BriteX-1000S

SUGAR COLOR SENSOR

Measure raw or refined ICUMSA sugar color on-line, at a lower cost than competing systems. The BriteX™ employs our field-proven, patented technology, for effective reflectance measurements of sugar. Monitoring of sugar color allows processes to operate in a more efficient manner while increasing throughput to meet market demands for high color quality. Its high-sensitivity and fast response makes the BriteX suitable for high-speed processes and long-range use. The metal alloy case and glass lens provide robust construction expected in an industrial environment.

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 of sugar color that can be correlated with ICUMSA color values.

EMX
INDUSTRIES

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Applications

- Monitor ICUMSA sugar color
- Raw sugar
- Refined sugar
- Measure on centrifugal exit
- Process optimization

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-1000S
Sugar color sensor

Accessories

UVX-300B
Bracket

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

NOT INTENDED FOR USE IN PERSONAL SAFETY APPLICATIONS.

Functions

NORMAL OPERATING MODE	Displays relative reflection intensity
CALIBRATION	User sensitivity adjustment
THRESHOLD	Set detection level
LED INTENSITY	Set LED, LO, MED, HI
HYSTERESIS LEVEL	Set undetect level 1-9 steps below threshold
DISCRETE OUTPUT	Set normally open or normally closed
OUTPUT PULSE STRETCH	Set minimum output period 10…90mS
SECURITY	Lock/unlock pushbutton controls
TEACH MODE	Auto-set detection threshold

Specifications

Light source	457 LED life 100,000 hours
Spot size	50mm dia. @ 200mm
Light source intensity	3 levels
Sensing distance	up to 900mm
Receiver Spectral Response	350...1000nm
Response time	<150uS
Switching Frequency	6kHz
Relative intensity display range	00 to 99
Sensitivity	Adjustable
Signal level	Two 7 segment digits
Detection threshold	Two 7 segment digits
Digital Output	Auto-Detect PNP / NPN
Output Function	NO/NC selectable
Analog Output	0…5V
Power indicator	Green LED
Detect indicator	Red LED
Programming indicator	Yellow LED
Data retention	EEPROM non—volatile memory
Dimensions	51mm x 61mm x 25mm (2.0" x 2.4" x 1.0")
Weight	95 g (0.21 lbs.)
Supply Voltage	24 VDC
Operating Current	60 mA
Short Circuit Protection	Discrete output
Overload / Reverse Polarity Protection	Supply voltage
Operating temperature	-20ºC…55ºC
Storage temperature	-20ºC…70ºC
Housing	Metal alloy
Mechanical Protection	IP65 NOT FOR PRESSURE WASH DOWN

Indicators	
7-Segment display	LED
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

MADE IN THE USA