PATLITE®
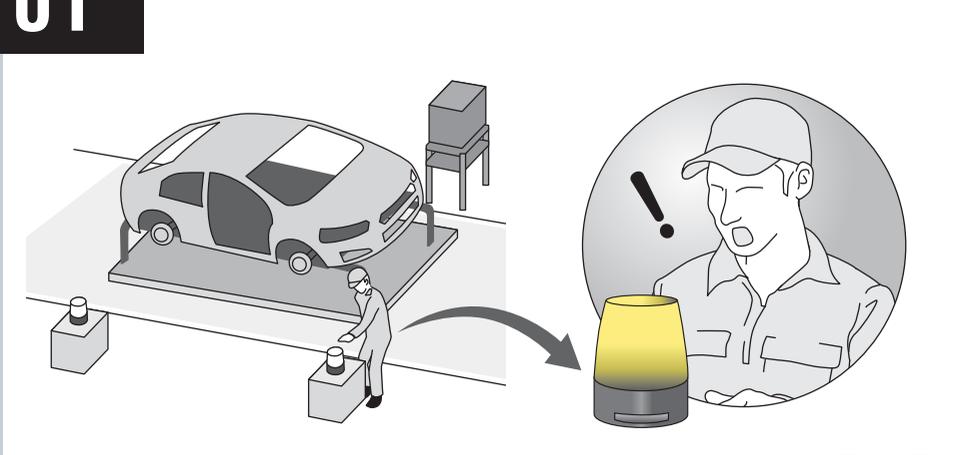
IO-Link Product Catalog

IO-Link

RoHS CE cULus FC KC
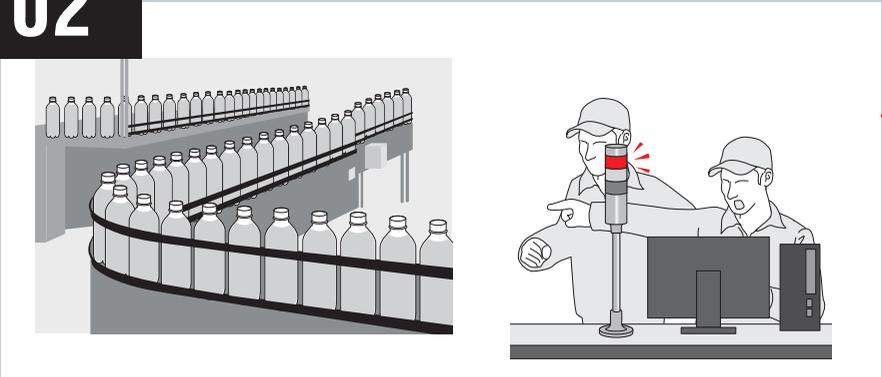
IO-Link × PATLITE®

IO-Link is an open-standard protocol that enables bi-directional data communication between devices and the master. Incorporate PATLITE signal devices into IO-Link to facilitate and enhance manufacturing processes.

Solution 01 — Automotive Production Line

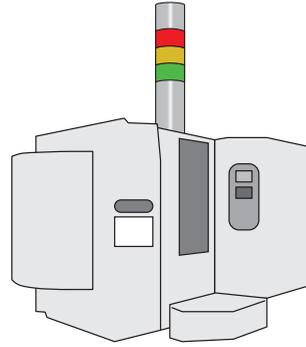Call for parts and notify managers of issues.

