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.



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Applications

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

Design & Features

- Large spot size
- High sensetivity 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 Indicators 50mm dia. @ 200mm 7-Segment display LED 3 levels Green LED Power up to 900mm Red LED Detect 350...1000mm Yellow LED Program <150uS 6kHz Connector M12 00 to 99 Pin 1 Power to 24VDC Adjustable Discrete output Pin 2 Two 7 segment digits PNP/NPN NO/NC

Two 7 segment digits Pin 3
Auto-Detect PNP / NPN Pin 4
NO/NC selectable
0...5V Pin 5
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.)

60 mA
Discrete output
Supply voltage
-20°C...55°C
-20°C...70°C
Metal alloy

24 VDC

IP67 NOT FOR PRESSURE WASH DOWN



Ground

5V DC

Analog output 0 to

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.