

New Products

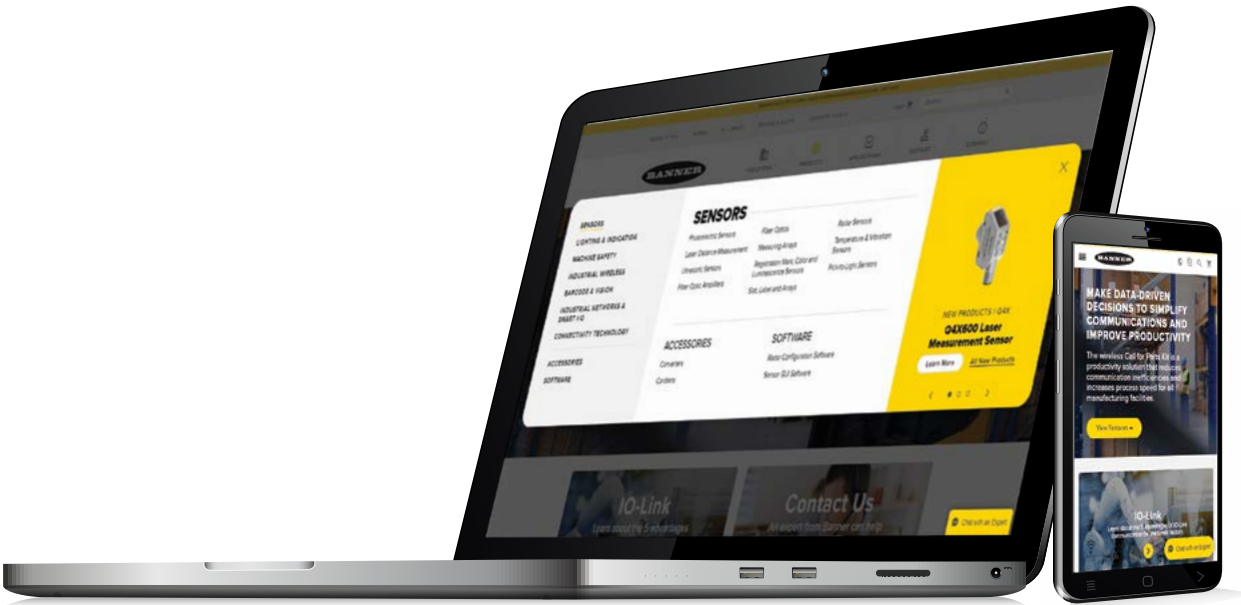


BANNER®

more sensors, more solutions



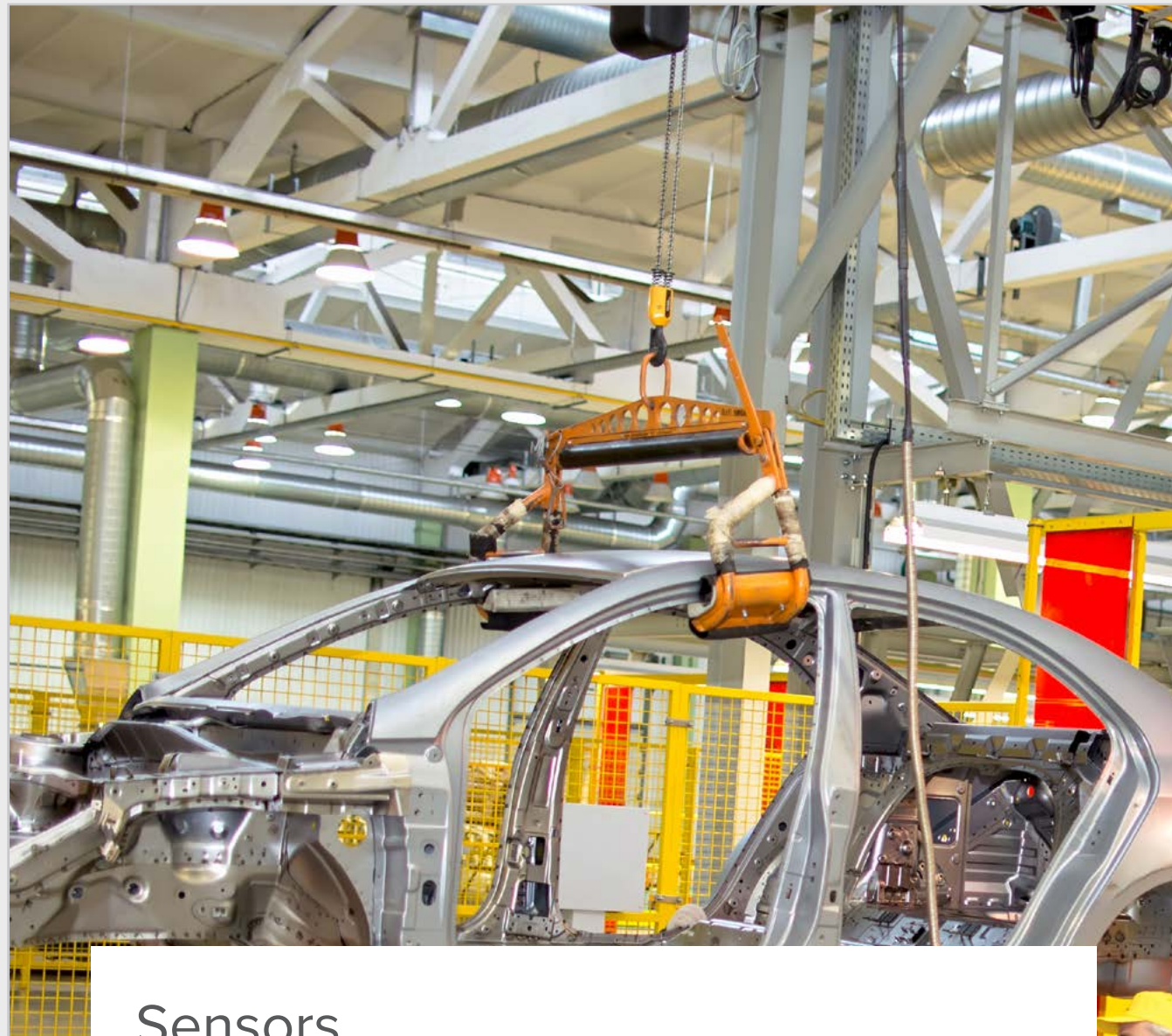
Banner Engineering manufactures industrial automation products that include sensors, LED lights and indicators, machine safety components, and industrial wireless devices. These products help produce the cars we drive, the food we eat, the medicine we take, and many of the things we touch every day. Headquartered in Minneapolis since 1966, Banner is an industry leader with more than 10,000 active products, operations on six continents, and over 5,500 employees, factory and field representatives, and application engineers. Every 3.5 seconds a Banner product is installed somewhere in the world.



New Products

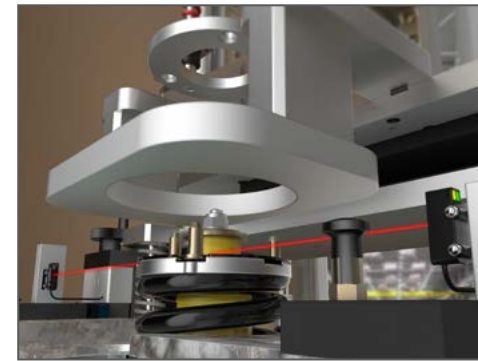
Table of Contents

Q2X Series Miniature Photoelectric Sensors	7
Q4X Series Rugged All-Purpose Sensors	8
Q5X Series High Power, Multi-Purpose Sensors.....	9
T30R Series Radar Sensors.....	10
K50R Series Radar Sensors	11
SC10 Series Compact Safety Controllers with ISD	15
XS26-ISDd Series Expandable Safety Controllers with ISD	16
SI-RF Series RFID Safety Switches with ISD.....	18
Illuminated E-Stops with ISD.....	20
SI-GL42 Series Safety Locking Switches.....	21
SX5 Series Safety Laser Scanners.....	22
Pro Lighting and Indication Products.....	28
WLS15 Series Sealed, Low-Profile Strip Lights	30
HLS28 Series Hazardous Enclosure LED Strip Lights	31
WLS70 Series Sealed, High-Output Strip Lights.....	32
Flex Arm Lights Series.....	33
TL50 Pro Select Tower Lights.....	34
K50 Pro Touch with Display Indicators.....	35
K50 Pro Touch Buttons	36
CL50 Pro Column Lights.....	38
TL70 Pro Tower Lights.....	39
TLF100 Pro Flush Mount Tower Lights	40
TL15 In-Line Tower Light Indicators.....	41
In-Line Products.....	42
Snap Signal IIoT Hardware.....	46
R90C IO-Link Hub Converters.....	50
DXMR90-4K IO-Link Masters with Ethernet.....	51
R70 Series Data Radios	52
DEK Wireless Kits	53
Q45 Series Wireless Sensors	54



Sensors

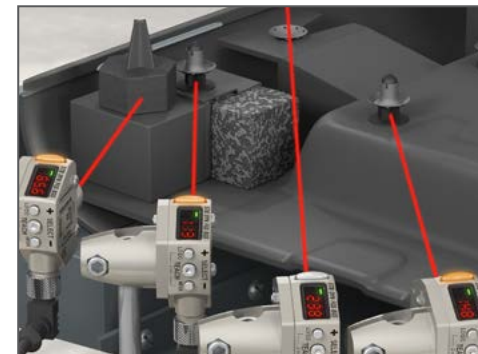
Banner Engineering has a wide variety of new innovative sensors to solve the most challenging solutions from clear object detection, distance measurement, object present or absence, to temperature and vibration, pick-to-light, and ultrasonics to solve almost any industrial automation application.



Q2X Series Miniature Photoelectric Sensors



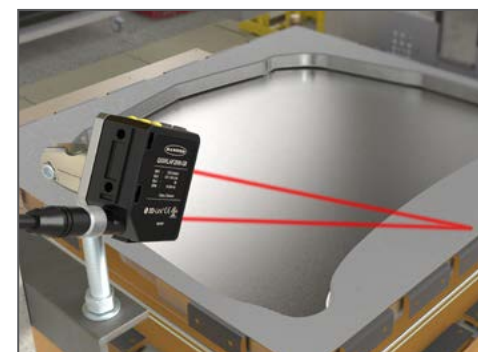
Powerful and simple sensing in a miniature package makes the Q2X ideal for installation in very precise machinery and tight industrial spaces.



Q4X Series Rugged All-Purpose Sensors



Versatile, rugged, IP69k-rated, stainless-steel laser-distance sensor offering best-in-class detection and measurement down to sub-millimeter changes in distance.



Q5X Series High Power, Multi-Purpose Sensors



This powerful laser distance sensor covering a range from 50 mm to 5 m is easy to use and offers exceptionally reliable detection of the most challenging targets.



T30R Series Radar Sensors



The T30R is a long-range sensor that provides reliable detection and position feedback even outdoors in extreme weather conditions.



K50R Series Radar Sensors



The K50R series of radar sensors provides a durable, cost-effective solution for short-range detection applications, particularly in challenging environments.

Solve More Challenges with New Analog Sensors

Overview

A digital output provides one of two states ON or OFF, depending on the target location relative to a switch-point. An analog output varies across the entire measurement range of the sensor, providing a continuous reading of the measured distance to the target. Analog outputs are available in current (4–20 mA) or voltage (0–10 V DC) output types.

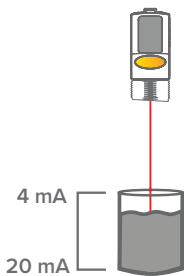
When to Use Analog Outputs

Every analog sensing application requires that the sensor produce a change in output that corresponds with a mechanical change. The analog output produces a measurable change in voltage or current. Analog outputs are often used for process controls such as tank level, roll diameter, or loop height. They can also indicate a distance or a position when product placement changes in real time.



Q4X600

Q4X, now available in 600 mm range with Voltage (0–10 V) and Current (4–20 mA) outputs and higher excess gain to detect even darker targets at the far end of the range.

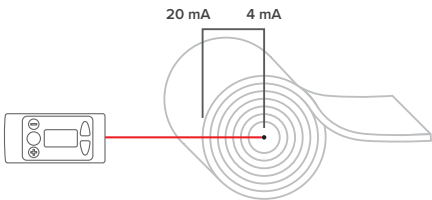


Analog output for continuous measurement of part size, position, or fill level



Q5X (3 m analog)

The Q5X triangulation model is now available with an additional meter of range—for a total of 3 meters—with Voltage (0–10 V) and Current (4–20 mA) outputs and higher excess gain to detect even darker targets at the far end of the range.



Analog output provides real-time roll diameter measurements for process optimization



Q2X Series Miniature Photoelectric Sensors

The next generation miniature sensor for powerful and simple sensing in a miniature package.

- Miniature sensor for installation in the smallest of spaces
- Precise and reliable position detection of small components
- Machine design flexibility with proven mounting and connection options
- Small high-visibility red LED or Class 1 laser emitter (adjustable-field model only)
- Enhanced immunity to energy-efficient lights
- Crosstalk immunity algorithm allows two sensors to be used in close proximity



Polarized Retroreflective

- Bright visible red LED for easy alignment of sensor
- Works with a variety of reflectors
- Ideal for detecting dark and shiny targets

Opposed

- Visible red LED with large spot size for easy alignment
- High switching frequency for reliable detection in high-speed applications

Adjustable-Field

- Small visible red LED or Class 1 laser emitter spot
- Simple multi-turn screw adjustment of cutoff distance
- Reliable detection of objects when the background condition is not controlled or fixed
- Crosstalk immunity algorithm allows two sensors to be used in close proximity



Q4X Series

Rugged, All-Purpose Sensors

Versatile, rugged, IP69-rated laser distance sensor offering superior performance and capable of detecting sub-millimeter changes in distance.

- Discrete, analog (0–10 V or 4–20 mA), clear object, and IO-Link models available
- Reliable sensing range from 25 mm to 610 mm
- Detects and measures across a variety of target colors, material types, and surface conditions



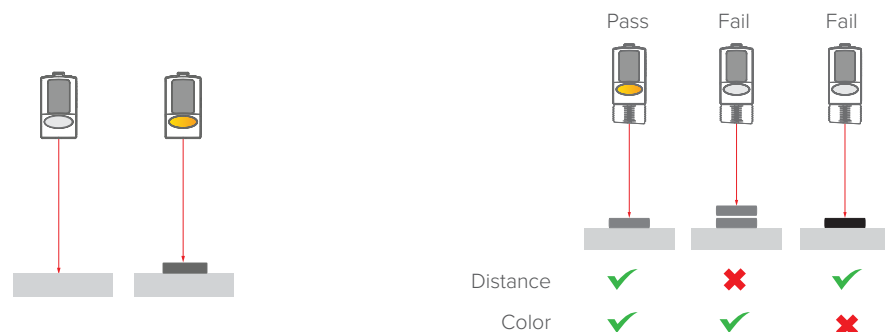
Q5X Series

High Power, Multi-Purpose Sensors

This powerful background suppression laser features a range from 50 mm to 5 m, is easy to use, and reliably detects the most challenging targets.

