Overview

The SCAN-A-LINE™ Dog Ear Detection System is designed to detect quality defects after splicing operations. It specifically looks for offsets in the edge condition of continuous web products. Spliced materials can include rubber, textiles, paper, film, and foils. The Model DEPU Dog Ear Detection Processing Unit can be used with an existing SCAN-A-LINE™ Width Measurement System or configured as a stand-alone system.

Continuous video is analyzed from one or two SCAN-A-LINE™ sensors and compared to a user-defined threshold. When the threshold is crossed, the system alarms on the offset condition. The alarm lights the red DETECT lamp on the front panel. It also closes a normally open relay contact closure to signal the detection event. Both contact closure and lamp illumination are customer variable via an internal potentiometer for latch time. A second green front panel lamp indicates the FAIL-SAFE circuitry. The FAIL-SAFE circuitry monitors the sensor functions and system power to ensure proper operation. In the event of a system malfunction, it opens a normally closed relay contact and extinguishes the FAIL-SAFE lamp.

Features

- Sensor Compatibility: 10XAS-Series Sensors, Signal routing for two sensors and one connection Cable.
- Internal Potentiometer for Threshold adjustment from 0.00” to 0.50”, Sensitivity from 0.031”.
- Bi-directional serial port (RS232/485) for configuration and access to detect status and internal counter.
- Two Open Collector Outputs: Fail-Safe and Detect. The detect output time is operator adjustable from 0.050 seconds.
- System Power: Universal 90VAC-240VAC Switchable, 50-60Hz at 2 Amps Max.
- Enclosure Dimensions: 8.25” x 6.28” x 3.78”
- Custom Mounting Frames available upon request.

Benefits

- A chance to correct for later process problems that occur in downstream equipment.
- Minimize edge trimming to correct for edge defects
- A tool to help improve product quality
- Non-Contact, 100% inspection builds process confidence

Configurations

- Stand-Alone with one 10XAS-Series Emitter and Receiver for narrow material widths.
- Stand-Alone with two 10XAS-Series Emitters and Receivers for wide material widths
- By itself with a feature cable to connect to an existing SCAN_A-LINE™ Width Measurement System.
Dog Ear Detection System

Dog Ear Detection Stand-Alone System with one 10XAS-Series Sensor Set.

Model 10XAS-Series Emitter

Model DEPU

Model 10XRA-Series Receiver

Dog Ear Detection Stand-Alone System with two 10XAS-Series Sensor Sets.

Model 10XAS-Series Emitters

Model DEPU

Model 10XRA-Series Receivers

Model 10XAS-Series Emitter

Model DEPU

Model MPX

Model 10XRA-Series Receivers

Model DEPU Processor with existing SCAN-A-LINE™ Width Measurement System with one 10XAS-Series Sensor Set.

Model 10XAS-Series Emitters

Model MPX

Model DEPU

Model 10XAS-Series Emitters

Model 10XRA-Series Receivers