Solution 02 — Food and Beverage Production Line

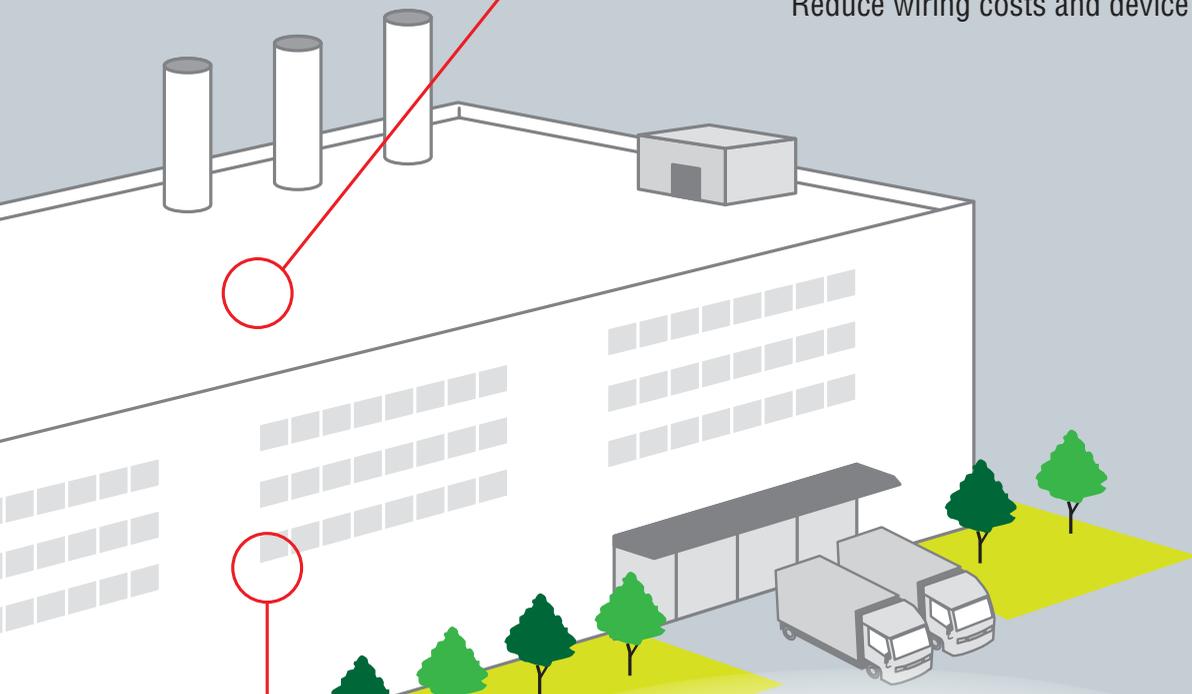Acquire real-time equipment status and collect operational metrics.

Various Industrial Equipment

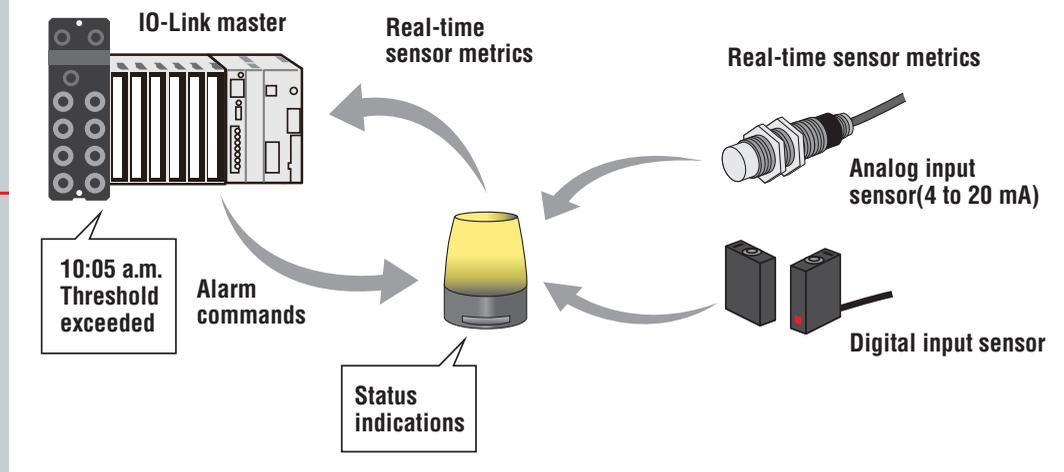Reduce wiring costs and device setup time.