- Extremely high excess gain to detect the darkest and most difficult targets at extreme angles
- Reliable detection of black, clear, reflective, multicolor, or textured targets in front of white or shiny metal backgrounds
- Jam detection model uses time and distance intelligence to alert operators to unwanted stoppage on conveyors and production lines
- Models with discrete, analog, and IO-Link communication are available

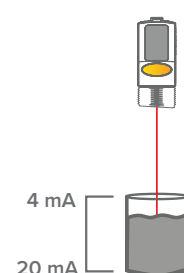
Discrete



Distance-based presence/absence detection or part positioning regardless of color or reflectivity of object and background.

Inspections use distance to verify parts' presence and position, and intensity to verify correct color or part orientation

Analog



Analog output for continuous measurement of part size, position, or fill level



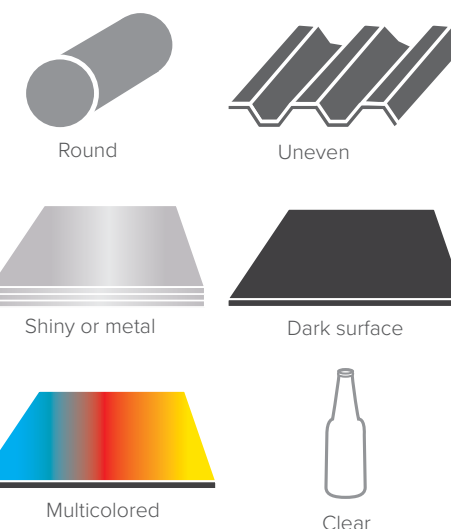
- Four-digit display and three-button interface for easy setup and adjustment
- Distance to target viewable as centimeters (default) or inches

Rated IP67 for reliable performance in wet environments

Class 2 laser with small, highly visible spot for easy alignment and small object detection

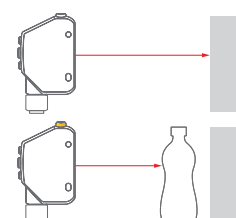
Reliably Detects Challenging Targets

Dynamically adjusted laser power increases output for dark targets or objects at steep or uneven angles, while reducing power for shiny targets, providing accurate measurements across a wide range of challenging targets. A small beam spot minimizes measurement variation across color transitions.



Dual mode: Distance with Intensity to Detect Any Change

Clear Object Detection



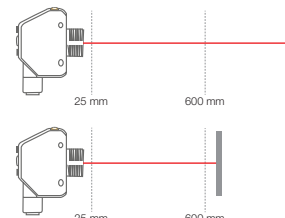
Reliably detects transparent objects without the need of a retro reflector.

Contrast



Detects intensity changes due to variation in surface finish, tone, or lightness.

Extended Range Presence/Absence



Teach reference to detect changes in contrast, even past the maximum measuring range.



Jam Detection Modes

Jam Retroreflective: Most reliable mode that can be used when teaching a back rail or other stationary target as a reference.

Jam Background Suppression: Allows for jam detection across a specific area without requiring a background.



T30R Series Radar Sensors

Detect the Widest Range of Objects

The T30R is a long-range sensor that provides reliable detection and position feedback in challenging applications and extreme environments.

- Reliable detection of high-dielectric targets (like metal or large amounts of water) and lower-dielectric materials (such as wood, rock, or organic material) in a wider range of applications
- Virtually unaffected by rain, wind, snow, fog, steam, and sunlight
- Operating temperature of -40 to 65° C
- Radar configuration software, IO-Link, remote teach input, and push buttons for flexible setup and configuration



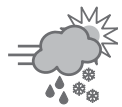
K50R Series

All-In-One Radar Sensor

The K50R series of radar sensors provides a durable, cost-effective solution for short-range detection applications, particularly in challenging environments.

- For detection and measurement of moving and stationary targets
- Large field of view offers powerful alternative to ultrasonic or photoelectric sensors
- Detect a wide variety of materials, indoors and outdoors
- Bright, visible indication; available in Pro models with configurable LEDs
- Easy setup and configuration of range, sensitivity, and output using the Banner Radar Configuration Software
- Compact, rugged IP67-rated housing withstands harsh environments

Robust, Longer-Range Alternative to Ultrasonics



Ideal for outdoor applications

- Resistant to rain, snow, fog, steam, or sunlight
- IP67-rated



Temperature stability

- Radar (radio waves) not affected by temperature changes like Ultrasonic (sound waves)
- Consistent measurement from -40 to 65 °C



Detect near or far

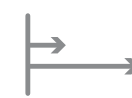
- Sensing ranges down to 100 mm and up to 15 m



No crosstalk

- No problem mounting multiple sensors close together

All-in-One Sensor



Accurate measurement

- Short dead zone of 0.1 m
- 2.5 m range



Ideal for outdoor applications

- Resistant to rain, snow, fog, steam, or sunlight
- IP67-rated
- Consistent measurement from -40 to 60 °C



Senses more objects

- 60 GHz radar detects a wider range of low-dielectric materials for use in many applications



Solve more problems

- Dual discrete outputs for slow and stop
- Pulse Pro for measurement values
- K50R Pro with programmable LED indication

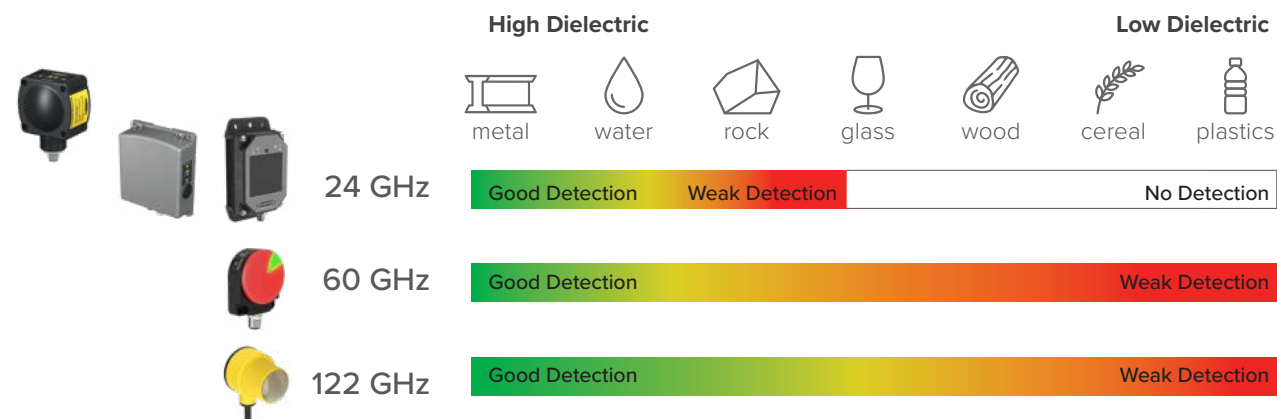


Direct integration with Banner lights

- No separate controller needed

Operating Frequency

Different radar frequencies affect not only the range of the sensor but also what materials it can detect. 24 GHz radar has a long range and ignores ambient weather like heavy rain or snow. However, its detection is limited to stronger radar targets. 122 GHz radar provides greatly increased accuracy and can see a much wider range of materials compared to 24 GHz. 60 GHz conveniently falls between 24 GHz and 122 GHz in terms of performance. It has remarkable resistance to ambient weather and can detect a similar range of materials to 122 GHz with a better accuracy than 24 GHz.



Metal, water, and other high-dielectric materials provide a stronger return signal than plastic, wood, or other organic materials.

Pro Sensing and Indication

K50R Pro

Pro models available with configurable RGB LEDs to customize any application

No Output



Output 1



Output 2



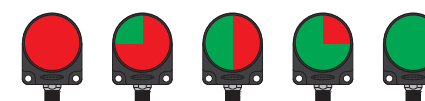
Output 1 and 2



Warning Zone Indication



Real Time Distance Feedback



Near Sensing Window Far

K50R Standard

Standard models available with power and output indications

No Output

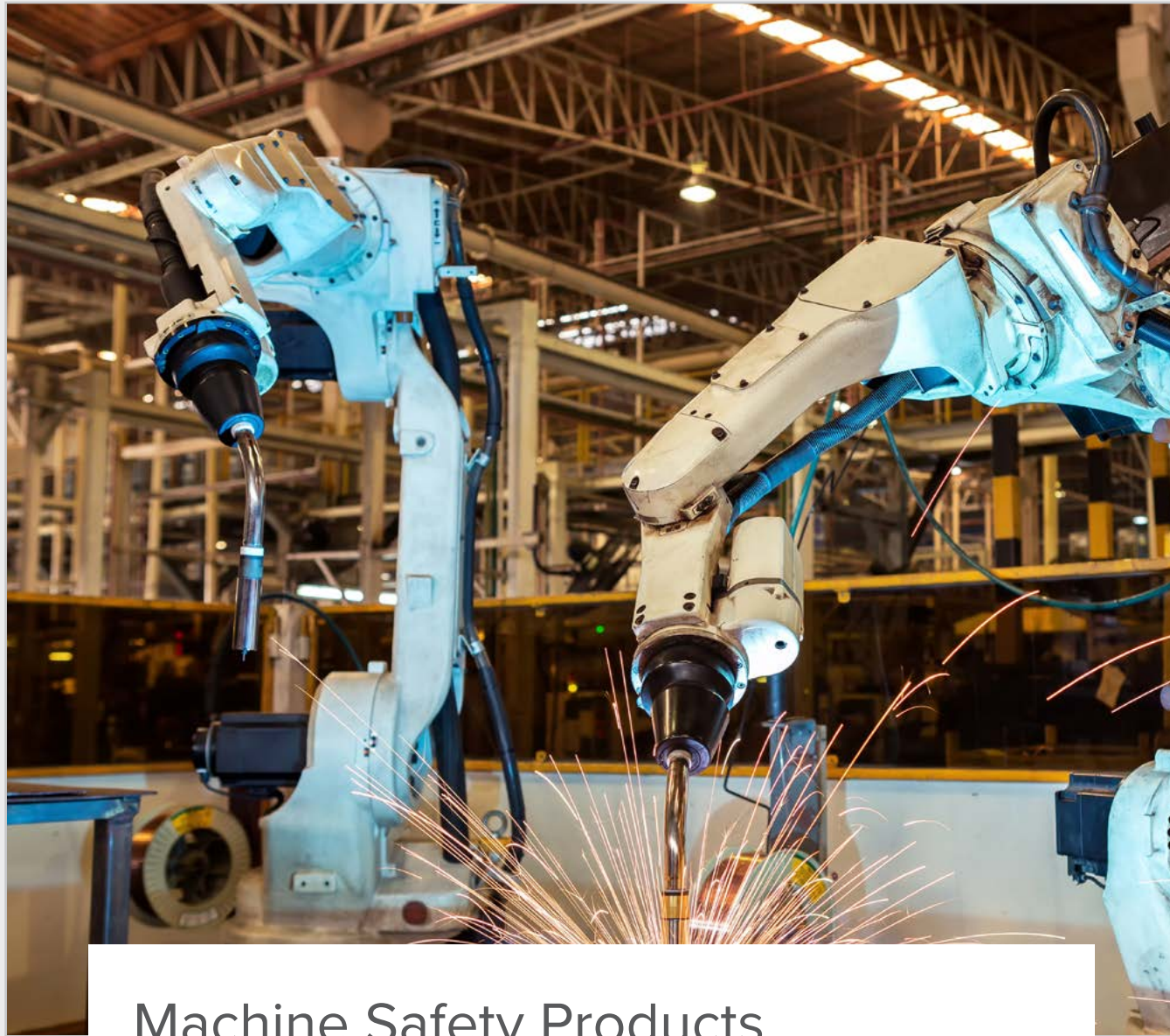


Output 1 and 2



LEDs Disabled





Machine Safety Products

Designed to be easy to use and implement, developed to protect personnel and equipment from accident and injury, and built to perform reliably in challenging environments, our comprehensive collection of machine safety products provide the highest levels of safety without compromising productivity.



SI-RF Series RFID Safety Switches with ISD

SI-RF Series safety switches utilize RFID technology to monitor doors, gates, and other movable mechanical safeguards that separate personnel and equipment from a hazard. They will send a signal to the machine control system to prevent or stop hazardous situations when the guard is not in the proper position.



SI-GL42 Series Safety Locking Switches

Locking-style safety interlock switch for interlocking and position monitoring.



ISD Connect

This compact T-connector brings a non-ISD enabled device into an ISD system.



Illuminated E-Stops with ISD

Fully assembled illuminated E-stops with ISD enable easy installation and hookup with no assembly, individual wiring, or additional enclosure required.



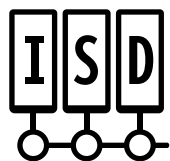
SC10 Series Compact Safety Controllers with ISD

Cost-effective, easy-to-use safety controller for smaller machines replaces the functionality of two or more safety relay modules and features an intuitive user interface and advanced diagnostic capabilities.



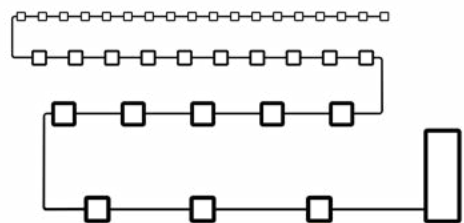
XS26-ISDd Series Expandable Safety Controllers with ISD

The XS26-ISDd expandable safety controller has the capacity to adapt to a variety of machines, including large-scale machines with multiple processes.



Banner In-Series Diagnostics

- Prevent and reduce downtime
- Local operator guidance and remote actionable data
- Reduce and simplify wiring
- Up to 32 plug-and-play devices with one in-series connection
- Intuitive setup and PLC integration
- Easy-to-use software and auto-tag export



In-Series Diagnostics allows you to connect up to 32 devices with one in-series connection and communicate directly with the most commonly used PLCs.



When a Safety Event occurs, the system receives an alert that includes information about which safety device tripped, making troubleshooting a breeze.



1234567890

74.5°C

13.7v

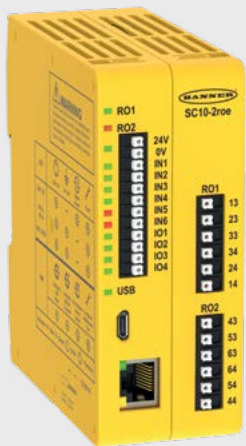
Status: ON

Alignment: OK

08.0mm

In-Series Diagnostics provides an array of additional data points for each In-Series Device used, including a unique tag value, internal temperature, voltage, and more, along with device-specific details such as the alignment and distance between a safety switch's sensor and actuator.

