TL50 Series

Tower Lights

- Exceptionally bright with a long, visible indication range
- Install quickly and easily with no assembly required
- Clearly evident on/off status
- Versatile mounting options
- Compact, sleek, rugged design with IP67 models available
- Audible alert: continuous, pulsed and staccato models available
- Models available with IO-Link communication
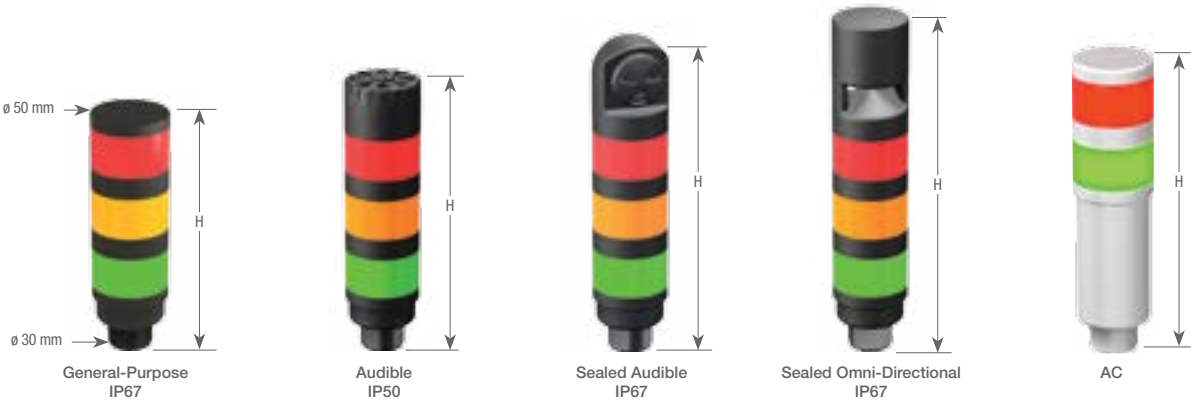- Cordsets and brackets see page 432

LASER MARKING AVAILABLE

TL50 Tower Light

Housing	Brightness	Supply Voltage	Color Position 1	2	3	4	5	6**	7**	Audible Alarm	Control	Housing Color	Connection
TL50	H		G	R	Y						K		Q

Brightness
Blank = Standard
H = High Brightness

Color Position
G = Green
Y = Yellow
R = Red
B = Blue
W = White
T = Turquoise*
O = Orange*
V = Violet*
S = Sky Blue*
M = Magenta*
Blank = Audible Only

Control
K = IO-Link†

Housing Color
Blank = Black
C = Gray

Connection
Blank = 2 m Integral Cable
Q = Euro Integral QD (dc only)
QP = Euro Pigtail QD
(Available with Micro Pigtail QD for ac models if 4 segments or less)

Supply Voltage
Blank (1 to 5 colors) = 18 to 30 V dc or 21 to 27 V ac
Blank (6 or 7 colors) = 12 to 30 V dc or 21 to 26 V ac
Z = 100 to 240 V ac

* These colors are not available in the high brightness models
** Positions 6 and 7 not available in high brightness models; Position 7 not available with audible
† IO-Link not available on high brighness or ac models

Audible Alarm
Blank = None (IP67)
A = Audible (IP50)
ALS = Sealed Audible Continuous Tone
ALS3 = Sealed Audible Pulsed Tone
ALS4 = Sealed Audible Staccato Tone
AOS = Omni-Directional Sealed Audible Continuous Tone
AOSI = Omni-Directional Sealed Audible Continuous Tone with Intensity Adjust
AOS3 = Omni-Directional Sealed Audible Pulsed Tone
AOS3I = Omni-Directional Sealed Audible Pulsed Tone with Intensity Adjust
AOS4 = Omni-Directional Sealed Audible Staccato Tone
AOS4I = Omni-Directional Sealed Audible Staccato Tone with Intensity Adjust

For more specifications see page 421.

Connection options: A model with a QD requires a mating cordset (see page 432).

ø 50 mm

ø 30 mm

General-Purpose
IP67

Audible
IP50

Sealed Audible
IP67

Sealed Omni-Directional
IP67

AC

All models available in black or gray

TL50

Color Count	Tower Height (H) General-Purpose IP67	Tower Height (H) Audible† IP50	Tower Height (H) Sealed Audible IP67	Tower Height (H) Sealed Omni-Directional IP67	Tower Height (H) AC
0	—	92.0 mm	74.4 mm	88.4 mm	
1	61.2 mm	92.0 mm	115.1 mm	129.1 mm	
2	101.9 mm	132.7 mm	155.8 mm	169.8 mm	Add 69 mm to any of these heights to get total height
3	142.6 mm	173.4 mm	196.5 mm	210.5 mm	
4	183.3 mm	214.1 mm	237.2 mm	—	
5	224.0 mm	254.8 mm	277.9 mm	291.1 mm	
6	264.7 mm	298.5 mm	318.6 mm	332.6 mm	—
7	305.4 mm	—	—	—	—

† Tower height (H) with top unscrewed approximately 3.5 mm to allow sound to escape.

