BB-WCD-LSSCBL

Stack Light Sensor Strip & Cable with 3 photo-transistors

Features

Photo transistors convert stack lights into measurable, digital data

No need to keep an eye or physical presence on the factory floor

Increase productivity and efficiency, reduce downtime, free up manpower

Molex® connector with crimp terminal

Non-intrusive, non-disruptive network overlay

Aggressive, high temperature adhesive; removable at any time

RoHS compliant

Introduction

The Wzzard™ light sensor, Model BB-WCD-LSSCBL, makes it fast and easy to get measurable data from your stack lights. Just peel and stick the sensor strip onto your stack light. (Cut away any sensors that you don't need.) Plug the cable into a wireless Wzzard stack light sensing node to transparently capture and network-enable digital data (nodes, gateways, kits sold separately).

Wzzard Mesh Sensor Network

The Wzzard mesh sensing network is a non-intrusive overlay that doesn't interfere with your existing network, stack lights nor disrupt live operations. Remove, rearrange or add up to one hundred nodes, with a variety of sensors, at any time.

Real-time Management

Get other tasks done while Wzzard sensors keep an eye on your stack lights and factory floor. Data is collected digitally for real-time management – no need to keep an eye on or manually record stack light activity.

Operations Visibility

Digitized stack light data allows process and quality monitoring, generates email or SMS alerts, reduces downtime, replaces outdated data collection methods and frees up manpower.

Data can be published to a local web interface or forwarded to third-party software applications such as Azure, AWS, OSI PI, Kepware, Ignition or many others using MQTT.

Data-driven Decision Making

The most important upgrade to Industry 4.0 is data-driven dashboards that integrate OEE and MES to optimize equipment use and drive more informed management decisions.

Ordering Information

Model No.	Description
BB-WCD-LSSCBL	Light Sensor Strip & Cable with 3 Photo Transistors

Accessories – Sold Separately

BB-WCD1H3001HP100 - Wzzard Mesh Wireless 802.15.4e Sensor Node

– Commercial Stack Light Node for Light Sensing

– 3 AI, vBat Out, Internal Antenna

– Battery-powered, multi-year life.

BB-SG0000525-42 - SmartSwarm 342 Gateway

– Asset Integration Gateway & Router, MESH wireless

– Configurable user business logic data processing & display engine

– Internet data inputs; outputs to MQTT email, SMS and more
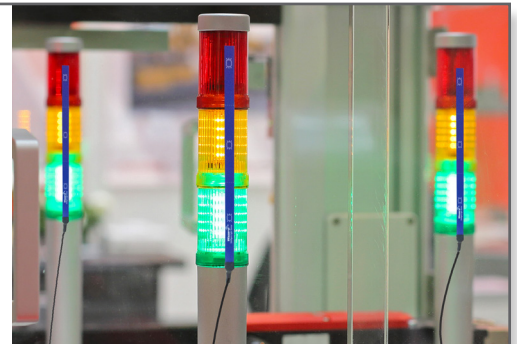
Stack Light Monitoring Starter Kit

Everything you need to get started – easily expandable to more stack lights later.

Model# BB-WSK-SLM-2

1 - Wzzard wireless stack light node
    (Model# BB-WCD1H3001HP100)

1 - Stack Light Sensor Strip w/Cable
    (Model# BB-WCD-LSSCBL)

1 - SmartSwarm 342 Gateway - supports up to 100 nodes
    (Model# BB-SG0000525-42)

Stack light sensing, monitoring & reporting application

Specifications

Serial Technology	
Circuit	PCB, FR4, 1 mm thick, ENIG plating

Photo Sensor	
Photo Transistor	(3) NPN silicon photo transistor
Sensitivity	Wide angle, visible spectrum
Regulatory	RoHS, lead-free

Photo Sensor – Absolute Maximum Ratings T_A=25° C				
Parameter	**Symbol**	**Value**	**Unit**	**Notice**
Collector-Emitter Voltage	V_{ceo}	60	V	Iceo = 100µA
Emitter-Collector Voltage	V_{eco}	4	V	Ieco = 100µA
Operating Temperature	T_{opr}	-40 to +85	°C	-
Storage Temperature	T_{stg}	-40 to +85	°C	-

Mechanical	
Sensor strip, dimensions	18.42L x 0.64W cm (7.25L x 0.25W in) Dome emboss over photo-transistors, PCB, etc.
Cable	Discrete wires soldered to back side of PCB, 26AWG stranded, 45.7 cm (18 in)
Connector	(1) Molex® 513820600
Connector Pins	(5) 561349000 pins
Mounting Adhesive	3M 467, aggressive, high-temperature

Mechanical Drawing - Light Sensor Strip

Light Photo Sensor   Light Photo Sensor   Light Photo Sensor
(cut-line)   (cut-line)

0.126"
0.250"

ADVANTECH Wzzard Intelligent Light Sensor   Model BB-WCD-LSSCBL

1.869"
3.112"
4.367"
5.619"
6.861"
7.247"