Devices Not Compatible with IO-Link

IO-Link master

Real-time sensor metrics

Real-time sensor metrics

Analog input sensor(4 to 20 mA)

10:05 a.m. Threshold exceeded

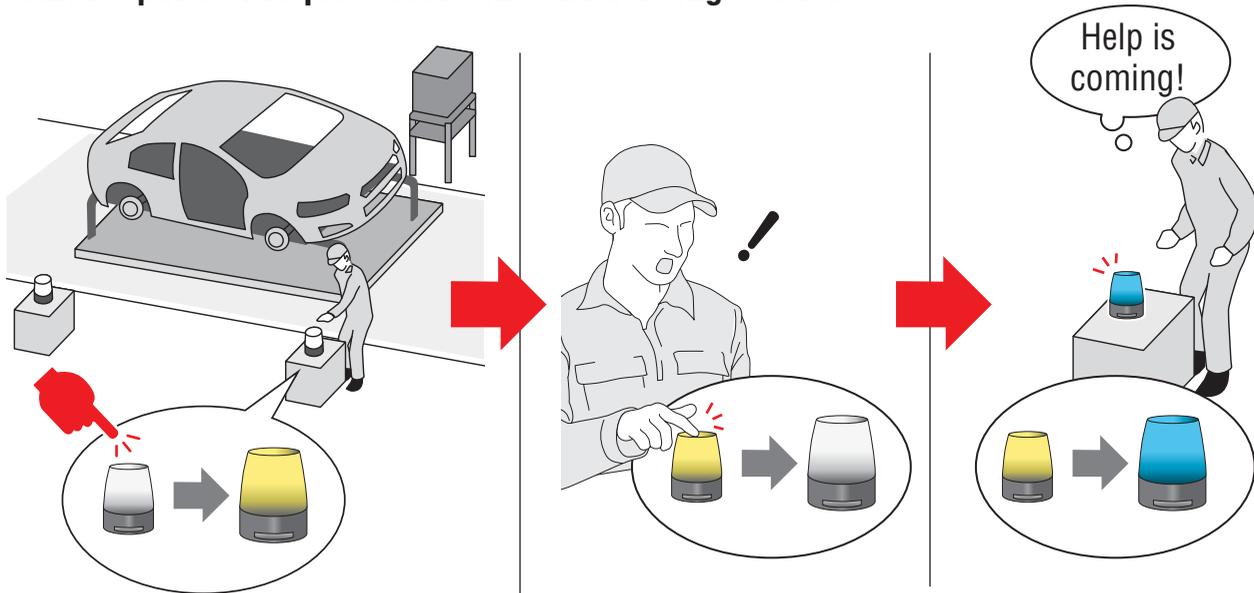**Alarm commands**

Digital input sensor

Status indications

Enables integration of non-compatible devices into IO-Link.

Automotive Production Line

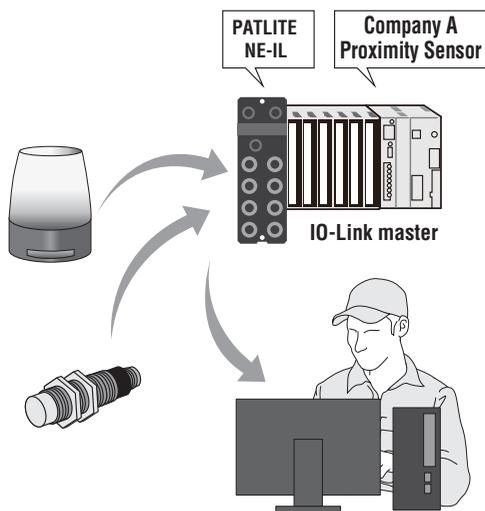## Call for parts or request assistance with a single touch

Help is coming!

When an issue arises, the personnel at the production site touches the NE-IL to activate the visual and audible alarms of the NE-IL at the manager's site.

The manager instantly notices the alarms, and determines where and what the issue is according to the illuminated color. The manager can touch the NE-IL to send notification back to the production site to indicate that help is on the way.

Food and Beverage Production Line

Anticipate issues and enhance predictive maintenance

PATLITE NE-IL

Company A Proximity Sensor

IO-Link master

The IO-Link master acquires real-time operational data of the sensors and other devices that are connected. This data can be monitored remotely, and collected for further analysis.
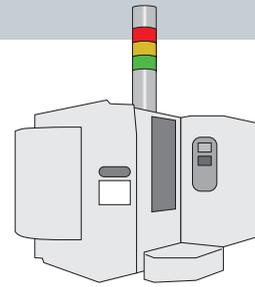
When device abnormalities such as water or dust obstruction is detected, the IO-Link master sends commands to the LR6-IL Signal Tower to activate its visual and audible alarms to indicate the specific problem. Identify device issues before it happens to avoid equipment malfunctions and halts in production.

