

# 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



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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

NOT INTENDED FOR USE IN  
PERSONAL SAFETY APPLICATIONS.

## 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**  
**Red LED**  
**Yellow LED**

LED  
Power  
Detect  
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.