



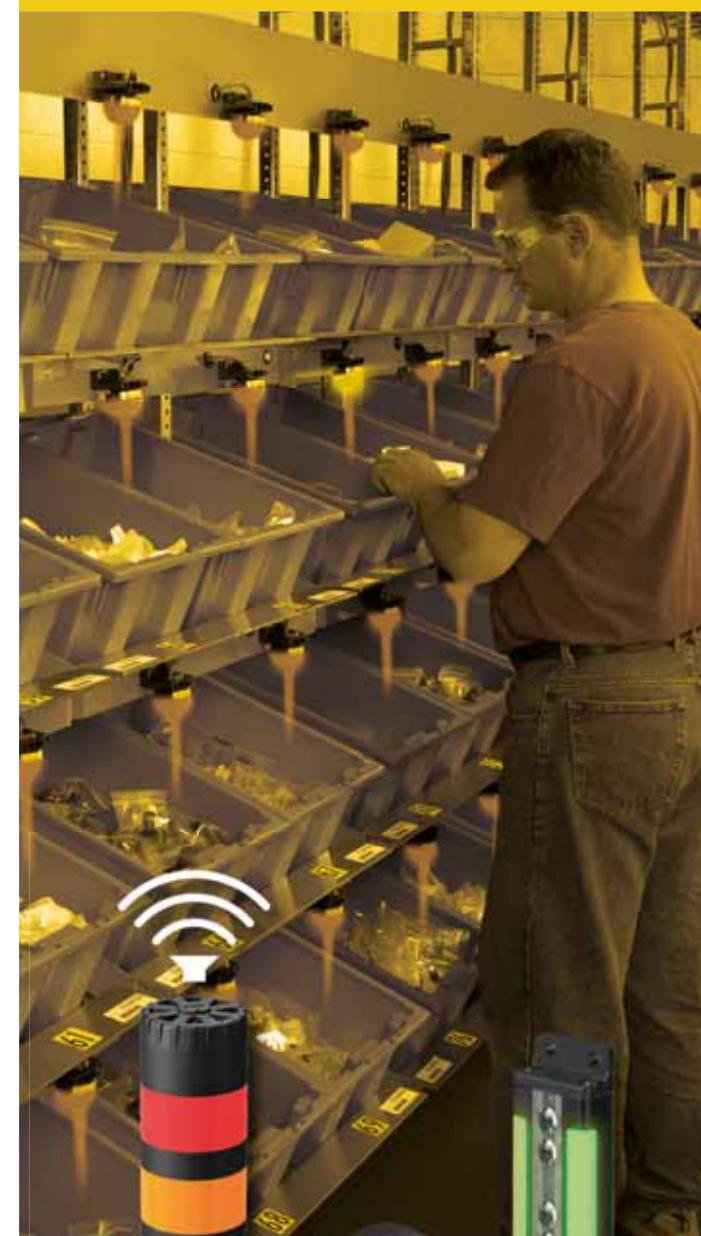
Sensors



Vision



Wireless I/O



Lighting & Indicators



Machine Safety

Worldwide sales and distribution with global customer support and local specialist networks give the best solutions to your application

Strong commitment to **R&D, technology and innovation** with over 15 % of employees dedicated to product development

Over **20000 products** to solve a wide range of applications and provide customized sensing products for specific customer requirements in all industries

Expert logistics together with local stock provide fast worldwide delivery

Global market leader and number one brand name for photoelectric sensors in North America

Within factory automation, Banner Engineering is recognized for its **high quality** standards

Over forty years of **engineering experience**

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|--|--|
| <p>Sensors</p> <ul style="list-style-type: none"> • Presence/Absence Detection • Foreground & Background Suppression • GO/NO GO Inspection • Gating and Triggering • Parts Counting • Level and Distance Measurement • Positioning • Contrast and Colour Sensing | <p>Lighting & Indicators</p> <ul style="list-style-type: none"> • Bin & Part Picking • Error/Mistake Proofing • Pick-to-Light & Put-to-Light • Operator Guidance • Call for Parts • Incorrect Pick Signal • Remote Start/Stop Indication • Work lights and cabinet lighting |
| <p>Vision</p> <ul style="list-style-type: none"> • Vision Sensors with Onboard User Interface • Pattern Recognition • Traceability (Barcode, Datamatrix and Text Reading) • OCR/OCV • Complex Part Inspection • Part Orientation • Assembly Verification • Colour Inspections | <p>Machine Safety</p> <ul style="list-style-type: none"> • Safety Light Screens • Optical Non-Contact Safety Systems • Ergonomic Two-hand Control Devices • Safety Modules • Emergency Stop Devices • Safety Interlocking • Laser Scanners for Safety Applications |