Various Industrial Equipment

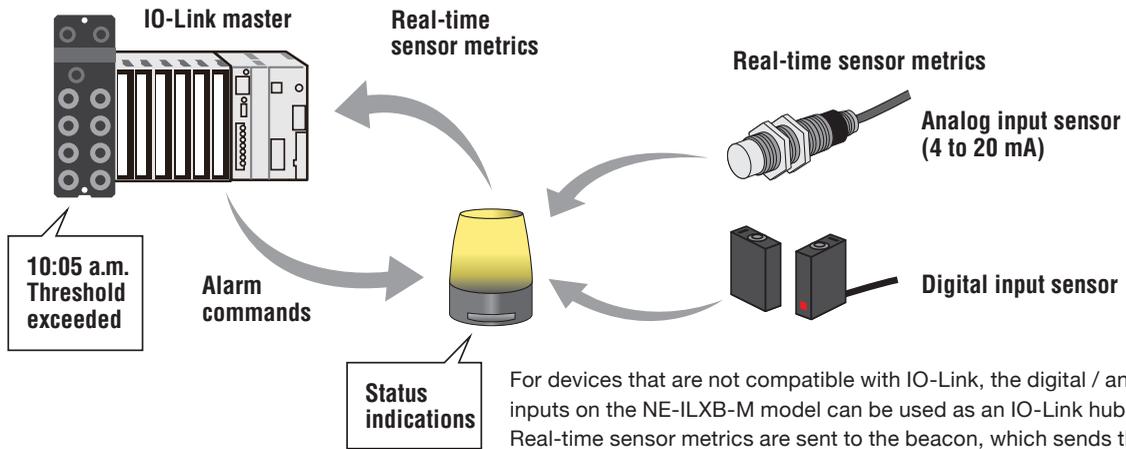## Standardizing with IO-Link reduces overall costs

The NE-IL Signal Beacons and LR6-IL Signal Towers can be connected to IO-Link with a single M12 cable. This minimizes wiring requirements, which reduces labor and costs. In addition, IO-Link allows for easy replacement of old or damaged devices, as it automatically imports previous settings to the new device.

