

OPAX-1000

OPACITY SENSORS

Verify opacity of containers with on-line, high-speed, accurate and reliable measurements. The OPAX-1000™ combines proven sensor technology with innovative hardware to provide an easy-to-use system to measure light transmission in a wide variety of applications including packaging containers used in pharmaceutical, food and personal care. Many products require packaging designed to protect the contents from the damaging effects of light. Establishing pass/fail criteria for minimum opacity of these containers and providing on-line measurement of every container eliminates defects and allows real-time control of these processes.

Container materials include HDPE, LDPE and other opaque materials such as paper and composite films. The metal alloy case and glass lens provide robust construction expected in an industrial environment.

The OPAX features a 2-digit display that provides an indication of signal strength making set-up and integration quick and easy. The sensor includes both a discrete PNP/NPN output and an analog output. The analog output signal may be used to access the relative opacity of samples.

OPAX



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Applications

- Pharmaceutical containers
- Food packaging
- Personal care products
- HDPE containers
- LDPE containers
- Composite films
- Blow molded products
- Paper products

Design & Features

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

Ordering Information



OPAX 1000
Opacity Sensor



OPAX-1000T
Transmitter

Accessories



OPAX-1000B
Mounting Bracket



LMX-300
Laser position sensor



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
Light source intensity
Sensing distance
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
OPAX 1000R (receiver)
Dimensions
Weight
OPAX 1000T (transmitter)
Dimensions
Weight
Supply Voltage
Operating Current
Short Circuit Protection
Overload / Reverse Polarity Protection
Operating temperature
Storage temperature
Housing

LED, min. 100,000 hrs.

3 levels
up to 300mm
<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.)

8mm x 38mm
(0.312" x 1.5")
20g (0.7oz.)
24 VDC
60 mA
Discrete output
Supply voltage
-20°C...55°C
-20°C...70°C
Metal alloy

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

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**NOT INTENDED FOR USE IN
PERSONAL SAFETY APPLICATIONS.**

MADE IN THE USA

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