Wireless I/O

- Slip Ring Replacement
- Tank Farm Monitoring
- Livestock Environmental Monitoring
- Water and Wastewater Treatment
- HVAC Remote Monitoring
- Traffic Monitoring & Control
- Remote Sensing in Process Automation
- Cable Replacement
- ATEX Approved Solutions

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Banner Competencies

Productivity Solutions for Lean Manufacturing



EZ-LIGHT™ CL50 Column Light

- Models with 1, 2 or 3 colours and audible alert
- 30 mm threaded base
- IP67 rated (audible IP54 rated)

EZ-LIGHT™ TL50 Tower Light

- Preassembled multi-segment indicators
- Up to 5 colours in a single tower; multiple lights can be on simultaneously
- Optional audible function
- LED light source for low-power consumption and long life

EZ-LIGHT™ K30L Indicator

- 30 mm dome/22 mm threaded base
- General-purpose or sensor emulator indicators
- Models with 1, 2 or 3 colours
- Rugged IP67-rated housing

EZ-LIGHT™ PVA Parts Verification Array

- Two-component light screen
- Four lengths to fit common bin sizes
- Operating range up to 2 m

EZ-LIGHT™ PVD Parts Verification Sensor

- One-component light sensor
- Automatically operates in diffuse or retroreflective mode
- 100 or 225 mm to fit existing bin sizes and configurations
- Up to 2 m range in retroreflective mode

EZ-LIGHT™ K50 Single-Point Sensor

- Large dome with up to 3 coloured lights and a 30 mm mounting hub
- Background suppression, retroreflective or push-button models
- Rugged housings; IP69K rated

EZ-LIGHT™ VTB Verification Touch Button

- Effortless and ergonomically safe push-button alternative
- Green, red, blue and green/red combination job light options