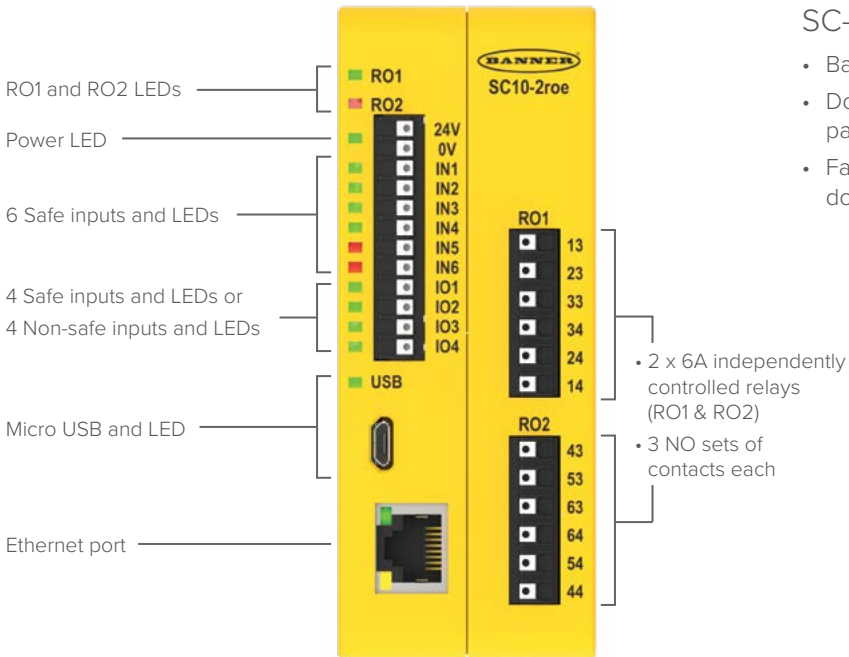
Additionally, the system sends warning alarms if devices are near to tripping, so that issues can be addressed before your machine shuts down.



SC10 Series

Compact Safety Controllers with ISD

- PC configurable: flexible and easy-to-use
- Safety inputs: up to 70 with ISD
- Safety outputs: two independently controlled relay outputs 6A each
- Ethernet/IP, Profinet, Modbus



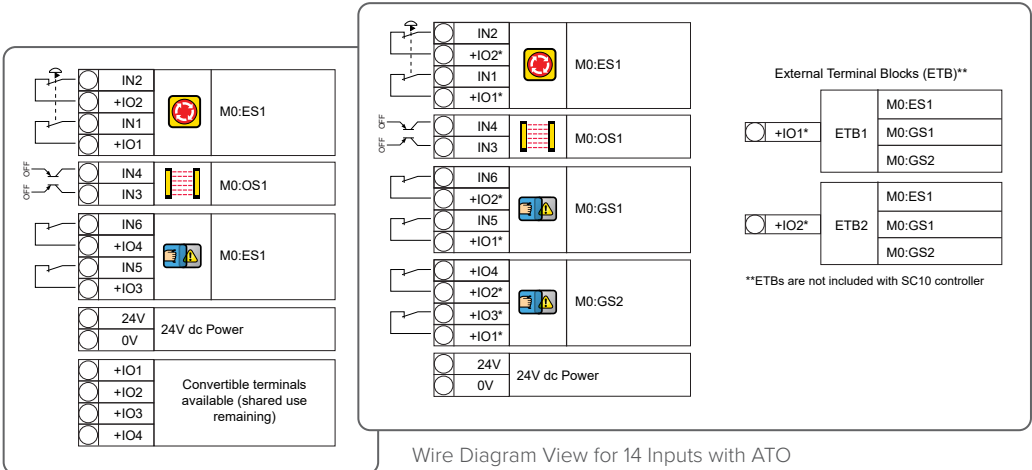
SC-XM3—Fast Programming and Swapout

- Backup copy of configuration, password, network settings
- Download configuration without a PC; save time during panel build
- Fast swapout to minimize downtime at swapout



Automatic Terminal Optimization (ATO)

Allows for an increase from 10 to 14 inputs

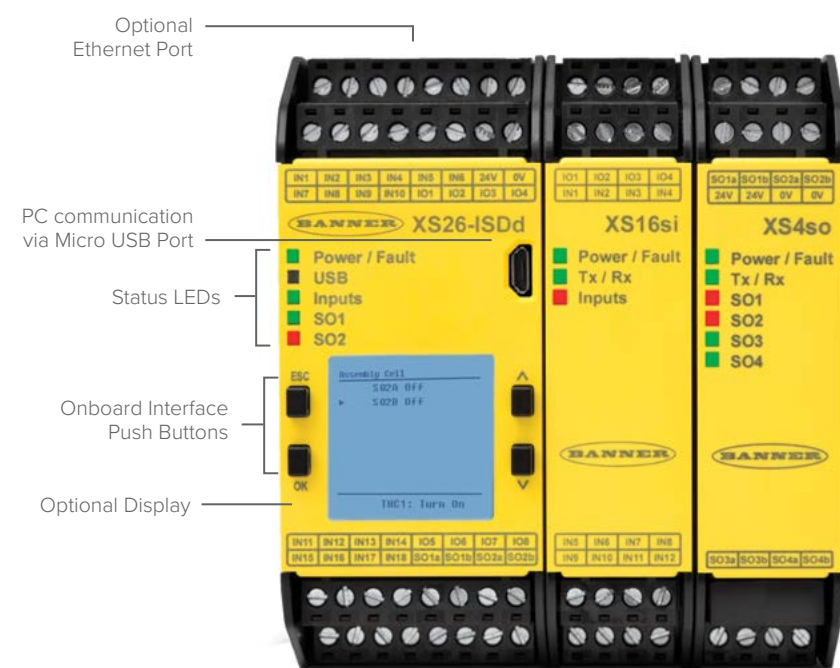




XS26-ISDd Series

Expandable Safety Controllers with ISD

- Safety Controller + ISD to PLC Gateway
- Easy to configure with free PC software
- Connect up to 256 ISD devices
- Expandable up to: 394 total safety devices and 68 safety outputs
- Profient, Ethernet/IP, Modbus TCP



Base Controller (shown with LCD and ethernet)



- Base Controller allows eight of the 26 inputs to be configured as outputs for efficient terminal use
- Two independent pairs of safe outputs at 0.5A each
- In-Series Diagnostic (ISD) provides detailed status and performance data

- Optional display screen allows local diagnostics for efficient troubleshooting
- Up to eight expansion I/O modules can be added as automation requirements grow or change
- Choose from six expansion module models with a variety of safety inputs, solid-state safety outputs and safety relay outputs
- Controller and input modules allow safety inputs to be converted to status outputs for efficient terminal use
- Fast programming and swapout using the SC-XM3 memory card

Cut Costs by Preventing and Reducing Downtime

Gather Real-Time Data About Safety Systems

In-Series Diagnostics gives machine owners and operators greater insight into the health and performance of their equipment, making them less reliant on outside experts to solve system problems. Users can monitor the status of each device in their safety system in real-time, identify the location and nature of any potential problems, and receive alerts if a critical event does occur, so equipment can get back up and running as soon as possible.

Reduce and Simplify Wiring

Cost-Effective and Easy to Implement

Connect up to 32 ISD devices in a series chain using plug-and-play industry standard M12 4-pin cables and T-connectors. The ISD protocol overlays the diagnostic data for each device on top of the safety OSSD signal wires, delivering the highest level of safety and advanced diagnostic over two wires. This error-proofs the system, reduces controller I/O, and eliminates the time, hassle, and expense of running designated cables between the device and control panel.

Intuitive Setup and PLC Integration

Easy to Design and Implement

Create a safety configuration in mere minutes with the free PC software, which provides an intuitive on-screen interface incorporating drag-and-drop icons. Download the configuration using the XM3 external memory drive, no PC required. Integration with the PLC is made easy with the export-tag feature that automates the typical manual entry of tag values in the PLC. Quickly set the controller's IP address using the on-board LCD display via the ClickSet IP feature.



SI-RF Series RFID Safety Switches with ISD

- Two-piece design in which sensor and actuator do not contact
- High tolerance (10 mm) to misalignment enables reliable performance in challenging industrial environments
- IP69 solutions available
- Available with the highest level of tamper resistance



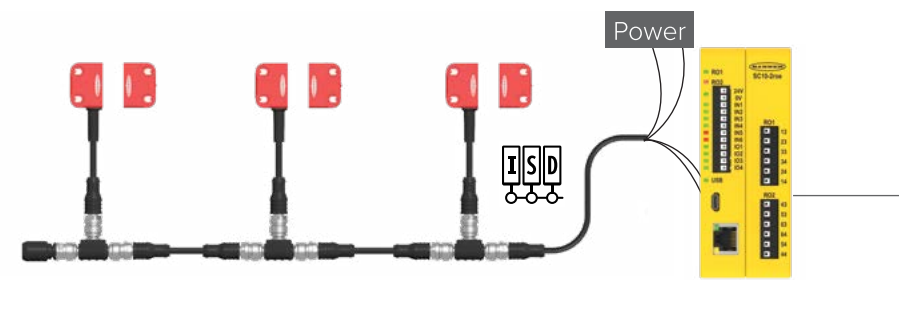
RFID Single

- Single-door RFID non-contact gate/door sensing solution
- Resistant to high vibration and operations with metallic shavings



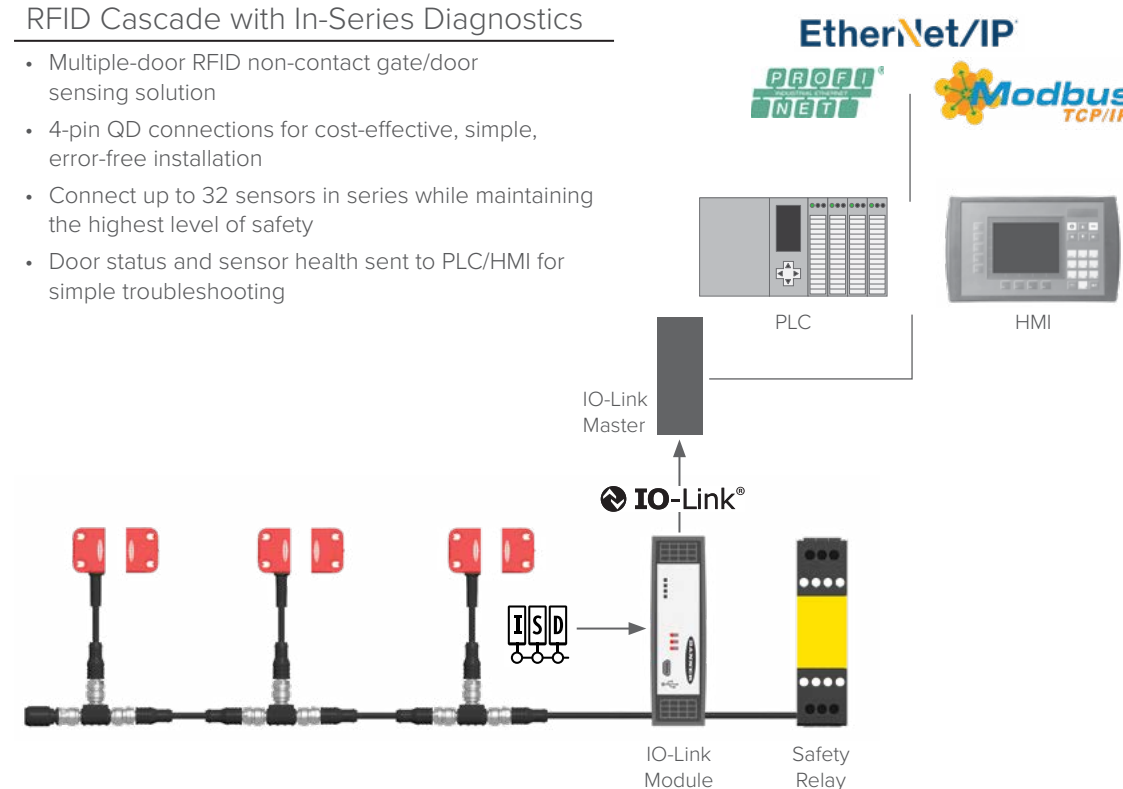
RFID Cascade

- Multiple-door RFID non-contact gate/door sensing solution
- 4-pin QD connections for cost-effective, simple, error-free installation
- Resistant to high vibration and operations with metallic shavings



RFID Cascade with In-Series Diagnostics

- Multiple-door RFID non-contact gate/door sensing solution
- 4-pin QD connections for cost-effective, simple, error-free installation
- Connect up to 32 sensors in series while maintaining the highest level of safety
- Door status and sensor health sent to PLC/HMI for simple troubleshooting



Related Product



ISD to IO-Link Modules

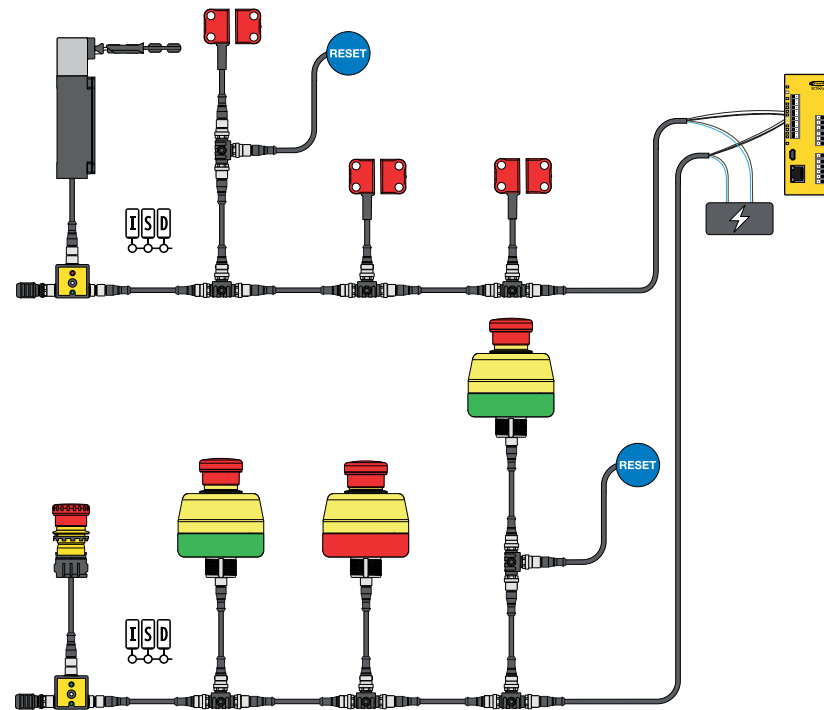
- Compact devices that transmit In-Series Diagnostics (ISD) data over IO-Link
- Connects IO-Link master to an ISD chain in or outside of the cabinet
- Connects with up to 32 ISD inputs any combination of ISD devices (ISD Connect, RFID, E-stop)
- Easily daisy-chain to safety relay or safety controller
- Model with IP69-rated housing saves limited cabinet space