Audible
max. intensity 92 db
@ 1 meter (typical)

Sealed Audible
max. intensity 94 db
@ 1 meter (typical)

Sealed Omni-Directional Audible
max. intensity 99 db
@ 1 meter (typical)

Sure Cross® Wireless I/O &
EZ-LIGHT® Indicators
Machine monitoring
enables an entirely new
category of applications
and machine diagnostics
free from wired limitation.
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information.

Building a Tower Light

www.bannerengineering.com/towerlights

Choose Type

1

Standard
High Intensity
Daylight Visible
Standard with IO-Link

Audible or No Audible

2

Audible
max. intensity 92 db
@ 1 meter (typical)

Sealed Audible
max. intensity 94 db
@ 1 meter (typical)

Sealed Omni-Directional Audible
max. intensity 99 db
@ 1 meter (typical)

Lighting Options/ Function

3

Position 7 (not available with audible)

Position 6

Position 5

Position 4

Position 3

Position 2

Position 1

Base

Color availability varies
between models

Connections

4

Integral QD   Euro Pigtail   Integral Cable

Housing Color

5

TL50 Specifications

Supply Voltage and Current	**DC models:**
	18 to 30 V dc (10% max. ripple); or 21 to 27 V ac
	       Standard Brightness:
	           Indicators: 45 mA max. current per LED color
	           Standard Audible Alarm (IP50): @ 25 mA max. current
	           Sealed Audible Alarm (IP67): 35 mA max. current
	           Omni-Directional Sealed Audible Alarm: 45 mA max. current
	       High Brightness: max. current per LED color:
	           Indicators: 18 V dc—100 mA; 30 V dc—60 mA; 21 V ac—80 mA; 27 V ac—70 mA
	           Standard Audible (IP50): 25 mA max. current
	           Sealed Audible Alarm (IP67): 35 mA max. current
	Audible only: @ 45mA max.
	AC models:
	100 to 240 V ac; 50 or 60 Hz

Indicators	LEDs are independently selected— Green, Yellow, Red, Blue, White, Turquoise, Orange, Violet, Sky Blue or Magenta; 1-7 colors depending on model
Supply Protection Circuity	Protected against reverse polarity and transient voltages
Input Response Time	**Indicators ON/OFF (dc):** 10 milliseconds (max.) **Indicators ON/OFF (ac):** 500 milliseconds (max.)
Audible Alarm	Audible measurements are made in the direction sound exits the device. For standard audible models, this is the top of the unit (when mounted vertically, sound is directed toward the ceiling). For sealed audible models (IP67), sound exits the vented openings in the side of the unit, which should be oriented so that the sound is directed toward the machine operator(s). In environments with high ambient noise levels or high ceilings that absorb sound, the sealed version is recommended. **Standard Audible Alarm:** 2.7 KHz ± 500 Hz oscillation frequency; max. intensity 92 db @ 1 meter (typical) **Sealed Audible Alarm:** 29 KHz to 250 Hz oscillation frequency; max. intensity 94 db @ 1 meter (typical) **Omni-Directional Sealed Audible Alarm with Intensity Adjustment:** 2.1 KHz ± 250 Hz oscillation frequency; max intensity 95 dB at 1 meter (3.3 ft) (typical)
Audible Adjustments	**Standard Audible Alarm:** Unscrew the cover (up to 1.5 turns max.) to adjust the audible intensity. (Do not exceed 1.5 turns or the cover may detach during operation.) For max. intensity, rotate the center plug 180° counterclockwise to remove it. **Sealed Audible Alarm and Omni-Directional Sealed Audible Alarm with Intensity Adjustment:** Rotate the front cover until the desired intensity is reached.
Construction	**Bases and Covers:** ABS **Light Segment:** Polycarbonate
Environmental Rating	**General-Purpose:** IEC IP67 **Audible:** IEC IP50 or IEC IP67, depending on model
Operating Conditions	**General-Purpose:** −40 to +50 °C **Audible:** −20 to +50 °C **Relative Humidity:** 95% @ 50 °C (non-condensing) **Storage Temperature**: −40 to +70 °C
Certifications	CE UL LISTED IO-Link®