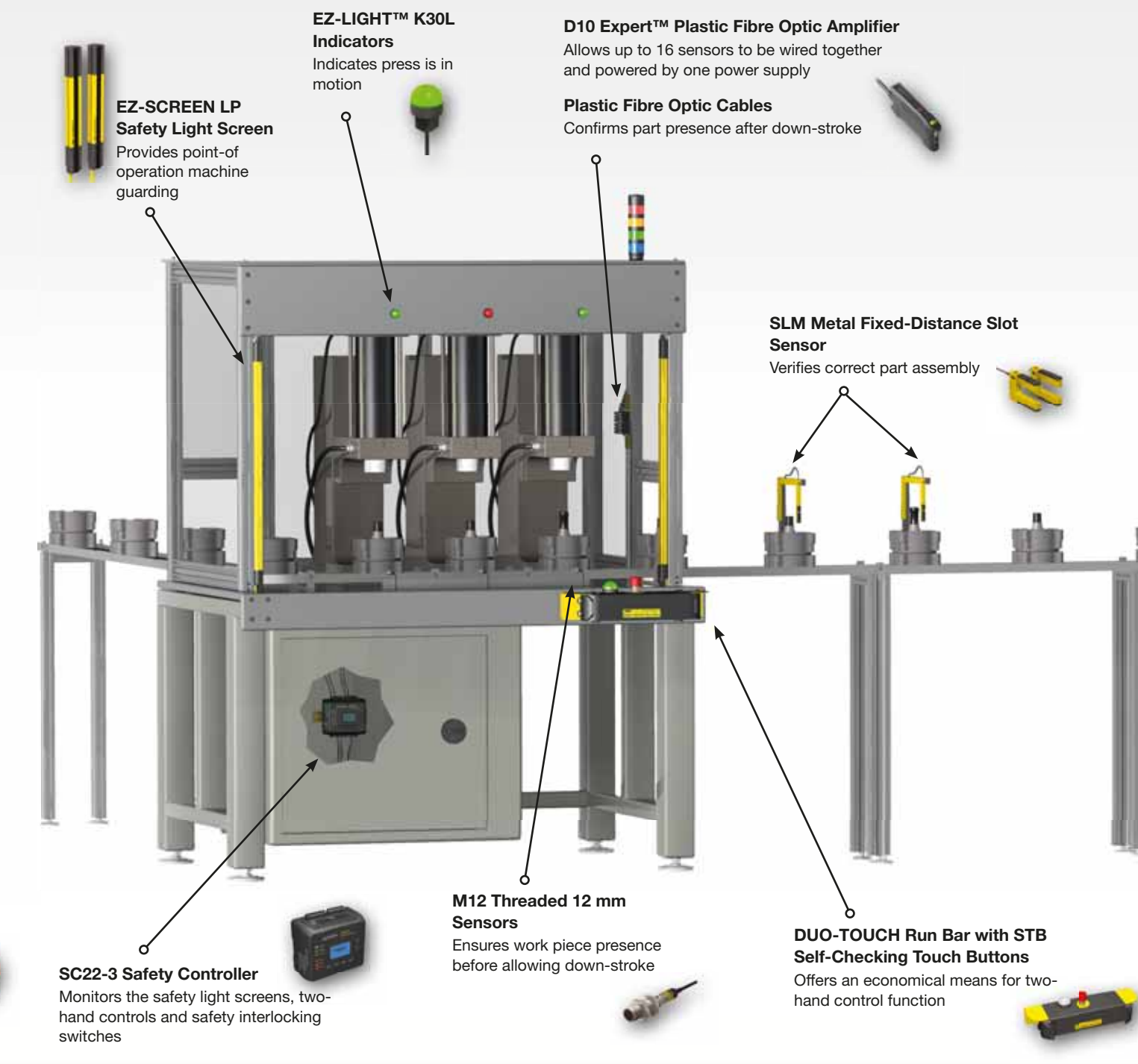
SureCross™ DX80 Wireless I/O Network

- Collects sensor data and communicates information back to a Gateway
- Analog and discrete I/O in a single unit
- 2.4 GHz or 900 MHz models with choice of antennas

