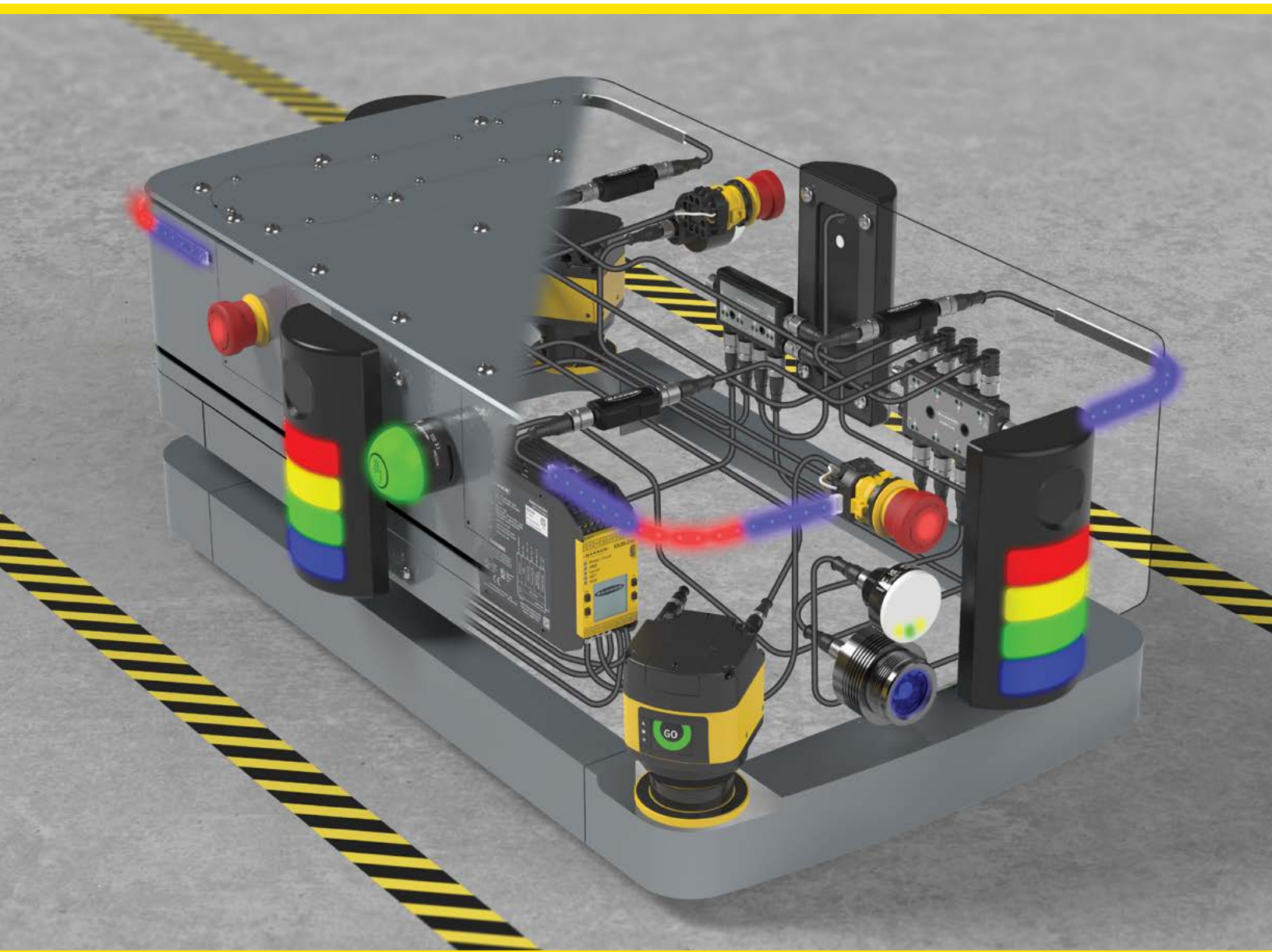
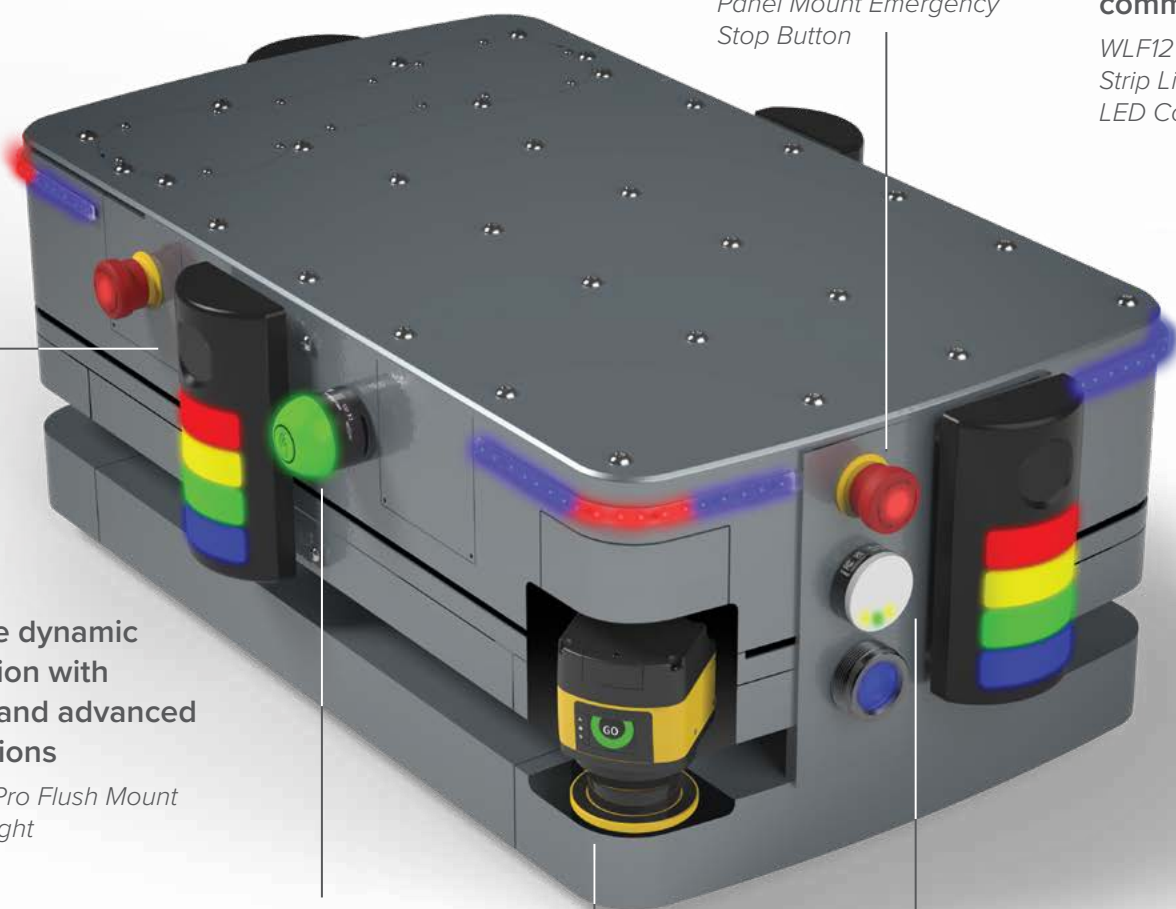


