handheld device. Permitting simple PLC functionality, Turck's FLCs expand the capabilities of block I/O to new areas and solidify Turck as a leader in fieldbus technology.

### Benefits of Turck FLCs

- Allows multiprotocol Ethernet devices to act as either an I/O device or a logic controller
- Works with innovative technologies such as RFID and IO-Link

### ARGEE-Capable Turck FLC Devices

#### TBEN: On-machine block I/O

- Up to 16 channels (TBEN-L) or 8 channels (TBEN-S) of I/O available
- Specialty I/O options including analog, serial, RFID and IO-Link
- Rated up to IP69K

#### FEN20: In-cabinet block I/O

- IP20 rated for in-cabinet, fixed I/O applications
- Universal I/O option - up to 16 channels
- Each channel can be input or output

#### BL compact: On-machine flexible block I/O

- Vast signal variety in packages rated up to IP69K
- Available with up to 16 I/O connections with M8 or M12 connectors or large housing styles



TBEN



FEN20



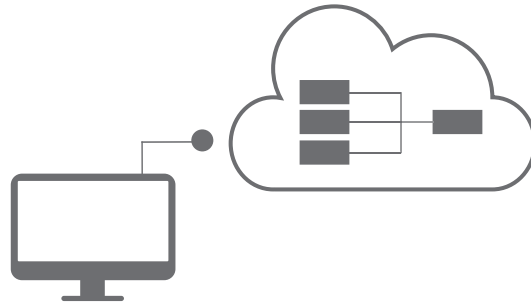
BLCEN

# ARGEE FLOW

Using a simple “Condition” and “Action” principle that is integrated into a flow chart user interface, ARGEE allows users with little or no experience to configure and program their Turck FLC devices to carry out tasks that fieldbus devices have never been able to do. This simplified, straightforward approach allows programming at the fieldbus level, eliminating the need for a PLC in some standalone applications, while still allowing the device to communicate with a PLC as necessary.

## ARGEE Flow allows users to:

- Use a device as a standalone solution
- Program using Boolean logic functions
- Toggle input and output bits
- Use up to two timers and counters



# ARGEE PRO

ARGEE Pro is an advanced programming environment that offers additional features and even more control than ARGEE Flow. Pro takes ARGEE to the next level by offering features such as an HMI builder and advanced capabilities.

## ARGEE Pro programmed devices can:

- Act as a standalone solution
- Serve as a safeguard to a PLC, and take over control if the PLC loses communication
- Monitor an application and send updates back to the PLC via assigned I/O variables



IIoT Ready

### Industrial Internet of Things Ready

With the extra control intelligence of ARGEE, Turck's block I/O modules are ideally suited for the requirements of IIoT scenarios, since they also support necessary technologies such as Ethernet, IO-Link and RFID.



### Flexible Use Through HTML5

ARGEE is based on the latest web standard HTML5. All functions can therefore be used with any device that is running an HTML5 capable web browser such as Chrome or Firefox, whether using a PC or tablet. Special software is not required.

# THE EASIER WAY TO PROGRAM

Arithmetic  
Function



Toggle Bit



Communicate  
with PLC



Timers/  
Counters



Monitor



An industrial automation programming environment built for consumers.

ARGEE utilizes HTML5, allowing users to program their fieldbus devices in new and exciting ways, resulting in a consumer-influenced interface that revolutionizes the way we think about industrial programming.

Users can access ARGEE's features with any web browser on any device, provided that it supports HTML5 (Chrome and Firefox). ARGEE offers users the ability to:

- Program and control fieldbus devices from anywhere without needing a PLC
- Write code without needing your block I/O device in front of you
- Program in an environment that requires little to no coding experience

**The capabilities of Turck FLCs with ARGEE will allow our customers to push the boundaries of what was – and what now is – possible.**

EtherNet/IP™



### Easy PLC Connection

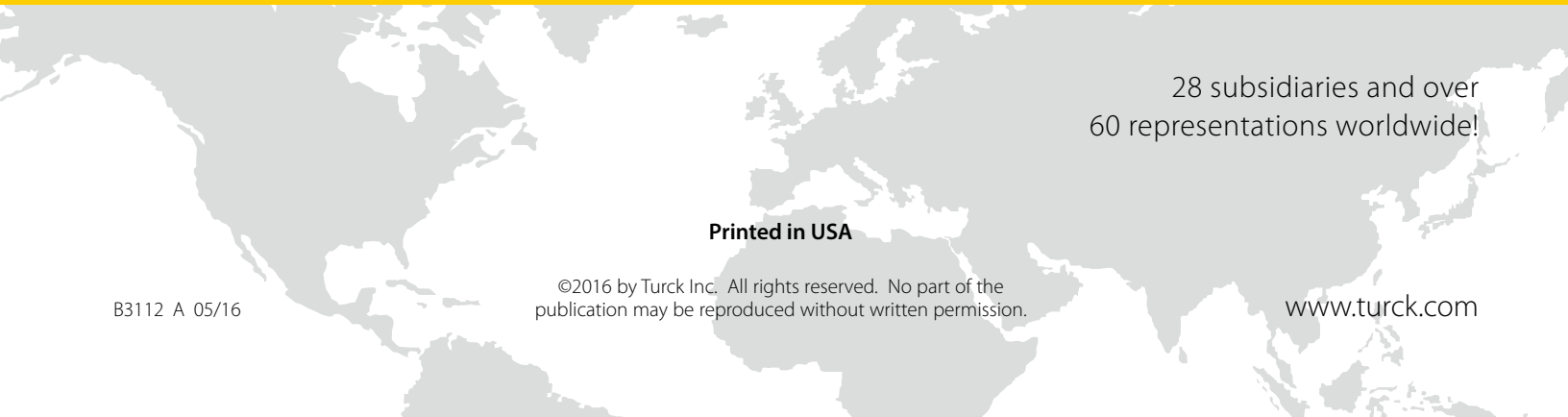
In addition to decentralized logic processing, ARGEE can exchange and process data with higher-level control systems via PROFINET, EtherNet/IP™ or Modbus TCP. This allows an FLC to be used for decentralized signal preprocessing.



### Added Value at Zero Cost

Turck provides the ARGEE programming environment for free with the block I/O modules TBEN-L, TBEN-S, BL compact and FEN20. This allows us to partner with our customers to push the limits of control.

# TURCK



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60 representations worldwide!

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