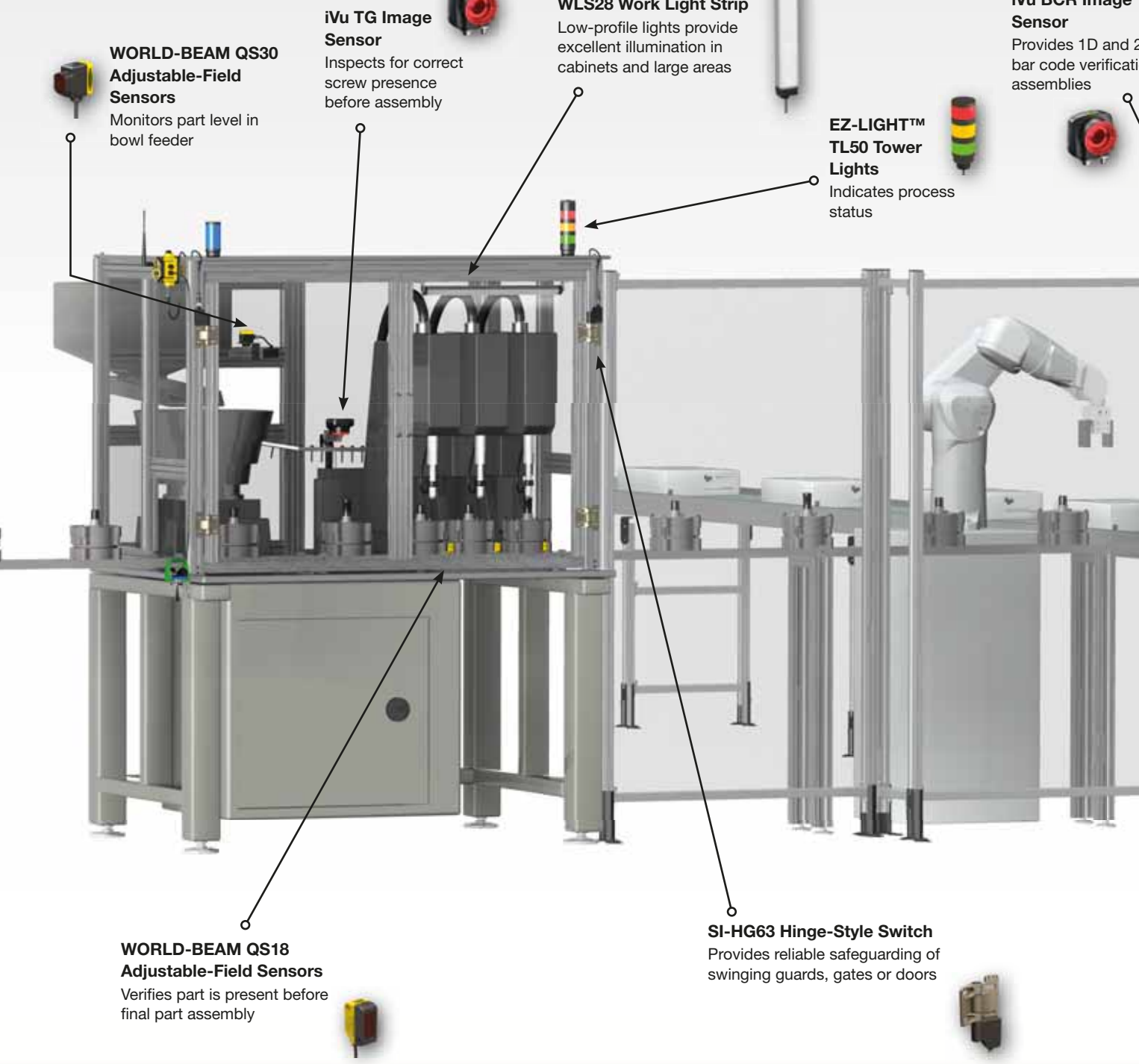
Operator Guidance/ Pick-to-Light



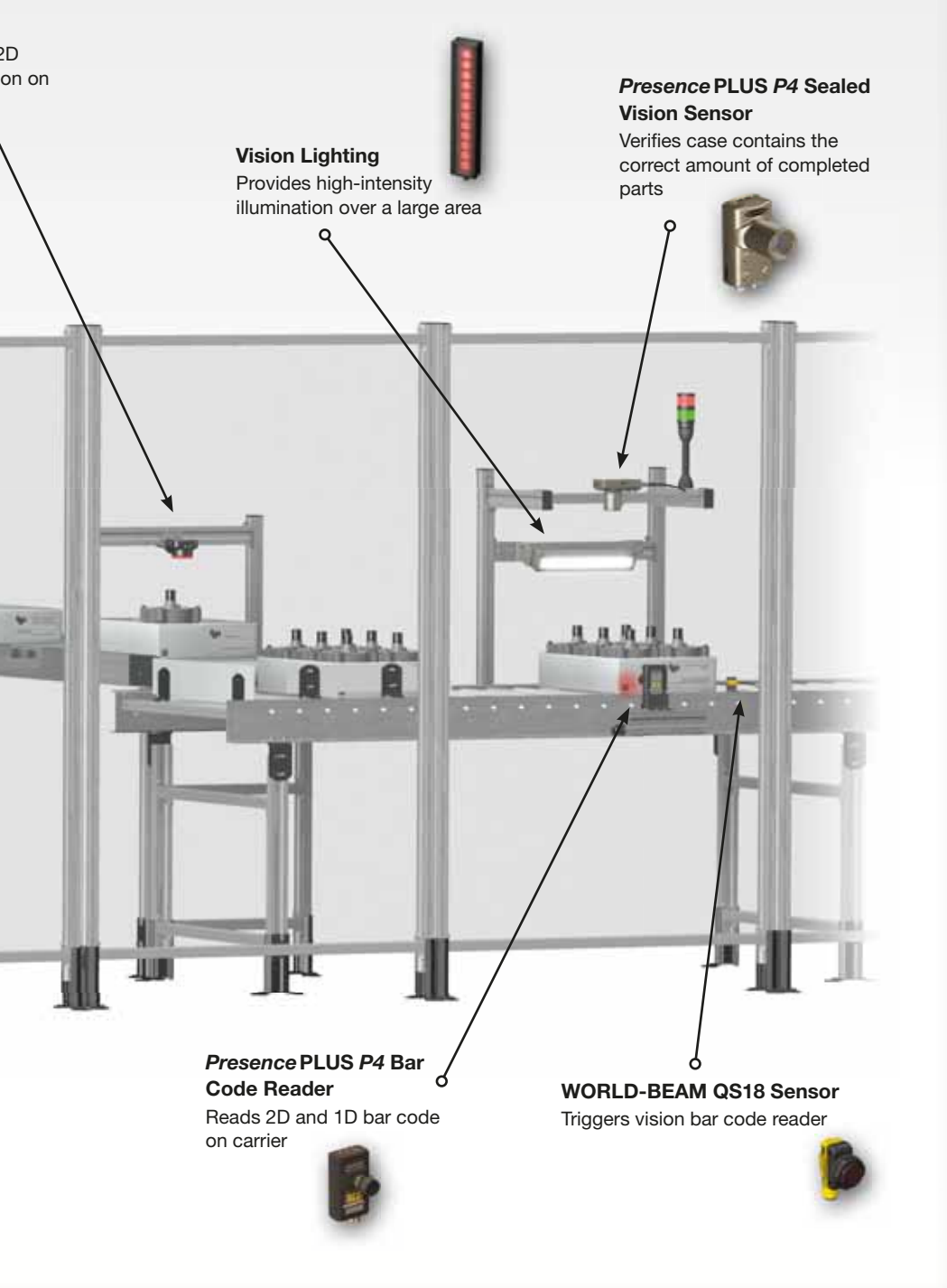
Semi-Automated Assembly



Automated Assembly and Material Handling



Package, Inspect, Identify & Verify



Presence PLUS P4 Sealed Vision Sensor

- IP68 rated to withstand dust, moisture and washdown
- Compact and durable housing to tolerate shock and vibration
- A complete suite of location, inspection, analysis and geometric tools
- Ethernet, serial, flexible discrete I/O, real-time video output and ActiveX controls

iVu Series Image Sensor

- No PC required
- Easy configuration: install/connect iVu, select sensor/bar code type, acquire image and set inspection parameters
- Three sensors in one rugged package: Blemish, Match and Area
- Models for 1D and 2D bar code reading
- Compact, rugged housing available with or without an integrated ring light

Presence PLUS P4 Bar Code Reader

- Standard or high-resolution 1.3 megapixel models
- Proven user interface common to all Presence PLUS sensors

Vision Lighting

- Complete selection of lighting, including ring lights, backlights, area lights, on-axis and more
- Infrared, red, white, blue or green LEDs with continuous or strobed operation, and intensity control
- Sealed (IP68) and non-sealed (IP50) housings
- LEDs for up to 50,000+ hours of maintenance-free illumination

EZ-SCREEN LP Safety Light Screen

- Compact, rugged housing and flexible mounting options for a precise fit with no dead zone
- 14 or 25 mm resolution; defined areas from 270 to 1810 mm
- Response times as fast as 8 ms with detection ranges up to 7 m
- Cascade option for cost-effective installation of multiple light screens

SI-HG63 Hinge-Style Switch

- Full 270° range of motion
- In-line and right-angle hinge models
- Corrosion-resistant stainless steel
