

**CONMARK**

# LINE-TEC 100 SHEET BREAK DETECTOR

## *The Line-Tec 100 Fiber Optic Sheet Break Detector*

**The Line-Tec 100 Sheet Break Detector** is a fiber optic sheet break detection system which operates on a proven non-contact, reflection principle. An optical sensor is placed above or under the web to be controlled. Typical applications include paper, board webs, and felts. The optical sensor is not affected by dirt, steam or temperatures up to 350 °F. The optical sensor is connected through a fiber-optic cable to an infra-red amplifier located in an enclosure away from the heat of the running web. The amplifier sends a special light signal through the transmitting element to the surface to be controlled. The reflected light is picked up by the receiving element and transmitted to the amplifier. This returning signal is then converted to a 4-20 mA current signal which is used to provide two alarm outputs

The simple truth is that sheet breaks are a fact of life...but Conmark offers papermakers a select group of products, combined with many years of application expertise, which effectively detect, capture, reduce or prevent sheet breaks, while significantly improving your bottom line. Conmark Systems has carefully chosen high-quality partners with industry experience to integrate expertise and products into a unique new Web Break Reduction Program, which provides papermakers with the tools they need to reduce lost time on paper machines. So, while sheet breaks are a fact of life..... reliable detection,capture for review and diagnostics, reduction and prevention of sheet breaks are all within your reach.

A major component of our Break Reduction Program is reliable detection of sheet breaks. Conmark's Line-Tec 100 detects sheet breaks with 100% reliability. Using state-of- the-art fiber optic technology, Line-Tec 100 avoids many of the problems that other detectors have run into, such as disturbances from the environment. Lots of money and time goes to unnecessary waste due to web and sheet breaks and detection of these breaks is the first vital step towards reducing them.



### Line-Tec 100 Options:

- LT100-5 Sheet Break detector 15ft Fiber Optic Cable
- LT100-7 Sheet Break detector 21ft Fiber Optic Cable
- LT100-10 Sheet Break detector 30ft Fiber Optic Cable
- LT100-12 Sheet Break detector 36ft Fiber Optic Cable
- LT100-15 Sheet Break detector 45ft Fiber Optic Cable

### **Line-Tec 100 Main Features:**

- Precise, continuous monitoring of the web with infra-red light.
- Immediate reaction to a web break due to the 4 kHz light frequency.
- No disturbance from direct or reflected visible or infra-red light, static electricity, steam, extreme temperatures, dirt or vibration.
- Minimal installation space required. The unit may be installed between cylinders, above felts and rolls and in press gaps.
- The sensor can be located a distance of 2 - 8 inches from the web.
- Production cost savings due to the elimination of false alarms or missed breaks, as well as a reduction.

### **Benefits :**

- Saves hundreds of thousands of dollars preventing machine damages with reliable automatic kick-off showers.
- Precise, continuous monitoring of the web with infra- red light.
- Detectors can also be used to indicate if the web is running in the correct direction.
- User-friendly, mounting, directing and aiming sensor is easy.
- Need of service can be observed from DCS or PLC.



### **Applications:**

- Line-Tec 100 indicates a web break on an open space when the reflection of light drops below a predetermined value
- Line-Tec 100 bounces an infra-red light signal off the web running on the felt. If the web breaks and allows the signal to bounce off the felt, the characteristics of the returning infra-red light signal changes - identifying a web break.
- Line-Tec 100 sensor bounces an infra-red light signal off the roll. The characteristics of the returning infra-red light signal changes related to the reflective characteristics of the roll, identifying the sheet break.
- Line-Tec 100 sensor bounces an infra-red light signal off the roll. The characteristics of the returning infra-red light signal changes if the sheet adheres to the roll, indicating that the sheet is running in the wrong direction. The sensor will alarm, providing a quick response signal for machine operators during machine start-ups.