# AGV Solutions



## Solutions that help improve the development, assembly, and performance of AGVs

- Enhance AGV appearance and visibility to workers around the machine with customizable lights and indicators
- Reduce labor, cost, and errors during AGV assembly by using plug-and-play IO-Link® products
- Improve navigation systems with sensors that detect a wider variety of objects
- Simplify safety systems and get more diagnostics with easy-to-program safety controllers and laser scanners



**Ensure stopping an AGV is within reach**  
Panel Mount Emergency Stop Button

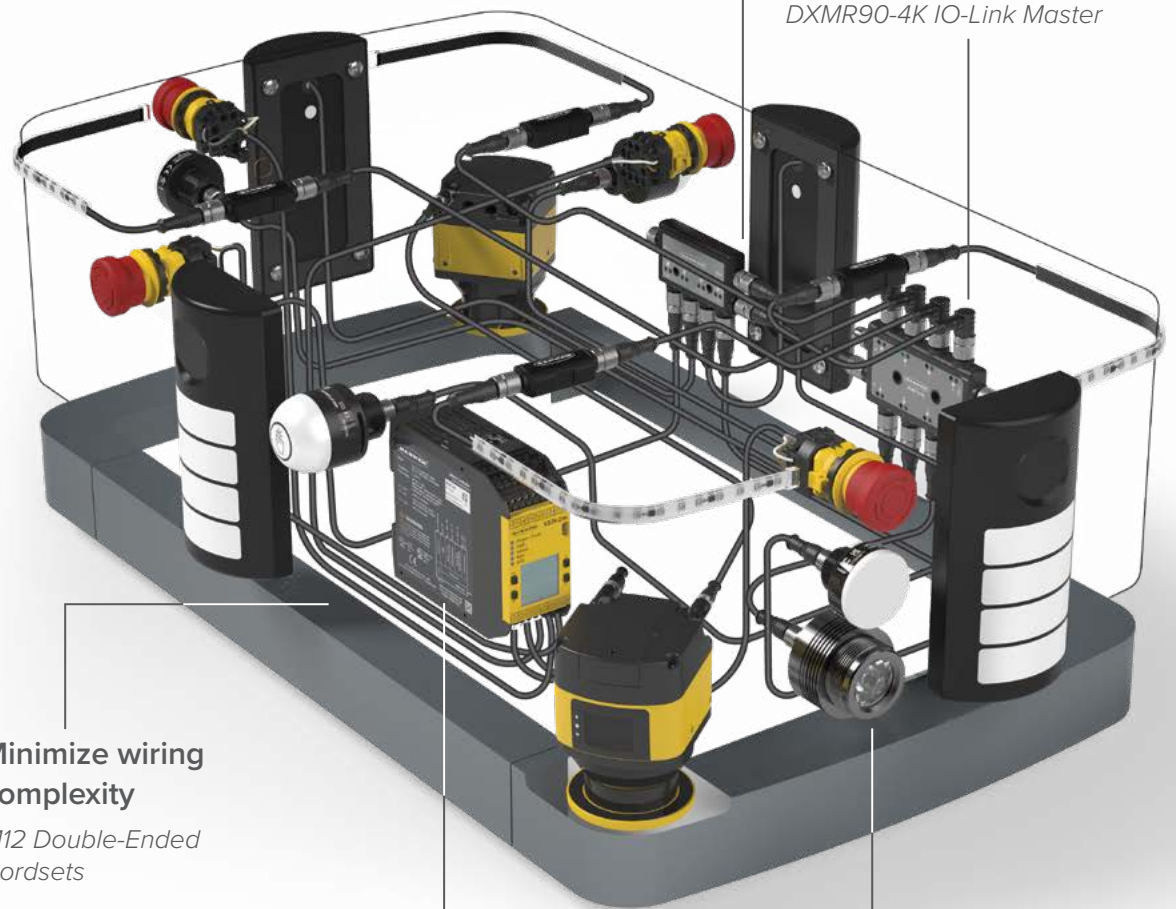
**Increase visibility and visual communication**  
WLF12 Pro Flexible Strip Light with LC25 LED Controller

