

Introducing the
CRIS2020



**CONTROL
RELIABLE
INSPECTION SYSTEM**

**SENSORS
INTEGRATION**

Introducing the **CRIS2020**

An advanced Product Inspection and Barcode Verification System for the Packaging Industry

**CONTROL
RELIABLE
INSPECTION
SYSTEM**

Where required by ANSI standards, the importance of using safety relays to achieve control reliable circuits can be explained as follows:

Control Reliable Systems must be designed such that "a single component failure within the system does not prevent the stopping action from taking place but will prevent successive system cycles until that failure has been corrected."

With the **CRIS2020**, this means that when any component of the inspection system such as a Barcode Scanner, trigger eye or output device including the downstream reject device, has a failure, the **CRIS2020** will detect that failed component and shut the line down on the next product completing the inspection zone.

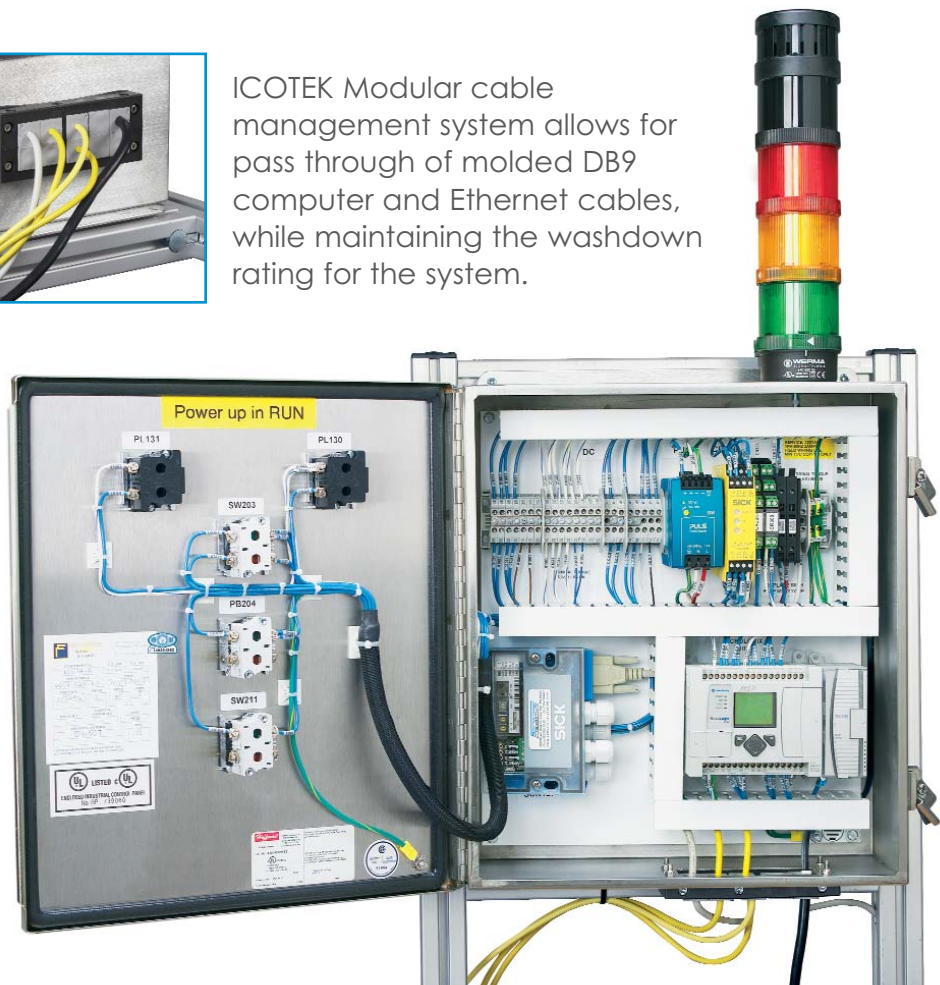
Sensors Integration, a leading supplier for barcode verification, has launched the **CRIS2020** System – adding a safety circuit methodology to the verification process. Sensors Integration understands that adding simple barcode verification alone to your packaging line cannot ensure product verification. Consumer safety and confidence depends on this, not to mention, preventing costly recalls and lawsuits.

The design of the **CRIS2020** is based on insights from packaging and system engineers from leading companies, who had the need for a reliable and accurate system for the verification and inspection of the packaging of their products. The **CRIS2020** is more than a barcode verifier, it is a methodology and system that makes your packaging line inspection system control reliable. If any single component of the system becomes unplugged, or dysfunctional, the **CRIS2020** shuts the line down within one cycle. This is significant because other barcode verifiers simply look for a reject signal from the inspection device. This can allow the line to continue running with the failed scanner, trigger device or reject device undetected. Our system sends out a shut down signal on each cycle and assumes a fault unless otherwise overridden by a positive match signal from either a barcode or vision scanner. This ensures a true control reliable system.

