CTL50
Continuous Tower Light

Standardize. Visualize. Adapt.

- Standardize on one configurable tower light platform
- Visualize machine status, levels, timers, counters, and process data
- Adapt indication schemes without changing hardware

IO-Link

Modbus

PRO EDITOR SOFTWARE



BANNER®

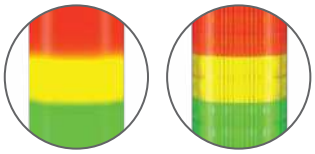
One Platform For Every Application



Communicate more status than a traditional tower light with **8-, 12-, and 20-cell models**

Individually **controllable cells**

Meet the visibility requirements of the environment with **diffuse models for a clean, blended appearance and clear beacon-style models for higher visibility**

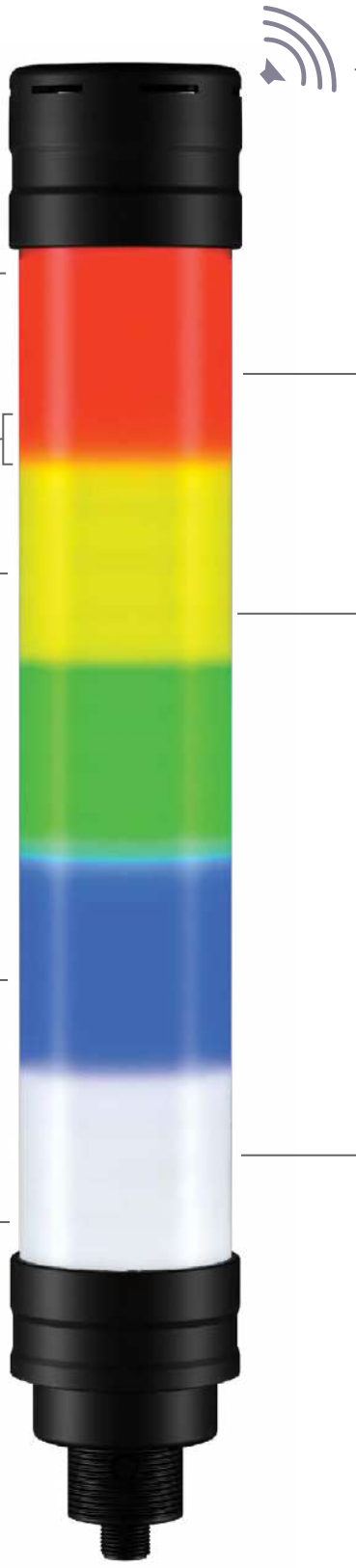


Diffuse Beacon

Create clear, application-specific indication patterns with **14 pre-configured colors, custom colors, 17 animations, and adjustable brightness**



Install directly in washdown environments with an IP66- and IP69-rated design that needs no additional protective enclosure



Draw operator attention to status changes with **audible models** that add sound to visual indication for alarms, warnings, and process changes

Simplify deployment with **built-in modes** that convert machine and sensor inputs directly into visual indication

Use **traditional segments, manual segment lengths, and AutoSpan** which automatically scales active segments to utilize the entire light for improved visibility



Retrofit existing machines and standardize across control architectures with **discrete, IO-Link®, and Modbus® models** sharing an integral M12 quick-disconnect connector

Discrete

IO-Link

Modbus

Standardizing Indication in Automotive Assembly

IO-Link®

Challenge

An automotive manufacturer uses IO-Link to control traditional segmented tower lights that communicate machine status throughout an assembly line. Across robotic cells, welding stations, conveyors, and inspection stations, a mix of two- to five-segment configurations is used to communicate machine conditions through different combinations of colored segments being steadily ON, OFF, or flashing. Because segment count and color needs vary across the machines, the manufacturer has to stock spares for every configuration on the line.

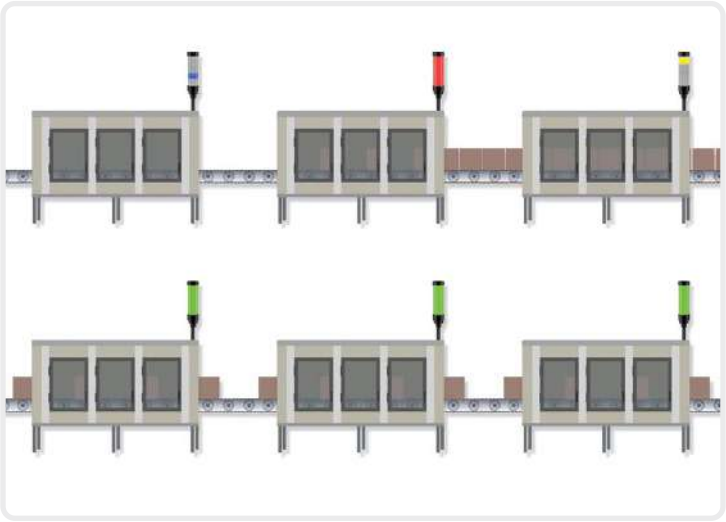
Solution

A 20-cell CTL50 Continuous Tower Light with IO-Link provides configurable indication throughout the line. In Segment Mode, parameter data from an IO-Link master groups the cells to match each machine's segment count and defines the color and flashing behavior assigned to each machine condition. During operation, process data selects the corresponding indication, allowing the CTL50 to look and operate like a conventional segmented tower light. The ability to reproduce all of the different tower-light configurations used across the line allowed the manufacturer to standardize on the CTL50, reducing spare-parts inventory and procurement complexity.