Illuminated E-Stops with ISD

Resolve Issues and Prevent Downtime

- Available with In-Series Diagnostics (ISD), which provides detailed status and performance data from each connected button that can be accessed with an HMI or similar device
- Patented E-stop base will flash red when actuated and indicate armed status with either green, yellow, or no illumination
- One-piece, fully enclosed button with M12 connection reduces time and labor of installation; button diameter options and button shrouds available
- Rugged design rated to IP65 for use in harsh environments; IP69 cover available
- Models available with local reset input



Related Product



ISD Connect T-Connector

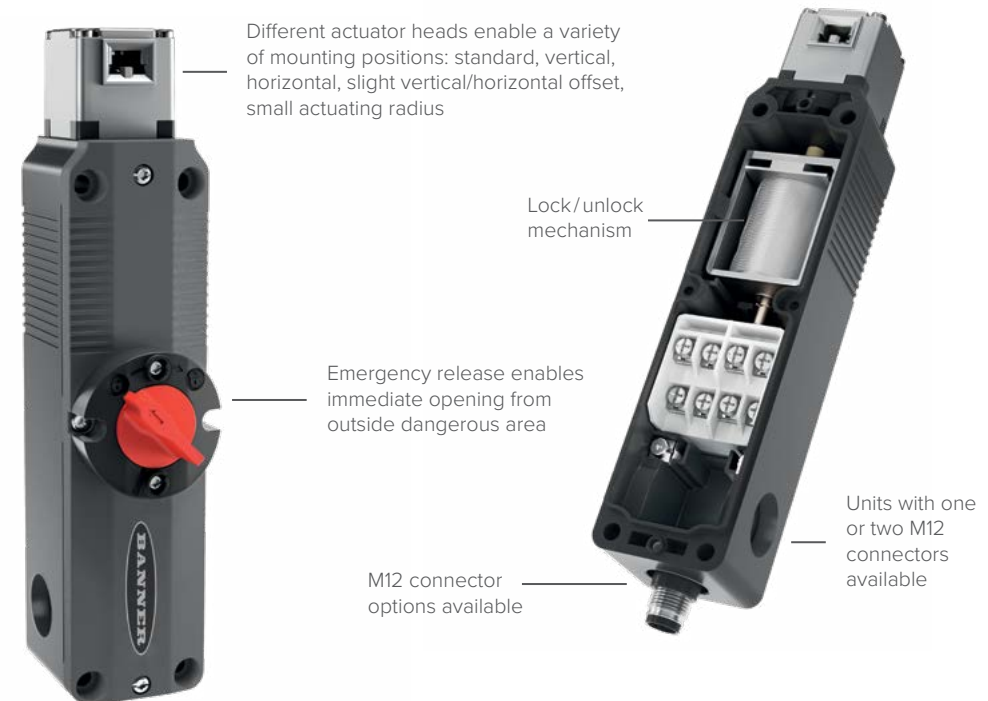
- Connects a non-ISD-enabled safety device with 2 NC set of contacts, such as a panel-mount E-stop or safety switch, to an ISD chain
- Rugged design rated up to IP67 installs easily, with no assembly or individual wiring required
- 5-pin M12 female port for connecting an input device
- Access diagnostic data, prevent system faults, and reduce equipment downtime of non-ISD devices
- Built-in indication for input device and ISD status
- Center mounting hole for simple and versatile installation



SI-GL42 Series

Safety Locking Switches

- Lightweight, yet robust, design with plastic body and metal for mechanically stressed components
- Actuator head rotatable in 90° increments, providing five positions, including vertical
- Choice of spring lock with energized solenoid release or energized solenoid lock with spring release
- Multiple actuator and monitoring contact configurations for any automation safety application
- Some models compatible with Banner's exclusive In-Series Diagnostics (ISD) system for data-driven insight
- Activated locks can be manually unlocked with a tool if machines need to be accessed for maintenance or repair



Actuators

SI-QM-SSA-2

- Straight rigid actuator for sliding or removable guards



SI-QM-SSA-2RA

- Flat rigid actuator for sliding or removable guards



SI-QM-SMFA-2

- Flexible actuator for small hinged guards 150 mm or larger



SI-QM-SMFA-3

- Flexible actuator for small hinged guards 400 mm or larger



Sliding door handle with mechanical latch simplifies installation and provides latch function to prevent switch and actuator damage and optimizes alignment.



SX5 Series Safety Laser Scanners

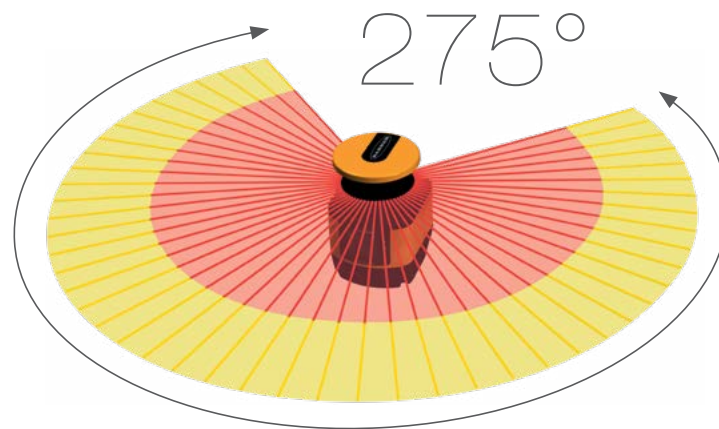
- Master and remote functionality with simplified setup and wiring
- Protect personnel and equipment with three independent safety outputs
- Ideal solution for complex applications with 70 unique safety zone sets, encoder inputs, and advanced measurement data
- Cost-effective, compact, one-piece design with 275° of monitoring
- Horizontal or vertical detection zones to reliably safeguard mobile vehicles, access points, work areas, and more

275 Degrees of Coverage

275 degrees of coverage makes it easy to mount on a corner

Maximum range for Safety Zone: 5.5 m

Maximum range for Warning Zone: 40 m



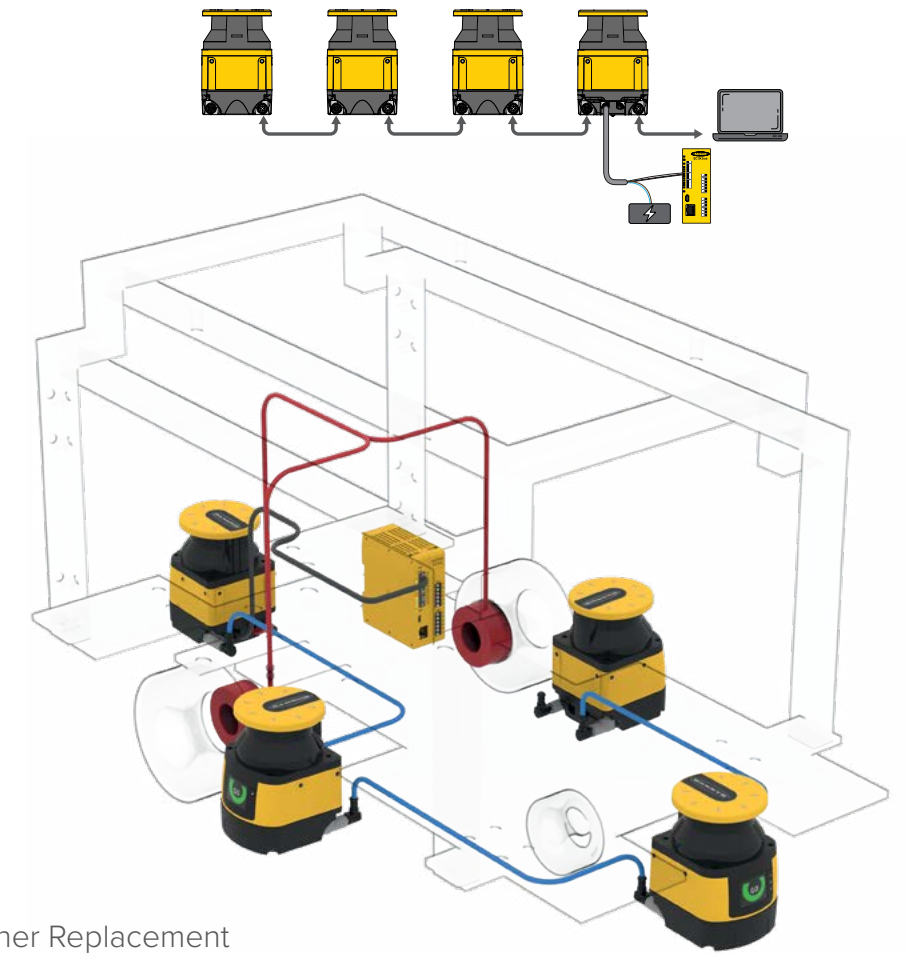
Monitor up to three safety areas simultaneously

Three independent safety outputs allows you to monitor up to three distinct safety areas, simplifying wiring, set-up, and installation. It's like having three scanners in one.



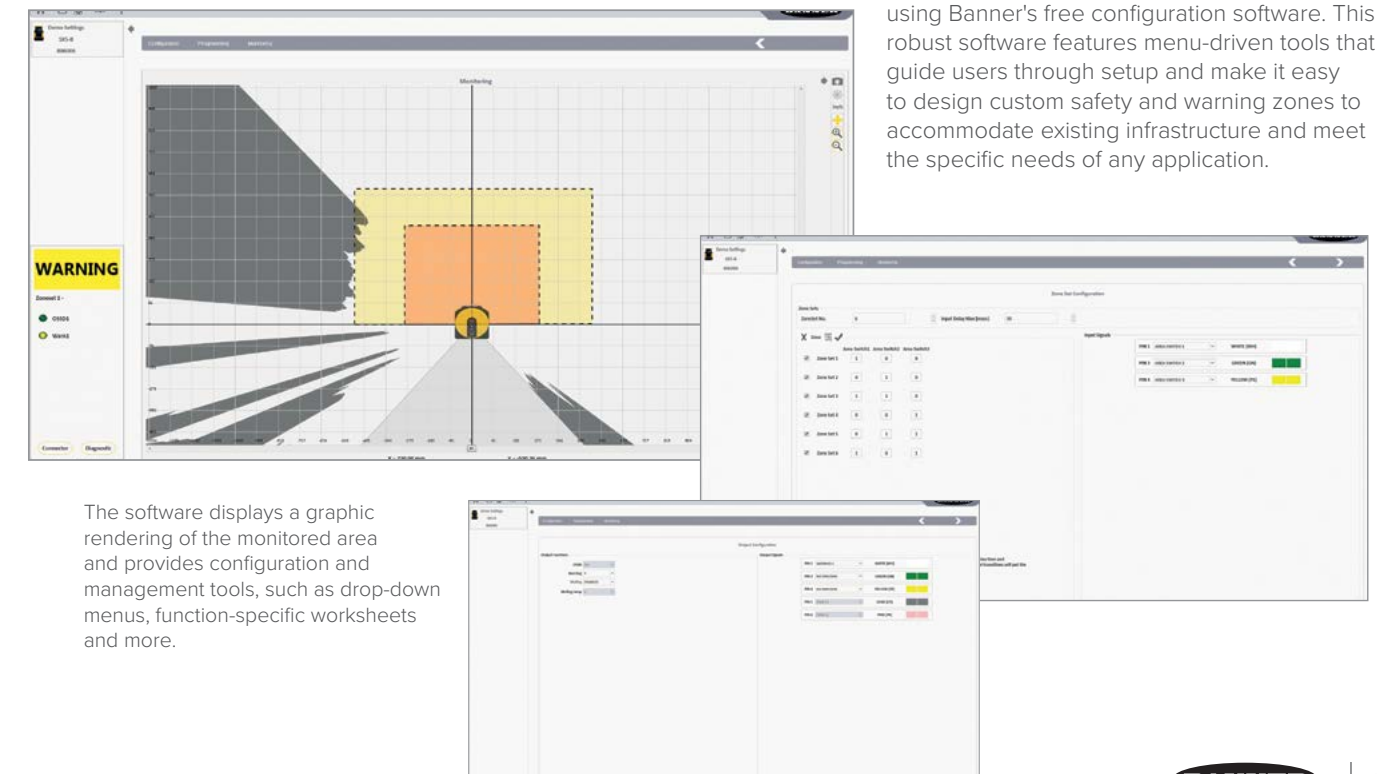
Removable Memory for Fast Scanner Replacement

The system configuration is backed up in a removable memory unit. Install your replacement scanner quickly and easily, without needing to reconfigure your system.

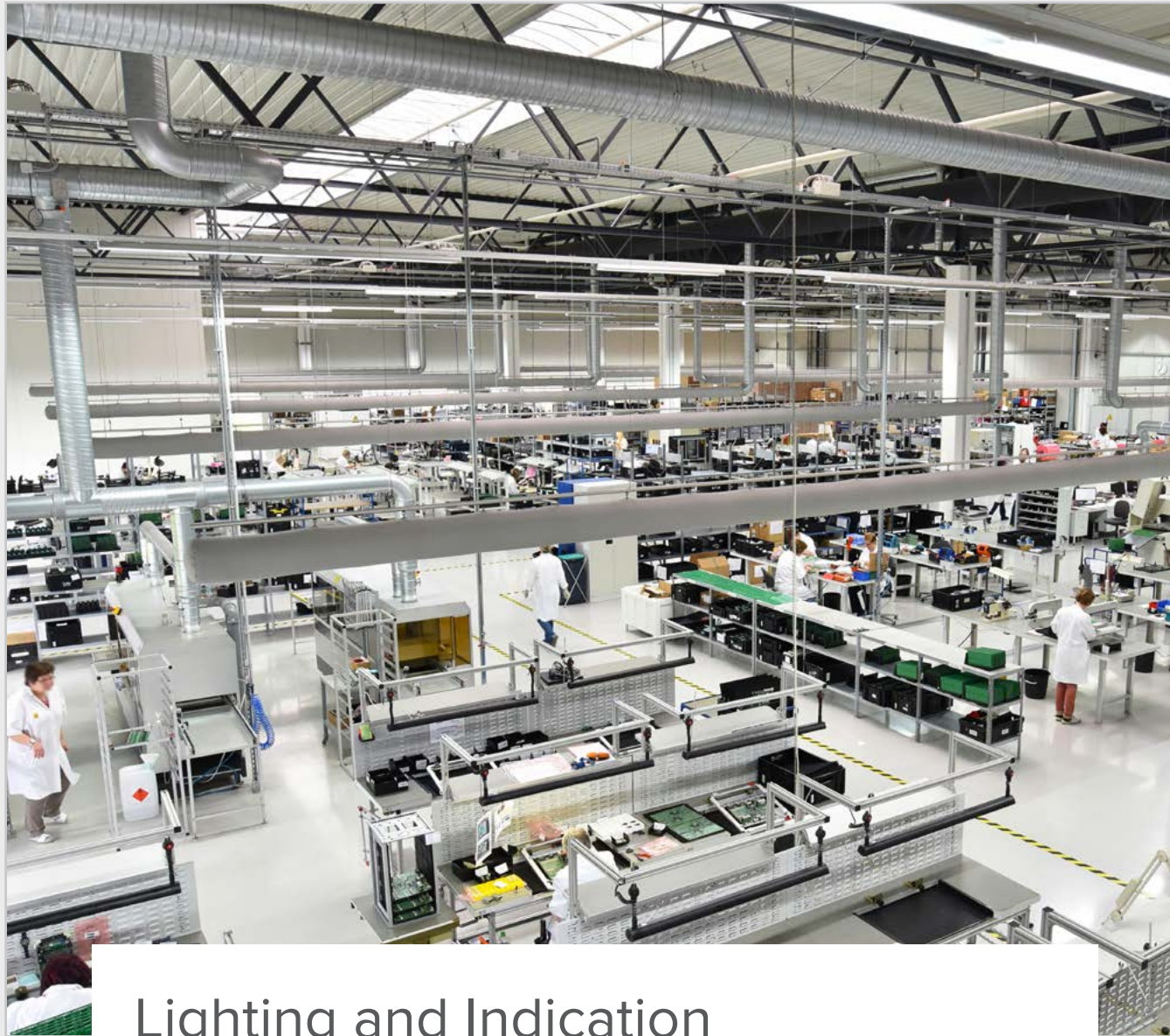


Simple Setup for Rapid Deployment

The SX5 can be set up in just a few simple steps using Banner's free configuration software. This robust software features menu-driven tools that guide users through setup and make it easy to design custom safety and warning zones to accommodate existing infrastructure and meet the specific needs of any application.