Typical industrial applications for the **CRIS2020** are food, pharmaceutical and chemical packaging, or wherever product package verification is needed.



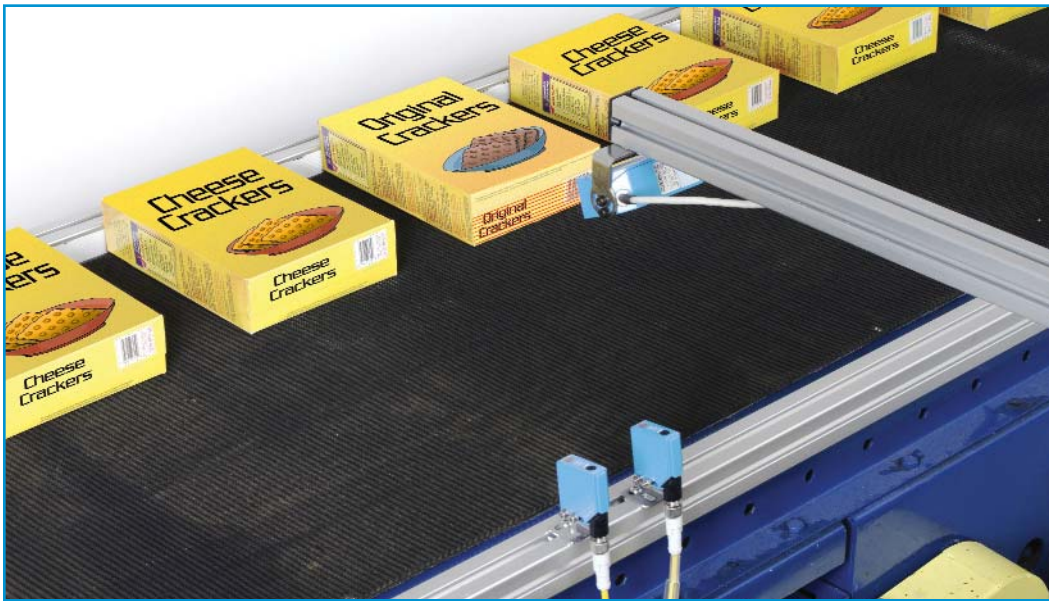
ICOTEK Modular cable management system allows for pass through of molded DB9 computer and Ethernet cables, while maintaining the washdown rating for the system.





The SICK CLV 430 Line scanner is shown reading ladder style UPC barcodes. The system will detect the mismatch carton and shut the packaging line down. Note the redundant trigger eyes.

The SICK CLV 430 Raster scanner is shown reading picket fence UPC barcode. The system will detect the mismatch carton and shut the packaging line down. Note the redundant trigger eyes.



About Sensors Integration

Since 1977, Sensors has provided consulting, system design and system manufacturing to the packaging industry, from world wide giants to small single line businesses. Sensors is not just a distributor of product and equipment – we are a solution creating team that includes Electrical, Manufacturing and Automotive engineers that work directly with you to solve your problems. We take pride in the fact that we have grown mainly by our reputation – your problems and needs are ours.

FEATURES

- Control Reliable System Shutdown-Circuit
- Self contained, autonomous from existing PLC and control circuits
- Fail to Safe methodology for single component failure including Trigger Eye, Inspection Scanner and Reject Device
- Verification of rejected carton and reject chute full detection
- Easy to set up and operate
- Cloning module self programs replacement scanners– no need for computer hookup
- NEMA 4X, IP65 sealed system
- Redundant solid state PNP and mechanical relay machine interface outputs
- Secure keyed system bypass switch
- Allen Bradley Micrologix 1100 PLC tracks product for down stream product reject or user specified functions
- Ethernet interface with Time and Date stamp data logging of product errors
- Up to 25 inspections per second

Options for the **CRIS2020**

Build your complete system with the selection of options below:

Inspection Devices



Articulating **ROLLER STAND** allows for easy mobility between lines



OSCILLATING SCANNER for use on picket fence Barcode orientation where large variations in code placements exist



LINE SCANNER for use on ladder style Barcode orientation



RASTER SCANNER for use on picket fence Barcode orientation or film application



VISION INSPECTION SYSTEM for use on pattern matching, contour matching, pixel counting and color finding



2D MATRIX CODE SCANNER for use on Datamatrix and other 2D codes

Sensor Trigger and Input Devices



WL12 Reflex sensor with 330 microsecond response time, metal housing and IP69K washdown rating



REGISTRATION MARK KT5W sensor with bar graph feedback triggers off of registration or color mark



WT18 Teach in Background Proximity sensor has precise cutoff and visible red light spot



TOUCH SCREEN HUMAN MACHINE INTERFACE (HMI) Optional HMI teach and system monitoring interface



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