

BriteX-100

BRIGHTNESS SENSOR

High sensitivity sensor is affordable enough for multi-point sensing. The BriteX-100™ employs our field-proven, patented technology to provide a simple solution for on-line monitoring and detection of a wide variety of materials in manufacturing and packaging applications. The BriteX-100 can detect differences in color, brightness and surface texture at a lower cost than competing products. BriteX-100 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 may be used to access targets based on their reflectance characteristics.

BRITE X



EMX Industries, Inc.

4564 Johnston Parkway, Cleveland, Ohio 44128

P. 800 426 9912 F. 216 518 9884

Sales Inquiries: salesupport@emxinc.com **Technical Support:** technical@emxinc.com

www.emxinc.com



Applications

- Carpet
- Plastic products
- Paper and cardboard products
- Registration marks
- Labels
- Reflective surfaces

Design & Features

- Optimized for small target area
- High sensitivity and high resolution
- Fast response
- Display range 00-99
- Adjustable gain
- Analog output
- PNP/NPN discrete output

Ordering Information



BriteX-100
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
 8mm dia. @ 40mm
 3 levels
 up to 150mm
 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 100mm x 25mm
 (2.0" x 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
Connector M12
 Pin 1
 Pin 2
 Pin 3
 Pin 4
 Pin 5

LED
 Power
 Detect
 Program
 Power to 24VDC
 Discrete output
 PNP/NPN NO/NC
 Ground
 Analog output 0 to 5V DC
 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

©EMX Industries, Inc. all rights reserved. REV 2.2 12/4/12