The software displays a graphic rendering of the monitored area and provides configuration and management tools, such as drop-down menus, function-specific worksheets and more.



Lighting and Indication

Banner's expanding selection of lighting, tower lights, indicators, audible alarms, and actuators shines brilliant and bright to provide superior-quality illumination, clear status indication, and unmistakable operator guidance. Banner offers the low-power, maintenance-free advantages of LED technology as well as programmable LED devices, which provide users the ability to configure color, flashing, dimming, and advanced animations.

Communicate Status

- Empower Operators
- Alert Supervisors
- Accelerate Resolution
- Plant-wide

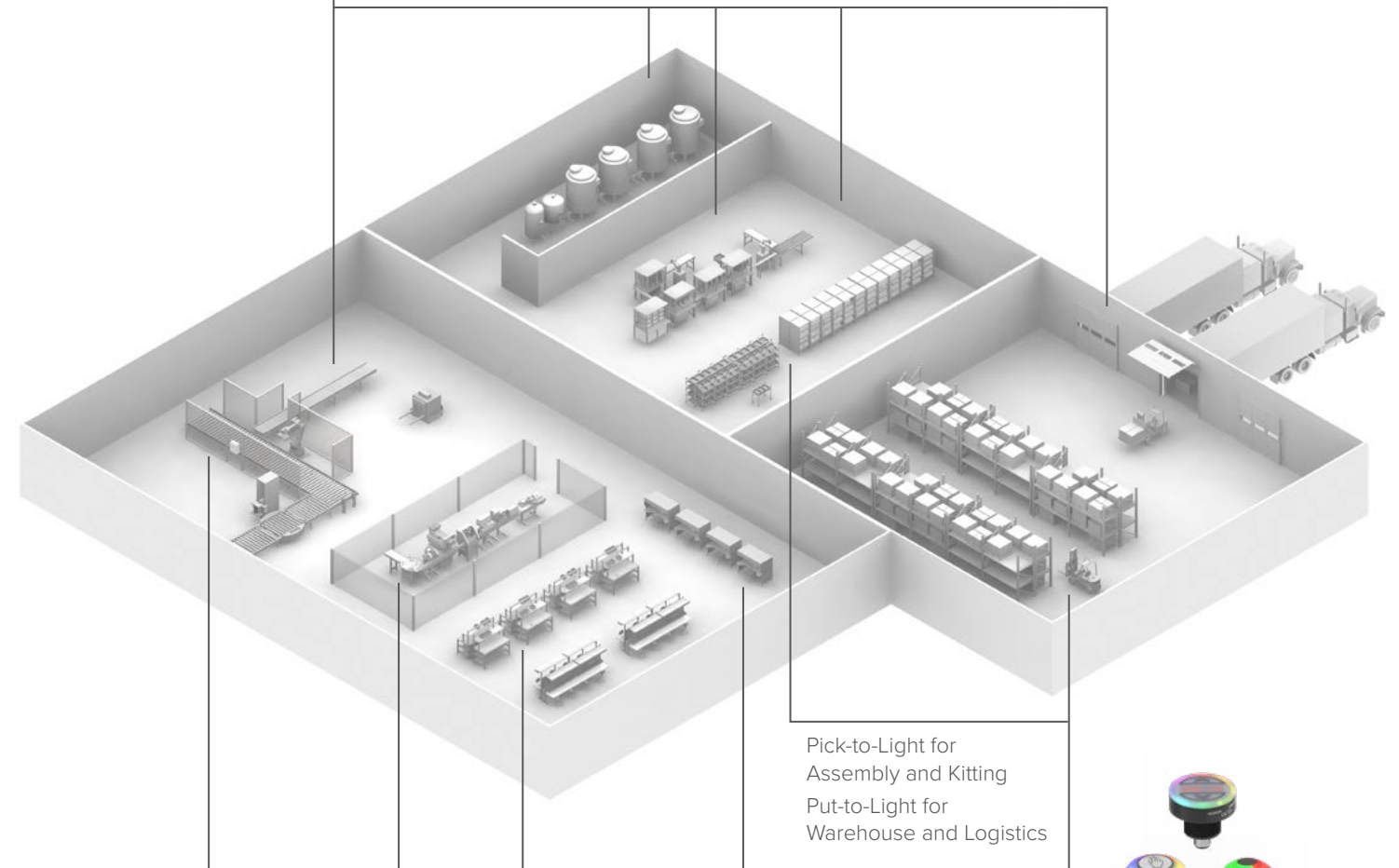


Sensor
Emulation

Machine and
Process Status

Call for Parts

Loading Dock/Bay
Communication



Pick-to-Light for
Assembly and Kitting
Put-to-Light for
Warehouse and Logistics

Electrical
Panel Lighting

Machine
Lighting

Workstation
Lighting

Visual Inspection
Station



Illuminate the Work Area with LED Lighting

- Boost Worker Productivity
- Improve Product Quality
- Reduce Energy Costs



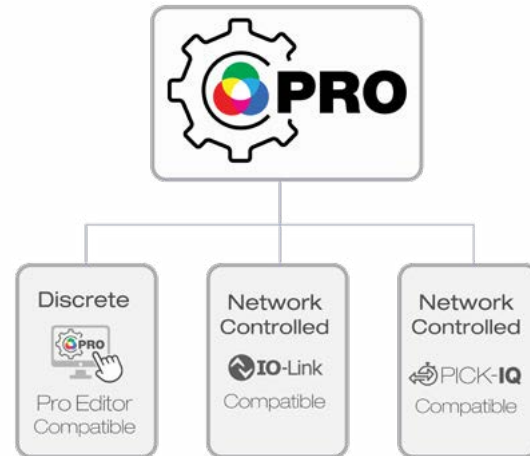
Increase Efficiency with Light-Guided Part Picking

- Reduce Cycle Time
- Error-proof Assembly
- Streamline Training



What is Pro?

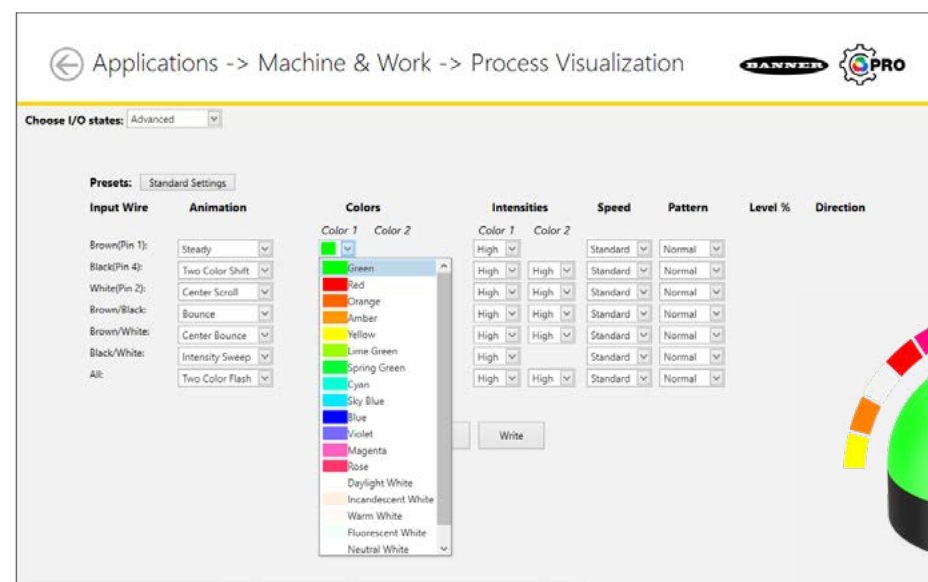
The Pro Series programmable multicolor LED devices from Banner Engineering offer limitless possibilities for advanced indication of dynamic machine states, operator interaction, and process statuses. The Pro Series is ideal for users who are looking for greater flexibility or more advanced capabilities than a traditional factory light provides. For both discrete and network-controlled devices, the Pro Series uses Banner's Pro Editor Software, IO-Link, or PICK-IQ® to customize visual communication across a factory.



Pro Editor Software for Intuitive Indication and Interaction

Software for Programmable Discrete-Controlled Devices

Banner's Pro Editor software allows users to program device status, colors, animations, and much more for control via discrete inputs. The application-based interface makes it easy to configure a device for a wide range of applications such as displaying machine warm-up time, indicating unique steps in an assembly process, showing distance and position information, and communicating multiple machine states.

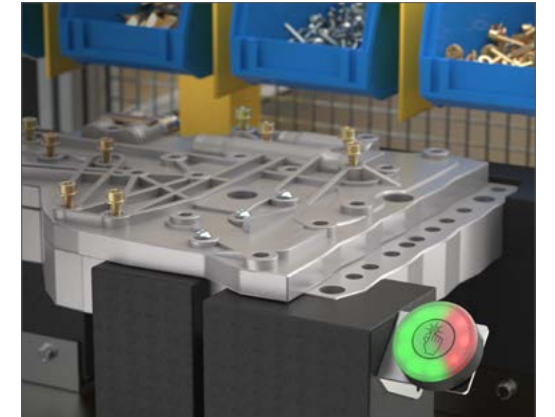
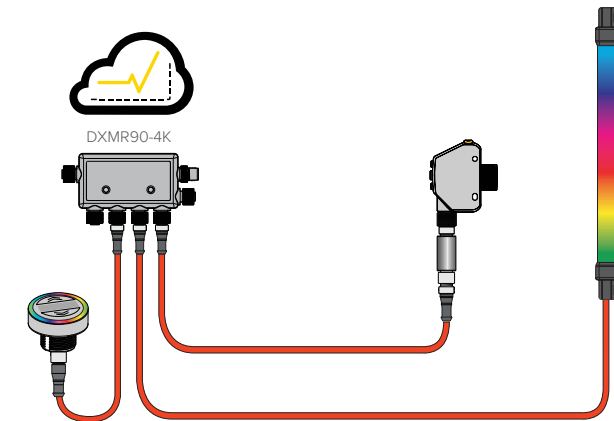


IO-Link®

IO-Link for Dynamic Control

Reduced Costs and Increased Efficiency

IO-Link models allow for dynamic control—reacting to inputs from other devices—and have additional modes that discrete devices do not. IO-Link enables users to change device parameters from the control system as needed, such as during product changeover, which reduces downtime and allows machines to accommodate greater product diversity. The models also offer unique LED color management to provide advanced users with total control.

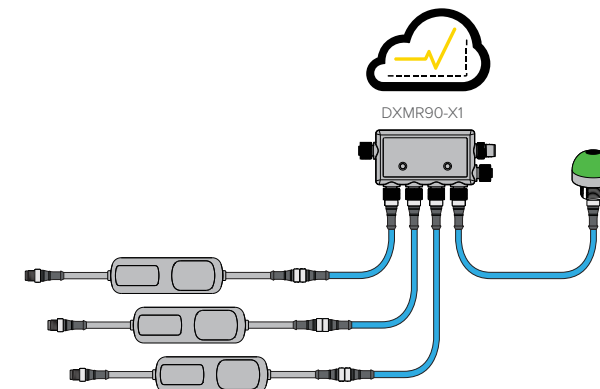


PICK-IQ®

PICK-IQ® for High Device Density

Faster Response Speed and Simplified Programming

PICK-IQ® is a purpose-built serial bus protocol that maintains high speeds even in networks with a high device count. Devices with PICK-IQ® allow full access to color, flashing, rotating, and dimming settings as well as advanced animations such as process statuses and LED control. Devices with PICK-IQ® are typically used in pick-and-put walls, light-guided assembly, and other high-density installations with close device proximity.





Pro Products

Give Your Light Full Control

For illumination, indication, or interaction, the family of Pro products from Banner enable advanced capabilities and control throughout a visual environment.