Devices Not Compatible with IO-Link

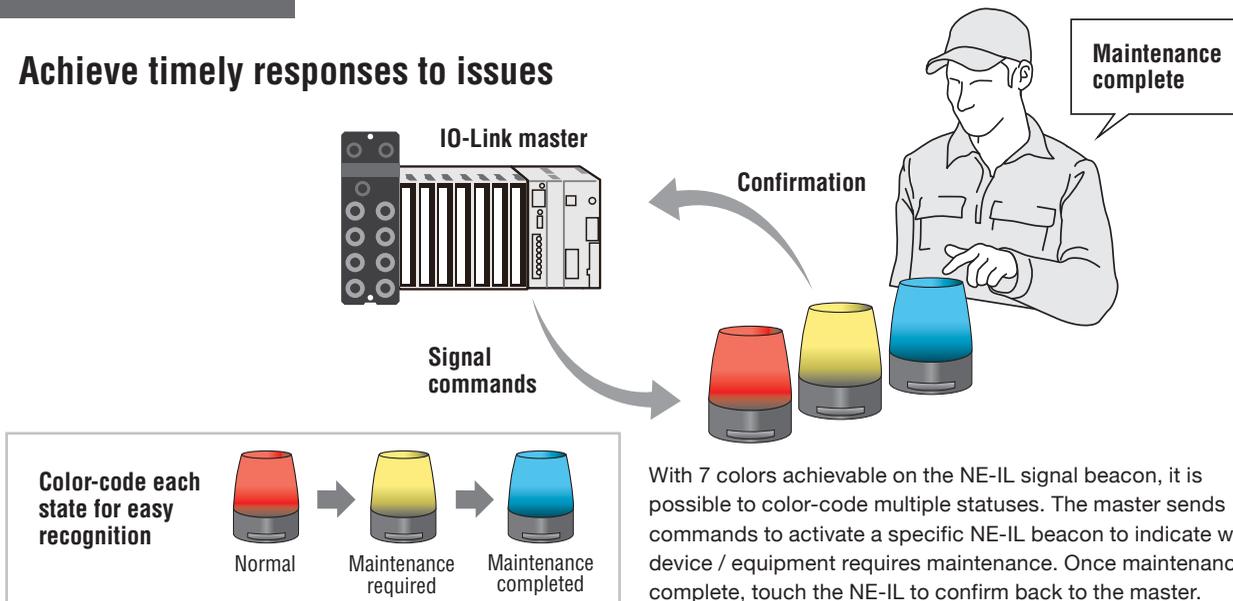## Devices Not Compatible with IO-Link

IO-Link master

Real-time sensor metrics

Real-time sensor metrics

Analog input sensor (4 to 20 mA)

10:05 a.m. Threshold exceeded

Alarm commands

Digital input sensor

Status indications

For devices that are not compatible with IO-Link, the digital / analog inputs on the NE-ILXB-M model can be used as an IO-Link hub. Real-time sensor metrics are sent to the beacon, which sends this data to the master. The master can then send specific commands to activate the beacon alarms.

Example of Use

Achieve timely responses to issues

Maintenance complete

IO-Link master

Confirmation

Signal commands

Color-code each state for easy recognition

Normal   Maintenance required   Maintenance completed

With 7 colors achievable on the NE-IL signal beacon, it is possible to color-code multiple statuses. The master sends commands to activate a specific NE-IL beacon to indicate which device / equipment requires maintenance. Once maintenance is complete, touch the NE-IL to confirm back to the master.

IO-Link Signal Beacons NE-IL

Features

7 colors in 1 light

2-way communication (commands from the master and indications via touch sensor)

Buzzer can be sounded in combination with continuous/flashing light and touch sensor

Digital/analog input to connect devices that are not compatible with IO-Link (XB model only)

Durable and Versatile

Touch sensor is able to detect bare or gloved hands - even when wet

High protection rating for operation in harsh environments (IP65)

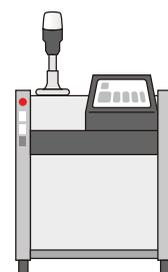**Compatible with M12 connector for easy connection**

Other Application Examples

Pick-to-light

Status indications at production cells

Real-time equipment status monitoring

Options

Upper Bracket
NE-001D

ex.

Wall Mount Bracket
NE-002D

1/2" NPT Bracket
SZP-092D

Features

Pre-assembled model

Body unit (Direct mount)

Body unit (1/2" NPT pipe or direct mount)

M12 connector for easy connection

Select from a variety of LED colors and buzzer sounds

Compatible Units

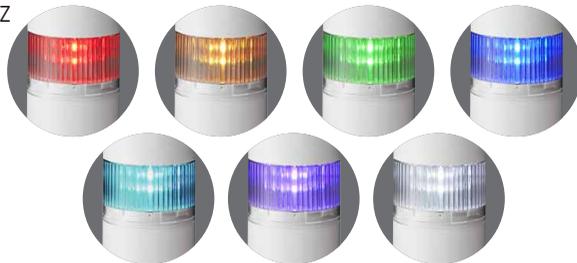### Solid Color
LR6-E-R/Y/G/B/C

Clear Globe
LR6-E-RZ/YZ/GZ/BZ

Buzzer Unit
LR6-BW

Multi-Color
LR6-E-MZ

Wireless Data Acquisition System Transmitter
WDT-6LR-Z2

Cost-effective, retrofit solution for select PATLITE Signal Towers enabling wireless data acquisition and real-time monitoring.
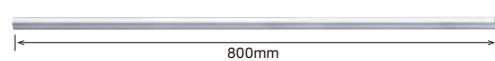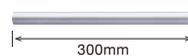
Options

