

# BriteX-1000P

## BRIGHTNESS SENSOR

High sensitivity, long-range sensor is affordable enough for multi-point sensing. The BriteX-1000P™ employs our field-proven, patented technology to provide a simple solution for in-line process control of paper brightness, paper bleaching and de-inking, paper grading and textile applications. At a small fraction of the cost of competing instruments, the new sensor improves process control by allowing more measurement points for real-time process feedback. Tighter control of processes can reduce operating costs and minimize quality variations.

The BriteX sensor measures relative brightness defined by ISO 2470 as a reflectance factor of diffused blue light at 457nm. The BriteX features a 2-digit display that provides an indication of signal strength making set-up and integration quick and easy. The versatile sensor provides user set-up parameters including light source intensity adjustment, detection threshold and gain selection.

The BriteX includes both a discrete PNP/NPN output and an analog output. The analog output signal provides an indication paper or pulp brightness that can be correlated with ISO Brightness.

# BRITE X



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## Applications

- Pulp bales on a conveyor
- Paper and cardboard
- Paper coatings
- Textiles

## Design & Features

- Large spot size
- High sensitivity and high resolution
- Fast response
- Display range 00-99
- Adjustable gain
- Analog output
- PNP/NPN discrete output

## Ordering Information



BriteX-1000P  
Brightness sensor

## Accessories



UVX-300B  
Bracket



UVX-300C  
Cable 5P, 5M, M12, F

## Functions

**NORMAL OPERATING MODE**  
**CALIBRATION**  
**THRESHOLD**  
**LED INTENSITY**  
**HYSTERESIS LEVEL**  
**DISCRETE OUTPUT**  
**OUTPUT PULSE STRETCH**  
**SECURITY**  
**TEACH MODE**

Displays relative reflection intensity  
 User sensitivity adjustment  
 Set detection level  
 Set LED, LO, MED, HI  
 Set undetect level 1-9 steps below threshold  
 Set normally open or normally closed  
 Set minimum output period 10...90mS  
 Lock/unlock pushbutton controls  
 Auto-set detection threshold

## Specifications

**Light source**  
**Spot size**  
**Light source intensity**  
**Sensing distance**  
**Receiver Spectral Response**  
**Response time**  
**Switching Frequency**  
**Relative intensity display range**  
**Sensitivity**  
**Signal level**  
**Detection threshold**  
**Digital Output**  
**Output Function**  
**Analog Output**  
**Power indicator**  
**Detect indicator**  
**Programming indicator**  
**Data retention**  
**Dimensions**  
**Weight**  
**Supply Voltage**  
**Operating Current**  
**Short Circuit Protection**  
**Overload / Reverse Polarity Protection**  
**Operating temperature**  
**Storage temperature**  
**Housing**  
**Mechanical Protection**

457 LED life 100,000 hours  
 50mm dia. @ 200mm  
 3 levels  
 up to 900mm  
 350...1000nm  
 <150uS  
 6kHz  
 00 to 99  
 Adjustable  
 Two 7 segment digits  
 Two 7 segment digits  
 Auto-Detect PNP / NPN  
 NO/NC selectable  
 0...5V  
 Green LED  
 Red LED  
 Yellow LED  
 EEPROM non—volatile memory  
 51mm x 61mm x 25mm  
 (2.0" x 2.4" x 1.0")  
 95 g (0.21 lbs.)  
 24 VDC  
 60 mA  
 Discrete output  
 Supply voltage  
 -20°C...55°C  
 -20°C...70°C  
 Metal alloy  
 IP65 NOT FOR PRESSURE WASH DOWN

### Indicators

**7-Segment display**  
 Green LED Power  
 Red LED Detect  
 Yellow LED Program

### Connector M12

Pin 1 Power to 24VDC  
 Pin 2 Discrete output  
 PNP/NPN NO/NC  
 Pin 3 Ground  
 Pin 4 Analog output 0 to 5V DC  
 Pin 5 Remote LOCK/ UNLOCK input



WARRANTY EMX INC. the product described herein for a period of 2 years under normal use and service from the date of manufacture. The product will be free from defects in material and workmanship. This warranty does not cover ordinary wear and tear, abuse, misuse, overloading, altered products, or damage caused by the purchaser from incorrect connections, or lightning damage. There is no warranty of merchantability. There are no warranties expressed, implied or any affirmation of fact or representation which extend beyond the description set forth herein. EMX Inc. sole responsibility and liability, and purchaser's exclusive remedy shall be limited to the repair or replacement at EMX's option of a part or parts not so conforming to the warranty. In no event shall EMX Inc. be liable for damages of any nature, including incidental or consequential damages, including but, not limited to any damages resulting from non-conformity defect in material or workmanship.

NOT INTENDED FOR USE IN  
PERSONAL SAFETY APPLICATIONS.

MADE IN THE USA

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