LED Indicators

- Configure color, flashing, intensity, rotation, and sound
- Up to 14 colors, four different sizes for machine or panel mount
- Pro Editor models offer simple wiring, enabling easy setup and reduced installation time
- PICK-IQ® devices provide the ideal solution for production lines and fulfillment stations that require dynamic indication
- Models with IO-Link communication enable almost limitless capacity for custom indication
- Simplify purchasing with fewer models that can be customized in-field, saving costs and inventory requirements



Touch Buttons

- Pro actuators offer advanced animation customization and faster response speed
- Configure color, animation, intensity, and activation logic
- Touch buttons offer excellent immunity to false triggering by water spray, oils, and other foreign materials
- Optical sensor models are immune to ambient light, electromagnetic interference, and radio frequency interference
- Can be actuated with bare hands or gloves and have the added feature of adjustable sensitivity
- Compatible models are programmable using Banner's IO-Link system for customization of colors and animation
- Models with PICK-IQ® feature faster response speeds over a serial network



LED Strip Lights

- RGBW LEDs for illumination and indication plus timer, counter, distance, and gauge modes
- Six white color temperatures for comfort and compatibility
- Provide high visibility status indication
- Versions available for Pro Editor, IO-Link, and PICK-IQ® to suit all your needs or integrate with other Pro products
- IO-Link helps reduce costs, increase process efficiency, and improve machine availability
- Available in multiple lengths from 150 to 1200 mm
- Visually communicate distance and other sensor measurements with Pulse Pro I/O™



Tower Lights

- 14 colors, three segment types, and two housing colors
- Classic segment control plus action, timer, counter, and level modes
- Pre-assembled and preconfigured multi-segment LED tower light indicators replace conventional stack lights, which often require time-consuming assembly and complex wiring
- Self-contained tower lights provide users with custom indication by combining the vast color options provided by RGB LEDs with the versatile control capabilities offered by either Pro Editor software or IO-Link communication



WLS15 Series

Sealed, Low-Profile Strip Lights

- Low-profile design for easy installation in tight spaces
- Improves visibility, safety, and efficiency
- Completely sealed with IP66 and IP67 ratings for use in wet or dusty environments
- LED lighting technology saves energy and minimizes replacement costs
- Available as either stand-alone models, or as cascade models that can be daisy-chained together for longer lighting runs, with a minimum of wiring
- Setup is quick and easy with simple mounting options, reducing time spent on installation
- Available in lengths from 220 to 1200 mm

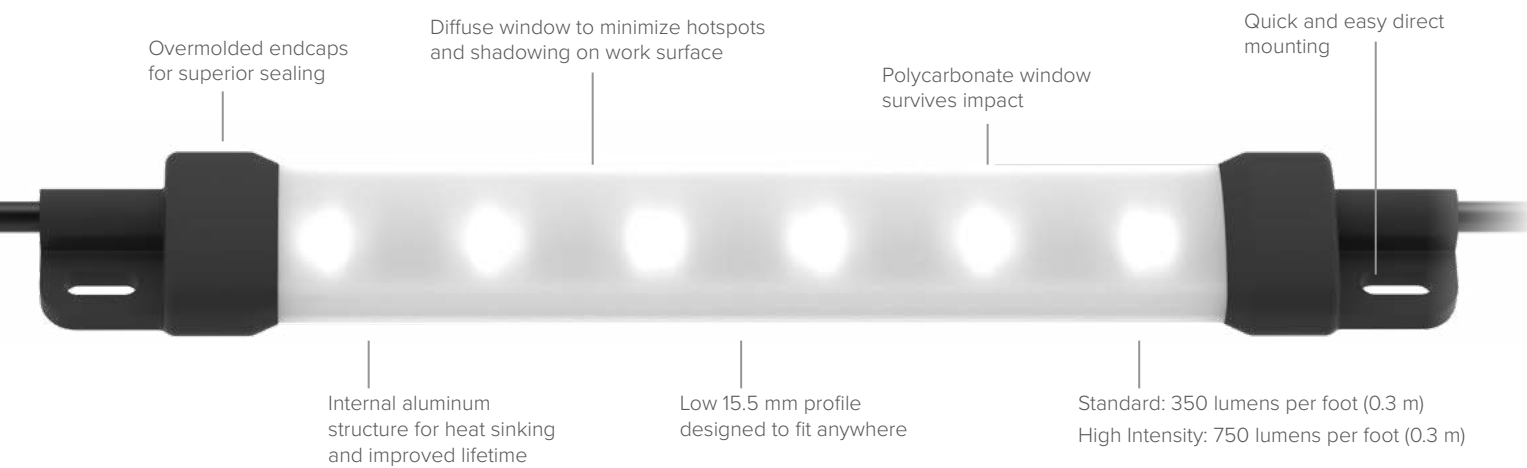


HLS28 Series

Hazardous Enclosure LED Strip Lights

Banner's HLS28 Hazardous Location LED Strip Light has a sturdy aluminum housing, shatterproof windows, and low-profile, space-saving design for use in certified enclosures in hazardous locations.

- 9 single color models and 3 multicolor models available in lengths from 145 mm to 570 mm
- Available with integrated motion sensor for auto-on when the enclosure door is opened, or anytime motion is detected
- Single color models have Hi/Lo/Off dimming capability for additional energy savings and customization
- Automatic temperature protection built into the unit
- Triple certification cULus, ATEX, and IECEx, for global use inside appropriately rated enclosures



WLS15 Low-Profile Strip Lights

- Improve worker performance by lighting under shelves, inside doors, above bins, and in cabinets
- Sturdy aluminum inner frames, encased in shatter-resistant, UV-stabilized polycarbonate shells, making them ideal for indoor and outdoor applications
- Draws less current than other lights for a low-power device that delivers high energy savings
- Cascade models require only a single electrical installation
- Capability to dim lights using PWM input

WLS15 Pro LED Strip Lights with Pro Editor, IO-Link, or PICK-IQ®

- 19 color options plus animations and direct sensor interface give limitless options to convey status, resulting in clear communication and improved productivity
- Pro Editor compatibility allows for field configuration of modes, colors, animations, and more on discrete (controlled) models
- IO-Link and serial (RS-485) PICK-IQ® models are available with even more capabilities, such as individual LED control and the ability to divide the light into 10 total segments

WLS15 High-Intensity LED Strip Lights

- Capability to dim lights using the wiring pinout (Hi/Lo/Off)
- Has more LEDs and less diffuse window than standard models
- More than double the output of standard models

WLS15 Dual-Color LED Strip Lights with EZ-STATUS®

- Uses two colors for status indication
- Amber LEDs available for photosensitive applications
- Promotes faster responses to status changes
- Improves ergonomics and limits wasted movement
- Reduces the risk of costly mistakes and accidents



Illumination for Enclosure Troubleshooting

- Light automatically turns on due to its integrated motion switch
- Motion sensor is integrated into the light for ease of use and installation
- This hands-free solution enabled workers to no longer bring their own light source to the oilfield
- Sturdy aluminum housing, shatterproof windows, and space-saving design, for use within enclosures in a hazardous environment



WLS70 Series

Sealed, High-Output Strip Lights

Banner's waterproof WLS70 is a very bright LED luminaire that features an even light output and is designed for a wide variety of environments and applications. These include machine lighting, automation systems, industrial applications, wet and harsh environments, railcars, inspection, dairy/poultry production, agriculture, parking garages, and other indoor and outdoor spaces.

- Up to 143 lumens/watt; exceptionally efficient for overall energy and cost savings
- Increases worker productivity and ergonomics with bright, high-quality, uniform light
- Sturdy aluminum housing encased in a shatterproof, UV-stabilized polycarbonate shell
- Daisy-chain long runs of AC lights quickly and easily with cascaded quick-disconnect models
- Dimming standard on all models



Flex Arm Lights Series

Light Where You Need It

- Choose between the high output 50 mm or focused 18mm flex arm lights with an M12 connector to easily plug into one of our power supplies
- Long, 457 mm (18 in.) vinyl-coated flexible arm
- Various mounting options
- Flex arm accessory also available separately to work with cabled and quick-disconnect models of WL50S, LED S50L Spotlights, and other 30 mm base models



Bright, Uniform Illumination

- Increases worker productivity and ergonomics with bright, high-quality, uniform light
- Class-leading 143 lumens/watt efficacy, and up to 5400 lumens in 1200 mm model
- Available in 300, 600, 900, or 1200 mm lengths
- Over 1400 lux at 1 m (1200 mm model)

Quick and Easy Installation

- AC and DC models available
- Quick disconnect options
- Brackets are included, and a wide variety of optional brackets are available for fixed and hanging mounts

Energy Efficient, Cost-Effective

- Over 140 lumens/watt
- Automatic temperature protection (above 50° C, the light reduces output to manage heat and protects product lifetime)
- Dimmable; saves energy, prolongs product life, improves workplace ergonomics



Bright LED Technology

- Bright 300 lumen output, and over 1000 lux at 1 ft. away
- Less than 3 watt
- Long-life LEDs and industrial-grade circuitry

Industrial-Grade Flex Arm Design

- Versatile mounting options including magnetic, quick-connect, flange, and more
- Adjustable high-tension arm that stays in place once you set it
- Easy-to-clean vinyl coating to protect against moisture, dust, and debris

Capacitive Touch Technology

- Ergonomic, capacitive touch design with zero force required for actuation
- On/off and dimming function built into the face of the light
- Intuitive touch logic and last state stored, even after a power outage



TL50 Pro Select Series Programmable Tower Lights

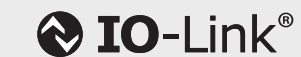
- Rugged and easy-to-install 3- and 4-segment tower lights
- Programmable using Banner's Pro Editor software and Pro Converter Cable
- IO-Link gives full access to color, flashing, and dimming settings, as well as advanced animations like run and level modes which provides dynamic response to changing machine conditions
- Lighted segments provide easy-to-see operator guidance and indication of equipment status
- Audible models available with omni-directional audible element
- 12 V DC to 30 V DC operation
- No assembly required



K50 Pro Touch with Display Programmable Compact Indicators

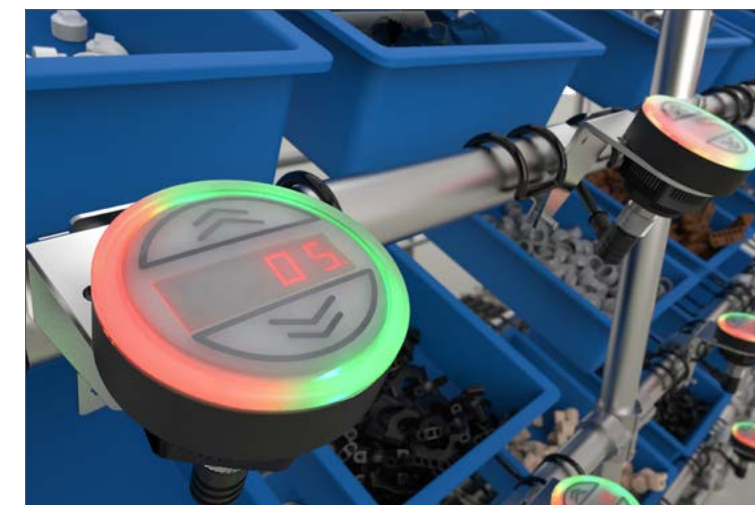
An ideal interface device for pick-to-light, condition monitoring, and general operator interaction in industrial environments. It enables users to clearly communicate status and receive feedback, improving throughput and productivity.

- 4-Digit, 7-segment LED display
- Two independent touch areas
- Excellent immunity to false triggering by water spray, oils, and other foreign materials
- Can be actuated with bare hands or gloves



Maintain Smooth Operations in a Complex Environment

- Effectively communicate equipment functionality and operator status
- Goods can be moved more reliably, accurately, and faster
- Tower lights are easily configured with Pro Editor software
- Pro ID creates unique identifiers for each tower light
- Standardize on a single model and customize for each process and status
- Lighted segments quickly notify maintenance and supervisors of a quality, processing, or material shortage problem
- Omni-directional audible element available for additional operator guidance



4-Digit, 7-Segment Display with Two Touch Sensors

- Dual touch surfaces, enabling increment/decrement and choose/select functionality that is difficult with standard, single touch buttons
- 4-digit alphanumeric display enables users to communicate more information, can be inverted, and can scroll longer messages
- IP67 and IP69-rated, allowing users to install it without any additional enclosure

Programmable RGB Configurability

- Combine proven technology and ruggedness with the added versatility of RGB LEDs
- 14 colors to choose from, including: red, green, blue, yellow, orange, white, and amber
- Customize color, animation, intensity, and activation logic
- Limitless possibilities for advanced indication of dynamic machine states, operator interaction, and process statuses



K50 Pro Touch

Programmable Multicolor Touch Buttons

K50 Pro multicolor touch buttons combine proven touch technology and ruggedness with the added versatility of RGB LEDs.

- Bright LED indicators combined with touch-activated switching capabilities
- Advanced touch technology allows for high immunity to water while still working with gloves
- Models made with FDA-approved materials are available for use in the food and beverage industries
- Up to fourteen color variations in one device (Green, Red, Yellow, Blue, White, Cyan, Magenta, Orange, Amber, Lime Green, Spring Green, Sky Blue, Violet, and Rose)



Bolder Indication for Everyone, Anywhere

- Get seven colors via only three inputs
- Save controller outputs and wiring
- Improve production efficiency through enhanced visual management
- Install wherever you need indication to improve communication and productivity
- Standardize to simplify ordering and spare parts
- Collaborate with Banner on custom models
- Enhance troubleshooting and branding with colors dynamically using IO-Link models
- Create your own custom units with Pro Editor software or IO-Link
- K50 compact models are available for low profile applications



Avoid nuisance maintenance and replacement expense



Rely on performance in washdown and humid environments



Select compliant models for use in food and beverage processing



Hear status information directly



Customize device configuration with advanced color and animation options



Simplify ordering, stock and spare parts with flexible, customizable units

K50 Pro Audible Models



Audible Tones

Continuous

Pulse

Wobble

Staccato

Strobe

Siren

Low Intensity

Medium Intensity

High Intensity

Whoop

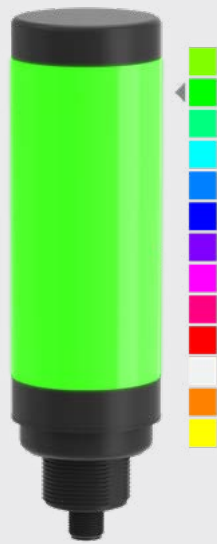
Jingle

Melody 1

Melody 2

Melody 3

Custom Tones



CL50 Pro

Programmable RGB Column Lights

- Rugged, versatile, and easy-to-install multicolor indicators
- Bright, easy-to-see operator guidance and indication of equipment status
- Programmable using Pro Editor software or dynamically controlled with IO-Link
- Customized indication possibilities, including color, flash patterns, and light intensity control
- Audible models available with sealed, omni-directional audible element

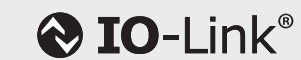


TL70 Pro

Programmable RGB Tower Lights

Features custom indication by combining the vast color options provided by RGB LEDs with the versatile control capabilities offered via IO-Link communication.