Dynamic Indication for Packaging-Line Flow

Modbus



Challenge

On a high-speed packaging line, conventional three- to five-segment tower lights alert operators to disruptions but provide little help locating the source. Basic Run, Warning, or Fault states do not show whether material is failing to arrive from upstream, accumulating locally, or blocked by a downstream jam. The time spent locating the source can turn small disruptions into line stoppages.

Solution

Configured in Run Mode, 20-cell CTL50 Continuous Tower Lights positioned along the line use their full displays to show a distinct color and animation for each flow condition. Steady green indicates normal flow, a downward blue animation indicates upstream starvation, an upward yellow animation indicates local accumulation, and flashing red indicates a downstream jam. Modbus states from the PLC select the appropriate indication. Operators can immediately see whether to investigate upstream, locally, or downstream, shortening the time needed to locate the source and helping prevent small disruptions from becoming line stoppages.

Continuous Tank Level Indication

PRO EDITOR SOFTWARE

Challenge

In a process that uses multiple tanks, fill level is available only by checking tanks individually or accessing an HMI, so operators cannot quickly see which tanks are nearing empty and need a refill or which require a transfer.

Solution

A 20-cell diffuse CTL50 Continuous Tower Light mounted atop each tank makes tank level immediately readable across the installation. At each tank, a splitter routes the Pulse Pro/PFM output from a Banner T30R Radar Sensor to the CTL50, providing the level input without additional control logic. Configured in Level Mode, the CTL50 fills from bottom to top as tank level rises, with green, yellow, and magenta indicating the low, middle, and high ranges so operators can quickly see which tanks are closest to requiring attention. Using Pro Editor software, fill animation, color, and thresholds are configured once, saved, and applied to each CTL50, streamlining installation and keeping indication consistent.

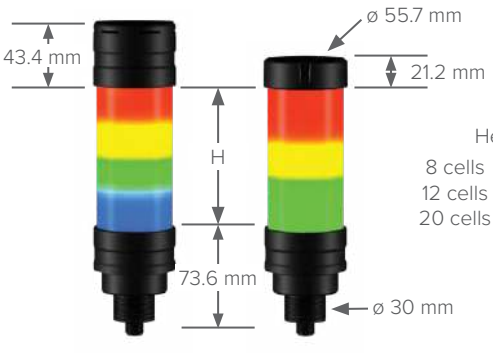


BANNER

CTL50 Continuous Tower Lights

Series	Window	Number of Cells	Audible	Control	Connection
CTL50	**D**	**20**	**A**	**K**	**Q**
	D = Diffuse **BL** = Beacon light	**8** = 8 Cells **12** = 12 Cells **20** = 20 Cells	**Blank** = No audible **A** = Audible	**Blank** = Discrete **K** = IO-Link **S** = Modbus	**Q** = 4-pin M12 integral QD (IO-Link, Modbus) or 8-pin M12 integral QD (Discrete) QD models require mating cordset

Specifications



Height (H)

8 cells	93.3 mm
12 cells	141.3 mm
20 cells	237.3 mm

Supply Voltage	Discrete, Modbus: 12 to 30 V DC IO-Link: 18 to 30 V DC
Max Audible	99dB
Construction	Polycarbonate
Operating Conditions	Standard: –40 to +50 °C Audible: –20 to +50 °C
Environmental Rating	IP66, IP69
Certifications	CE, cULus LISTED

Accessories



SMB30MM
Right angle curved mounting slot bracket



SMB30A
Right angle bracket



SMBAMS30P
Flat curved mounting slot bracket



SMB30RAVK
V-clamp bracket



SA-FFB12 (black)
Flush foldable bracket for use with elevated mount systems



4-Pin M12 Single-Ended
Straight connector models listed; for right-angle models, add **A** to the end of **M12F4** (example, BC-M12F4A-22-2)

BC-M12F4-22-2
2 m (6.5 ft)
BC-M12F4-22-5
5 m (16.4 ft)
BC-M12F4-22-10
10 m (32.8 ft)



4-Pin M12 Double-Ended
Straight connector models

BC-M12F4-M12M4-22-2
2 m (6.5 ft)
BC-M12F4-M12M4-22-5
5 m (16.4 ft)
BC-M12F4-M12M4-22-10
10 m (32.8 ft)



8-Pin M12 Single-Ended
Straight connector models listed; for right-angle models, add **A** to the end of **M12F8** (example, BC-M12F8A-22-2)

BC-M12F8-24-2
2 m (6.5 ft)
BC-M12F8-24-5
5 m (16.4 ft)
BC-M12F8-24-10
10 m (32.8 ft)



8-Pin M12 Double-Ended
Straight connector models

BC-M12F8-M12M8-24-2
2 m (6.5 ft)
BC-M12F8-M12M8-24-5
5 m (16.4 ft)
BC-M12F8-M12M8-24-10
10 m (32.8 ft)

Elevated Mount System



SA-M30TE12
Black Acetal adapter/cover
SA-M30TE12C
White UHMW adapter/cover

SOP-E12-150A (150 mm)
SOP-E12-300A (300 mm)
SOP-E12-900A (900 mm)
Black anodized aluminum pipe

SOP-E12-150AC (150 mm)
SOP-E12-300AC (300 mm)
SOP-E12-900AC (900 mm)
Clear anodized aluminum pipe

SOP-E12-150SS (150 mm)
SOP-E12-300SS (300 mm)
SOP-E12-900SS (900 mm)
304 stainless steel pipe

SA-E12M30
Black Acetal mounting base
SA-E12M30C
White UHMW mounting base

SA-F12
Black Zinc mounting base, 4 holes
SA-F12-3
Black polycarbonate mounting base, 3 holes

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