**Provide dynamic indication with colors and advanced animations**  
TLF100 Pro Flush Mount Tower Light

**Reduce components by combining buttons, indicators, and audible alarms into one device**  
K50 Pro Touch with Audible

**Enhance AGV safety while simplifying installation**  
SX5 Safety Laser Scanner

**Improve navigation by detecting more objects**  
K50R Radar Sensor



**Streamline AGV assembly with plug-and-play I/O systems**  
DXMR110-8K IO-Link Master and DXMR90-4K IO-Link Master

**Minimize wiring complexity**  
M12 Double-Ended Cordsets

**Simplify safety systems and reduce programming complexity**  
XS26 Safety Controller

**Give early indication of AGV position to nearby operators**  
GS60 Guide Spotlight

## Additional Products



**T30R Radar Sensor**  
Improve long-range detection of objects



**Q5X Photoelectric Sensor**  
Precise measurement for navigation and object detection



**ZMX 3D Measurement Sensor**  
Monitor an entire sensing region



**SC10 Compact Safety Controller**  
Simplify safety systems and reduce programming complexity



**WLS15 Pro LED Strip Light**  
Increase visibility and visual communication



**K50 Pro Touch with Display**  
Reduce components by combining buttons, indicators, and audible alarms into one device



**R95 Molded Junction Blocks**  
Consolidate wires to minimize wiring complexity



**S15A Wiring Adapters**  
Adapt wiring to match specific application requirements

# Improve Workstation Productivity with Banner's Call for AGV Solution



## Challenge

When designing an AGV system for delivering or picking up parts from a workstation, one major consideration is how operators will request an AGV to come to their station when needed. The basic concept is simple: the operator must press a button and the AGV must be dispatched. The challenge comes when implementing this in a way that can scale and change with the needs of your operation.

## Solution

Banner's wireless touch buttons and industrial wireless controllers form a reliable and easy-to-deploy solution to call AGVs to workstations. The solution is built on Banner's proven wireless technology that has been used in industrial applications for more than 10 years, and only requires a few unique parts.

Banner's K70 touch buttons are installed at each workstation. Because they send and receive signals wirelessly, only power must be supplied to these buttons. This is easily accomplished using Banner's PSW-24-1 24 V DC power supply that plugs into any 120 V AC outlet. Banner's DXM1200-B2 industrial wireless controller is mounted near the main AGV control system, which tells the AGV system which button has been pressed. A signal can also be routed back to the K70 touch button that changes the light color, letting the operator know an AGV is on the way. Though some integration is needed to connect the DXM1200-B2 to the AGV control system, Banner has simplified the process by supporting common industrial communication protocols such as EtherNet/IP™, PROFINET®, Modbus® TCP, and Modbus RTU.

Once the system is installed, a workstation operator simply presses the K70 touch button to tell an AGV to deliver or pickup parts. The K70 will change color to notify them that an AGV is on the way.

## Components for Initial Setup

This basic list of parts will get you started. For help building a call for AGV solution based on your exact application, contact your local Banner representative.



DXM1200-B2R1 Industrial  
Wireless Controller



K70 Wireless  
Touch Button



PSW-24-1  
Power Supply



Banner Engineering Corp.

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