- Configure color, flashing, rotation, and light intensity
- Models with IO-Link enable almost limitless capacity for custom indication
- Rugged, versatile, and easy-to-install
- High-visibility, at-a-glance operator guidance and status indication
- Audible models available with standard, loud, or programmable audible element
- Pro series tower lights provide classic segment control as well as advanced status indication that adds nuance to the visual factory



Intuitive Software with Advanced Capabilities

- CL50 Pro Column Lights utilize bright, multicolor RGB LEDs that enable customized indication possibilities, including color, flash patterns, and light intensity control
- Pro Editor compatible models utilize an intuitive software interface to enable fully customizable color and wiring combinations via discrete inputs
- Pro Editor software users can access up to fourteen different colors and unique animations that attract attention and effectively communicate status

Big, Bright Design

- Provides extremely bright and uniform light to indicate machine status
- Highly visible tower light enables better visual management by allowing operators to quickly check machine status and constantly monitor machine processes

Pre-Assembled or Custom

- Up to five light segments in a single tower plus one audible module
- Can be ordered as separate modular segments for a customized solution
- Audible models with loud 101 dB adjustable alarm and four selectable tones, including pulsed, chirp, siren and continuous

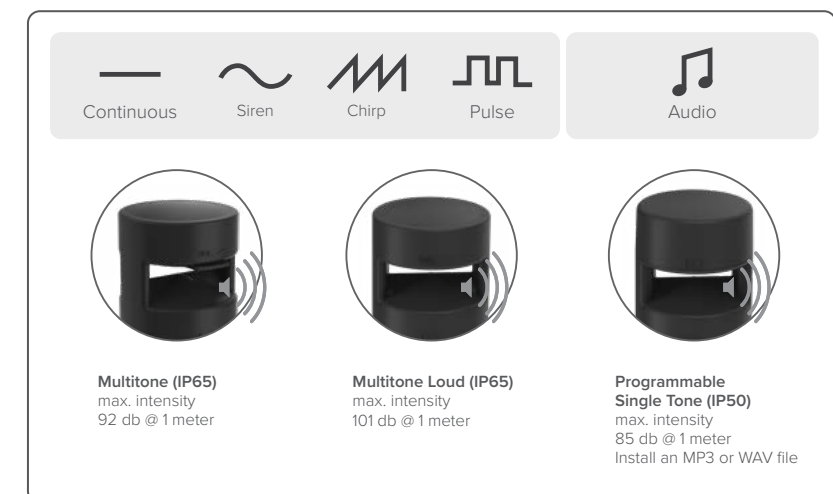
Determine Status Quickly

- Can be viewed from all angles
- Appears gray when off, avoiding false indication from ambient light



Dynamic Communication for Seamless Control

- IO-Link models allow for dynamic control—reacting to commands from an IO-Link master—and have additional capabilities that discrete units do not
- Change device parameters from the control system as needed, such as during product changeover, which reduces downtime and allows machines to accommodate greater product diversity
- Access unique LED color control to provide advanced users with total control





TLF100 Pro

Flush Mount Tower Lights

The TLF100 Pro Flush Mount Tower Light offers superior indication, advanced animations, an audible option, and sealed, IP65 and IP69K ratings for indoor and outdoor environments.

- Rugged, versatile, and easy-to-install flush mount 3- and 4-segment tower lights
- IO-Link gives full access to color, flashing, and dimming settings, as well as advanced animations like run and level modes which provides dynamic response to changing machine conditions
- Programmable using Banner's Pro Editor software and Pro Converter Cable
- 14 selectable audible tones and audible intensity control
- Bright, single color LEDs provide highly visible indication for indoor or outdoor applications



TL15

In-Line Tower Light Indicators

The TL15 In-Line Tower Light is an ultra-small, modular indicator that can be used standalone, or connected in-line with a tower light, sensor, touch-button or other device to display signal status. Its in-line connection and distinct indication give users a simple way to add status information where needed, improving issue response time and increasing throughput.

- Over-molded IP66, IP67, and IP68 design for use in harsh environments
- Green, yellow, red, and blue models, each with a specific activation pin
- All signals pass through M12 in-line connection, simplifying installation without disruption to I/O
- Small, modular design allows for installation flexibility into tighter area



Standard models for traditional applications (Available in black and cool gray)

Threaded Inserts for Mounting



Daylight visible models for use in high ambient light environments

Sealed Audible Alarm with volume from 84-94 dB at 1 m

IP65 and IP69K-rated

3 or 4 Segments



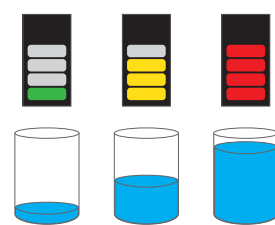
Low-Profile, Over-Molded Design

- Highly visible body
- Over-molded IP66/67/68 design is reliable and rugged to withstand harsh industrial environments
- Low-profile design makes it ideal for bright indication in tight spaces

Highly Visible Indication

- Provides easy-to-see status indication
- LED lighting technology saves energy and minimizes replacement costs
- Four colors: blue, green, yellow, and red
- Visible statuses can be used to guide operators or communicate upcoming machine movements

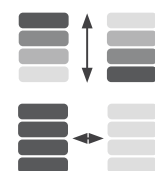
Modes and Animations



Level



Multicolor



Intensity Sweep



Audible



Timer



Scroll



Bounce



Flash



Counter

Related Product



TL15A

In-Line Audible Indicator

- The TL15 Series has expanded to include an audible model for audible status indication
- Can be used in-line with TL15 tower lights or as a standalone device along side other lights or sensors for additional audible indication



In-Line Products

Indication, Illumination, Signal Conversion, and More

- Small, plug-in accessories that are designed to begin operating immediately, fitting seamlessly into factory applications
- Rugged over-molded design meets IP65, IP67, and IP68
- Small, 15 mm tubular design and M12 connectivity enable easy installation in tight areas, directly to a device, or anywhere in line



LC15T In-Line Switches

- In-line capacitive touch switch with M12 connectors
- On/Off or PWM control models available
- Low-profile, rugged, water-resistant design
- Perfect for DC-powered devices
- Rated for up to 30 V DC
- Capability to dim lights using PWM output
- Optional snap clips, VHB, or velcro, for easy installation and repositioning
- Maximum output current 4A



S15WL In-Line Illuminators

Miniature devices providing 360-degree illumination to easily be added to existing components.

- Daisy-chain multiple lights directly or spaced with double-ended cables
- All signals pass through, simplifying installation
- Designed for enclosure or area lighting



Lighted M12 Cordsets

- Bright indication of sensor power and output status
- Two colors: one for power and one for sensor output status
- Meets IP66, IP67, and IP68
- Models available for PNP or NPN outputs



S15L In-Line Indicators

The S15L Series In-Line Sensor Status Indicator is an ideal accessory in industries that require highly visible indication, such as automotive, material handling, and general assembly.

- Two-color indicators available with green, yellow, and red to show power and output status, depending on model
- Mount directly on a sensor for 360 degree-visibility of power and status
- Highly-visible body allows workers to identify and troubleshoot problems faster
- Over-molded design is reliable and rugged to withstand harsh industrial environments



SNAP SIGNAL

S15 In-Line Devices

Converters, Adapters, and Filters

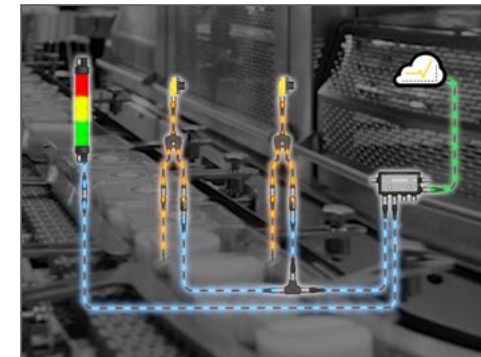
- Adapters re-route wiring to match specific application requirements
- Filters and suppressors protect devices from electrical noise and transients
- Pulse Pro converters output a digital PFM or PWM signal from an analog input





Industrial Wireless

Industrial wireless products from Banner connect remote assets with the people who manage them, enabling real-time monitoring and management of equipment and conditions in difficult-to-access locations or where wired solutions are impractical, ineffective, or cost-prohibitive.



Snap Signal IIoT Hardware

Increase productivity and unlock your factory's true potential with Snap Signal: a hardware and software toolkit for your IIoT evolution.



R70 Data Radios

MultiHop Serial Data Radios are compact industrial, low-power wireless communication devices used to extend the range of serial communication networks.



DEK Wireless Kits

A DEK Wireless Kit is a standalone, end-to-end preventive maintenance solution for simple remote monitoring of outdoor and indoor applications, ranging from agriculture and water treatment to mining and manufacturing. The kit can capture critical data such as vibration, temperature, humidity, tank level, duty cycle, and pressure.

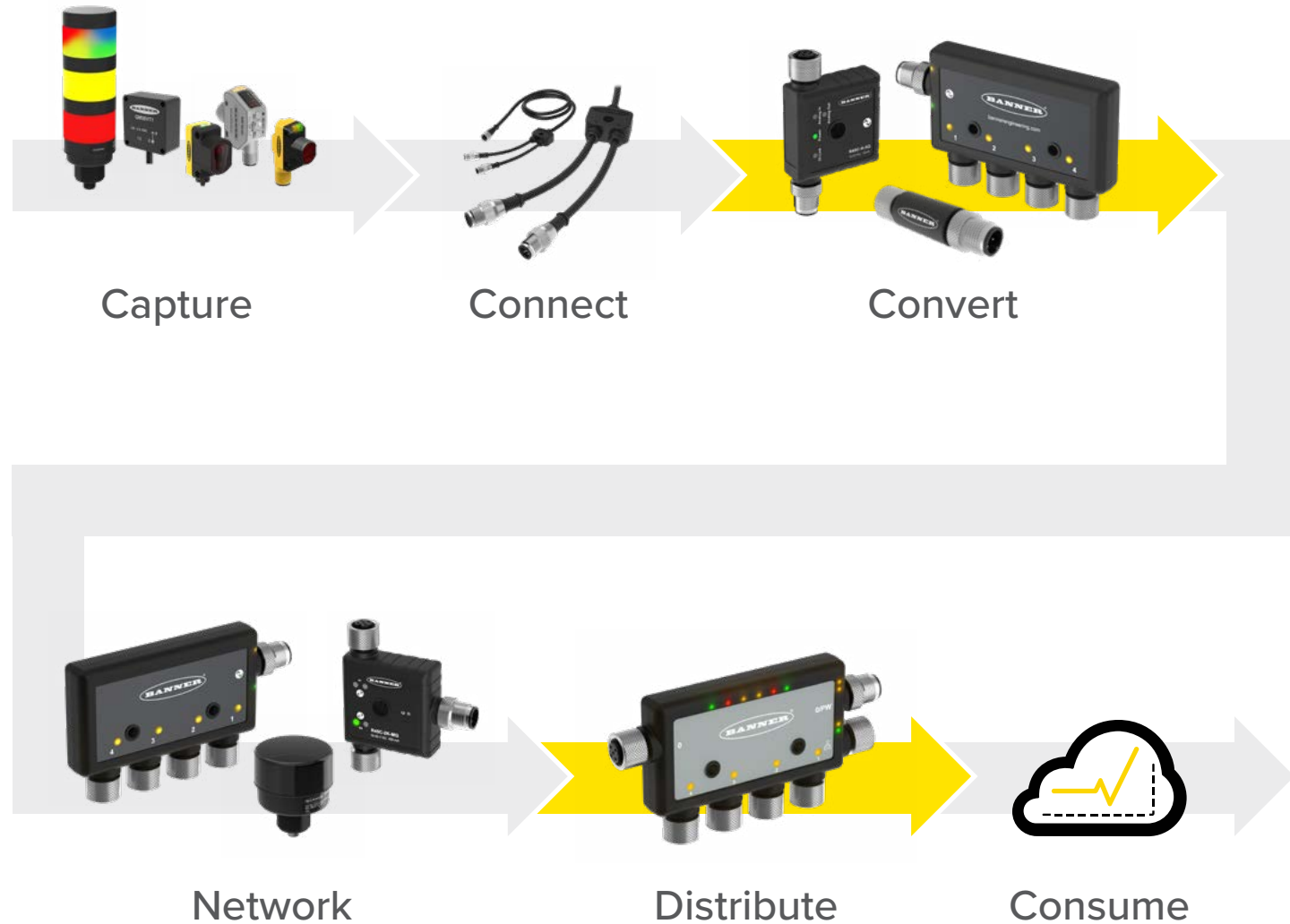


Q45 Nodes and Banner Cloud ID Kits

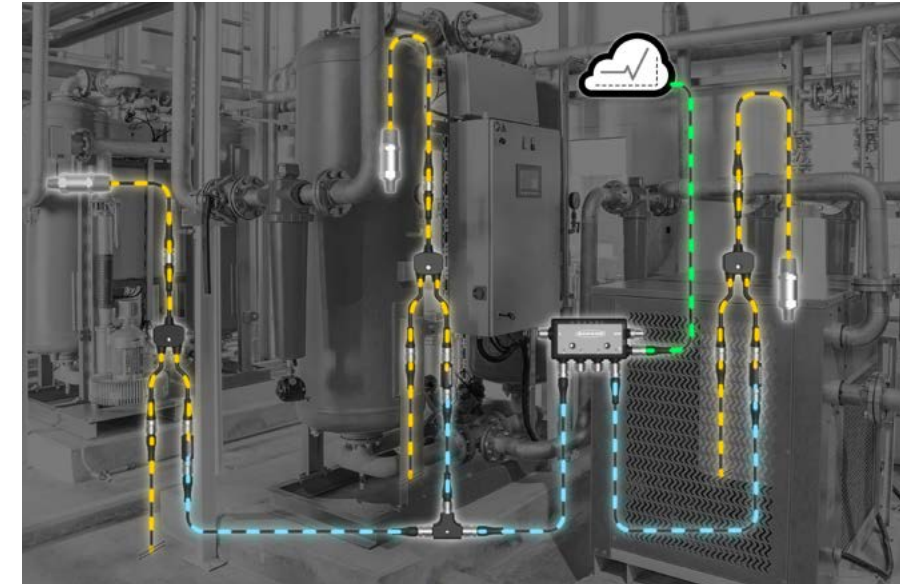
Get everything you need to capture critical data anywhere in production. Banner Cloud ID Kits and Q45 Wireless Nodes are easy-to-deploy, end-to-end solutions to handle operational challenges in real-time—regardless of location. Kits let you track and analyze critical performance data over time to make better, more informed decisions.

SNAP SIGNAL

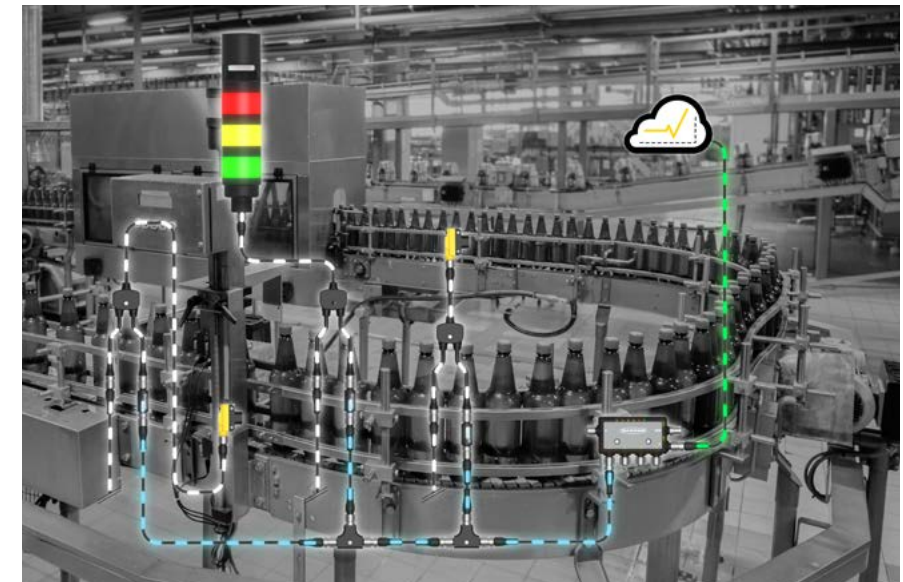
Customers use Banner's Snap Signal hardware and software to instantly unlock valuable data from their equipment and increase productivity. This smart-factory portfolio forms an overlay network by capturing signals from existing and new devices, converting them to a unified protocol, and then distributing them to monitoring platforms, such as SCADA systems, the cloud, or a local PLC/HMI for consumption. The solution deploys easily by leveraging available information without disrupting your existing controls. This helps save you money, reduces downtime, and optimizes your operations.