- Axial and radial load support of 1200 N

DUO-TOUCH Run Bar with STB Self-Checking Touch Buttons

- Convenient means for safeguarding when interfaced with Two-Hand Control Modules
- Ergonomic design for reduced hand, wrist and arm stress
- Two diverse-redundant microcontroller-based STB Self-Checking Touch Buttons

SC22-3 Safety Controller

- 22 input terminals can monitor both contact-based or PNP solid-state outputs
- Control reliability up to SIL CL3, SIL 3, PL e and Type 4
- 3 pairs of solid-state safety outputs and 10 configurable auxiliary status outputs
- Easy configuration with built-in front panel LCD display or PC Interface
- Models for direct connection to Ethernet/IP™ and Modbus/TCP industrial networks

D10 Expert™ Plastic Fiber Optic Amplifier

- Side-by-side mounting and simplified wiring
- Digital display of signal strength and operating status
- Push button for easy programming

SLM Metal Fixed-Distance Slot Sensor

- Eight slot widths, from 10 to 220 mm
- Sealed metal housing; rated IP67
- Yellow painted or nickel-plated housings

WORLD-BEAM QS30 Adjustable-Field Sensor

- Advanced background and foreground suppression technology
- Adjustable setpoints from 50 to 600 mm
- Midsize, right-angle housing with 30 mm threaded lens or side mount

WORLD-BEAM QS18 Adjustable-Field Sensor

- Compact housing with side mounts
- Advanced background and foreground suppression technology
- Adjustable setpoints from 20 to 300 mm
- Visible red LED or laser sensing beam

WORLD-BEAM QS18 Sensor

- Universal housing with 18 mm threaded lens or side mounts
- Available in all sensing modes and ranges to 20 m
- Rugged sealed housing, protected circuitry

M12 Threaded 12 mm Sensor

- Opposed, retroreflective, diffuse and fixed-field sensing models
- Visible red sensing beam for easy alignment
- IP67 rated for harsh environments