Wall Mount Bracket
SZK-003W

Pole Bracket
SZ-016A

Pole
POLE-800A21

800mm

POLE-300A21

300mm

POLE-100A21

100mm

Upper Bracket
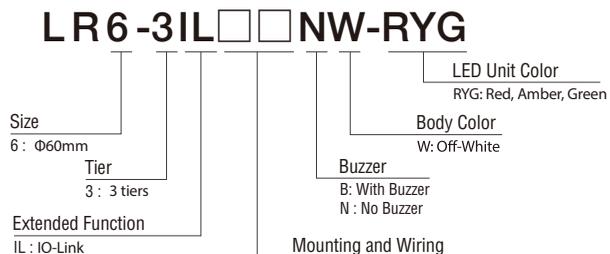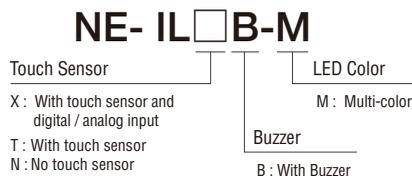SZP-004W

SZ-010

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Specifications

IO-Link Signal Beacons NE-IL

Model	NE-ILNB-M With buzzer	NE-ILTB-M With buzzer and touch sensor	NE-ILXB-M With buzzer, touch sensor, and digital / analog input
Size	φ56mm		
Rated Voltage	24V DC		
Mounting Location / Mounting Direction	Indoors, Upright		
Protection Rating	IP65 NEMA TYPE 4 X, 13		
LED Color	Multi-color (Red, Amber, Green, Blue, White, Purple, Cyan)		
LED Unit Modes	Continuous / Flashing		
Sound Pressure	Typ. 88 dB [8 sound types (Selectable)]		
Conformity Standards	●EMC Directive (EN 61000-6-4, EN 61000-6-2) ●RoHS Directive (EN 50581) ●UL 508, CSA-C22.2 No. 14 ● FCC Part 15 Subpart B Class A ● KC (KN 61000-6-4, KN 61000-6-2)		
Connection	M12 connector 5 pins A code		M12 connector 8 pins A code

IO-Link Signal Tower LR6-IL

Model	LR6-3ILWMNW-RYG Pre-assembled Model (Direct mount)	LR6-ILWMNW Body Unit (Direct mount)	LR6-ILWCNW Body Unit (1/2" NPT pipe or direct mount)
Size	φ60mm		
Rated Voltage	24V DC		
Mounting Location / Mounting Direction	Indoors, Upright		
Tier	LED Unit: Max. 5 tiers and one buzzer unit		
LED Color	Red / Amber / Green (Blue and White LED units also available)	N/A - LED units are sold separately	
LED Unit Modes	Continuous / Flashing		
Buzzer Sound Pressure	Typ. 84 dB (Use LR6-BW)		
Buzzer Sound Selection	4 sound types (Selectable) (Use LR6-BW)		
Protection Rating	IP65 NEMA TYPE 4 X, 13		
Conformity Standards	●EMC Directive (EN 61000-6-4, EN 61000-6-2) ●RoHS Directive (EN 50581) ●UL 508, CSA-C22.2 No. 14 ● FCC Part 15 Subpart B Class A ● KC (KN 61000-6-4, KN 61000-6-2)		
Connection	M12 connector 5 pins A code		

How to Order

NE- IL☐B-M

Touch Sensor
X : With touch sensor and digital / analog input
T : With touch sensor
N : No touch sensor

LED Color
M : Multi-color

Buzzer
B : With Buzzer

L R 6 -3IL ☐☐ NW-RYG

Size
6 : Φ60mm

Tier
3 : 3 tiers

Extended Function
IL : IO-Link

LED Unit Color
RYG: Red, Amber, Green

Body Color
W: Off-White

Buzzer
B: With Buzzer
N : No Buzzer

Mounting and Wiring
WM : Direct mounting / M12 connector (3-point mounting)
WC : Direct mounting / M12 connector (M30 nut attached)

www.patlite.com

⚠ **CAUTION**

To ensure correct use of these products, read the "Instruction Manual" prior to use. Failure to follow all safeguards can result in fire, electric shock, or other accidents.Specifications are subject to change without notice.

| O-AI06 | EN | 1906 A |