Snap Signal Application Examples



Tap into Pressure Sensor Data for Immediate Insights



Maximize Throughput and Reduce Downtime by Harnessing Sensor Data from Your Equipment

Improve productivity, quality, and reliability with actionable data. Build smart machines and smarter factories with Snap Signal.

Snap Signal products are plug-and-play, helping customers gather information from their equipment and making it simple to view from anywhere. End-users can use it as an overlay to harvest data from legacy equipment. Users can simply tee into existing discrete sensors using a splitter to gather enriched machine level data without disrupting the existing control systems. New sensors and devices can also be added to this overlay network. Machine builders and system integrators benefit from being able to add monitoring technology to equipment that can tie into any upstream system for data visualization.

IloT Made Easy

Banner’s Snap Signal family of plug-and-play products represents a new way to unlock your valuable machine data. Snap Signal offers you the flexibility to monitor key equipment within one area or monitor your whole facility. Regardless of whether you are retrofitting existing machines or building new infrastructure, designing and implementing with Snap Signal is easy and cost effective.

The DXMR90 is an IloT-enabling industrial controller that transmits information from multiple sources simultaneously in a unified protocol for real-time analysis and consumption. Banner’s S15C and R45C converters allow you to connect previously incompatible device types (including discrete, analog, and others), transform these signals to industrial protocols like IO-Link or Modbus, and seamlessly transmit data across multiple IloT ecosystems.



DXMR90 IloT-Enabling Industrial Controllers

Banner’s DXMR90 Series Controller consolidates data from multiple connections to provide local data processing as well as accessibility for host systems as a platform for the Industrial Internet of Things (IloT). The DXMR90 contains individual Modbus clients, allowing for concurrent communication to up to five independent serial networks. Data is collected into the controller to facilitate edge processing, convert protocols to Industrial Ethernet, and send information where you need it.

- Converts Modbus RTU to Modbus TCP/IP, Ethernet I/P, or Profinet
- Internal logic driven by action rules for easy programming, or MicroPython and ScriptBasic for developing more complex solutions
- Internet protocols including RESTful, MQTT, and APIs
- Compact housing saves space and weight compared to traditional “block”-style form factors
- RS-485 and Ethernet communications ports
- User-programmable LEDs for local status indication
- Connects to databases (including Banner’s Cloud Data Services) over Ethernet or through a cellular-enabled DXM controller
- Email alerts on critical assets can be set up in the Cloud
- Ideal for IloT data analytics, condition monitoring, predictive maintenance, OEE analysis, diagnostics, and troubleshooting
- Equipped with IP65-, IP67-, and IP68-rated housing for use in challenging environments



R90C and R45C IO-Link Masters with Modbus RTU Interface

The R45C and R90C IO-Link Masters connects two or four IO-Link devices (model dependant) and provides access via Modbus RTU interface

- Easy installation with no assembly or individual wiring required
- 5-pin M12 male quick disconnect connector
- 4-pin M12 female quick disconnect connectors
- Built-in indication for IO-link Master ports and Modbus RTU connection status
- Rugged over-molded design meets IP65, IP67, and IP68



S15C Converters

Break free from protocol limitations with S15C in-line converters. S15C converters take various types of signals such as discrete, analog, and others and convert these signals to smart protocols like IO-Link or Modbus. This makes it easy to incorporate existing legacy sensors into standard protocols to enable process monitoring. The converters are designed to connect directly to a sensor, indicator, or other device and begin operating immediately, fitting seamlessly into factory applications.

- Allows previously incompatible devices to be connected to a smart system
- Compact form factor
- Simple M12 connection for easy installation wherever needed in the circuit
- Rugged over-molded design meets IP65, IP67, and IP68 standards



R45C IO-link to Analog Converters

- Compact IO-Link to analog converters that output an analog value, voltage or current, as presented by the IO-Link Master
- Rugged over-molded design meets IP65, IP67, and IP68



R90C IO-Link Hubs

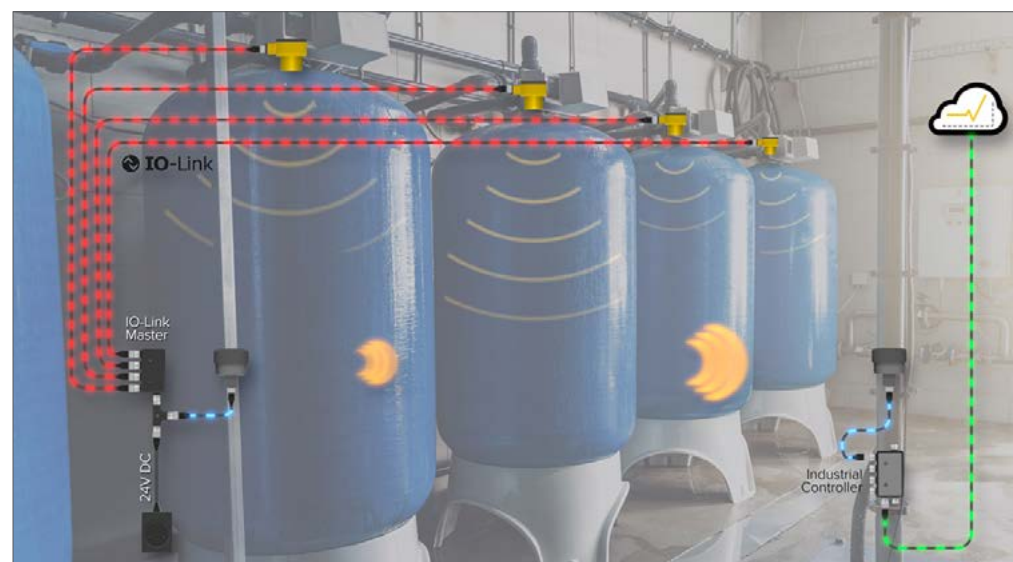
R90C IO-Link hubs are a quick, easy, and economical way to integrate non-IO-Link devices into an IO-Link system.

- Compact bimodal to IO-Link device converter that connects discrete PNP or NPN inputs and sends the value to the IO-Link Master
- Rugged design; easy installation with minimal assembly or individual wiring required
- 5-pin M12 male quick disconnect connector
- Four 4-pin M12 female quick disconnect connectors
- Rugged over-molded design meets IP65, IP67, and IP68



DXMR90-4K 4-Port IO-Link Masters with Ethernet

- Connects IO-Link devices to traditional PLC systems or sends data directly to the cloud
- Saves space and weight compared to traditional block-style form factors
- Rugged IP67/IP68 housing simplifies installation by eliminating the need for a control cabinet
- Communicates over Ethernet/IP, Modbus TCP, and Modbus RTU



Bring In IO-link Sensor Data for Tank Level Applications Wirelessly

Combining Banner's serial IO-link masters and R70 serial data radios, IO-link sensor data can be sent wirelessly. Using T30R IO-link radar sensors, Banner's R90-4K-MQ IO-link master, R70 serial data radios, and the DXMR90-X1 Industrial controller, we can develop a wireless monitoring system for multiple tank level measurements that is easy to set up, interpret the results, and monitor locally and through a cloud-based system. This setup makes it easy to transmit IO-link sensor data from remote clusters of IO-link sensors. Information can be sent to the cloud where tank levels can be monitored over time and text and email alerts can be configured if tank levels falls below established thresholds. Data can also be sent directly to a PLC or SCADA via Modbus TCP, Ethernet IP, and PROFINET.





R70 Series Data Radios

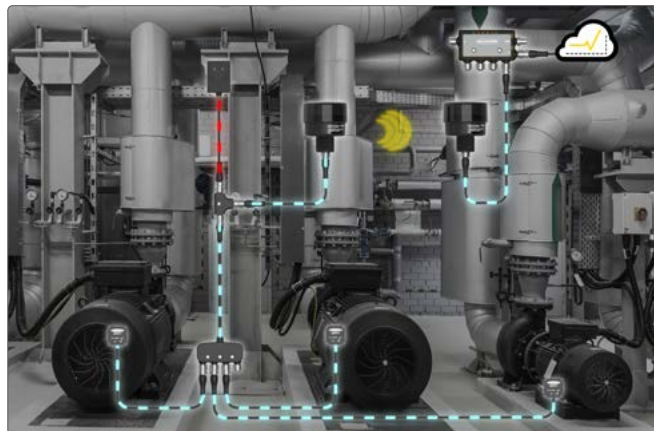
- Compact industrial, low-power wireless communication devices used to extend the range of serial communication networks
- Star or tree network topology configuration
- DIP switches select operational modes
- Frequency Hopping Spread Spectrum (FHSS) technology ensures reliable data delivery
- Self-healing, auto-routing radio frequency network with multiple hops to extend the network's range



DEK Wireless Kits

Simplifies Setup of Standalone Monitoring Systems

- Cellular-enabled gateway controller with battery power supply and optimized solar-charging circuit
- Kit includes environmentally rated enclosure, solar panel, battery, antennas, and mounting and cabling hardware
- Data inputs include analog and discrete signals with modbus, SDI-12, and wireless data communication
- Prepaid 90-day trial for Banner Cloud Data services with cellular service management provided by the Banner Cell Data web portal
- Available in two frequencies, 900 MHz and 2.4 GHz



I/O Serial Data Radios

- Available in two frequencies, 900 MHz and 2.4 GHz
- RS-485 serial communication

Ethernet Data Radios

- Simple Ethernet cable replacement makes connecting devices to switches and PLCs possible across long distances
- Advanced Encryption Standard (AES) using a 256-bit cryptographic key
- Also available in 900 MHz and 2.4 GHz



DXM Enclosure Kit



5 Watt Solar Panel



Banner Cloud Data Services



Banner Cell Data

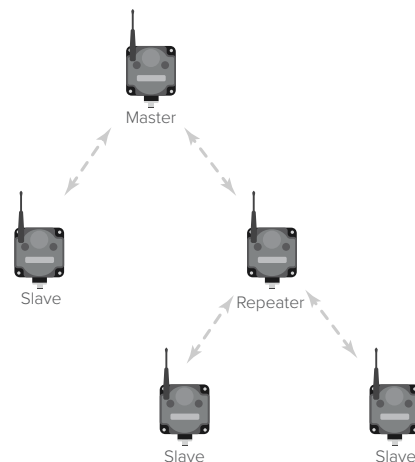
Reliably Transmit Data

- Data can be transmitted over great distances and around obstacles
- Extend the range of serial networks with wireless nodes to replace cable runs
- Combining wired and wireless technology for flexible predictive maintenance solutions
- DIP Switch configuration makes installation simple and fast

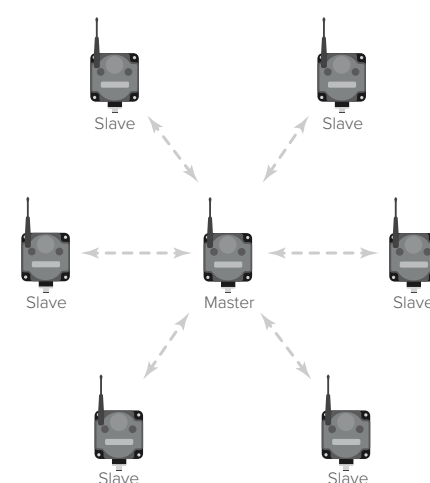
Point to point Networks



Tree Networks



Star Networks



Mining and Aggregate Operations



Industrial Dust Collection



Farm Irrigation



Water Supply and Wastewater Management



Q45 Series Wireless Sensors

- All-in-one design eliminates the time, labor, and expense of installing separate sensors and nodes
- Use with Cloud Data Services software to create an end-to-end IIoT solution that will help you identify and resolve problems more quickly and make better, data-driven decisions



Banner Cloud ID Kits

Validate with Data. Provide Savings. Increase Value.

- Products with proven wireless communication and integrated ethernet or cellular connectivity
- Automatic dashboards and default alarms assist in data-driven decisions and solutions
- Customize your solution with the battery-powered Q45 nodes for convenient installation and adaptability
- Durable IP-rated gateway and accessories included; wireless sensor nodes are sold separately
- Connect as many as 40 sensor nodes to scale and adapt the solution for specific needs; mix and match additional sensor options

Q45 All-in-One Series for Predictive Maintenance

Q45 Series all-in-one devices combine a wireless node, a sensor, and a battery power supply in one easy-to-deploy device that monitors assets and equipment in remote and hard-to-access locations.



The Q45DT all-in-one wireless dual thermistor node measures two separate thermistors and the differential for air and liquid handling applications



The Q45CT all-in-one current transformer and wireless node measures current draw, helping to reveal issues with critical motor performance



The Q45VA all-in-one vibration and temperature sensor and wireless node monitors the health and performance of motors, pumps, and similar equipment with rotating motion; mounting kit with magnetic and non-magnetic brackets available



The Q45UA all-in-one ultrasonic sensor and wireless node monitors the level or position of fluid or dry assets in tanks, totes, and containers



The Q45TA all-in-one thermistor node measures temperature in key areas or processes



The Q45THA all-in-one temperature, humidity, and wireless node monitors environmental conditions in a variety of applications

Q45 Nodes for Predictive Maintenance

Q45 Series 1-wire serial nodes are preconfigured to work with Banner's 1-wire serial sensors, simplifying setup and deployment. This variety of compact sensors with integrated lithium batteries make remote monitoring easy.



The Q45VTPD works with the QM30VT1 Vibration and Temperature Sensor to monitor a variety of vibration characteristics on rotating equipment for preventative maintenance applications



The wireless Q45UPSD pressure monitoring node and cabled BWA-PRESSURE-SENSOR accessories monitor pressurized systems in remote locations without human intervention



The Q45U connects directly to a variety of sensors such as the QM30VT1, K50UX1CRA, or M12FTH4Q to monitor environmental conditions in a broad range of applications



The Q45DPSD is a universal 1-wire serial node that reads any of Banner's 1-wire serial sensors such as the QM42-DPS Differential Pressure Sensor for pressure measurement applications

DXMR90-4K

See Page 51



R45C

See Page 49



S15C

See Page 49



DXMR90-X1

See Page 48

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