



# TL50 Tower Lights

Banner's TL50 Tower Lights are designed to be exceptionally bright with a long, visible indication range, providing excellent operational status for workers and supervisors. Several models are available for use in a variety of environments, including options with audible alerts.

- 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
- Cordsets and brackets see page 566

## Audible Types



**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)

## Light Position & Color Options



Position 7 (not available with audible)

Position 6

Position 5

Position 4

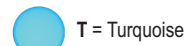
Position 3

Position 2

Position 1



G = Green



T = Turquoise



Y = Yellow



O = Orange



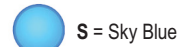
R = Red



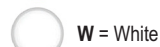
V = Violet



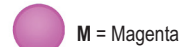
B = Blue



S = Sky Blue

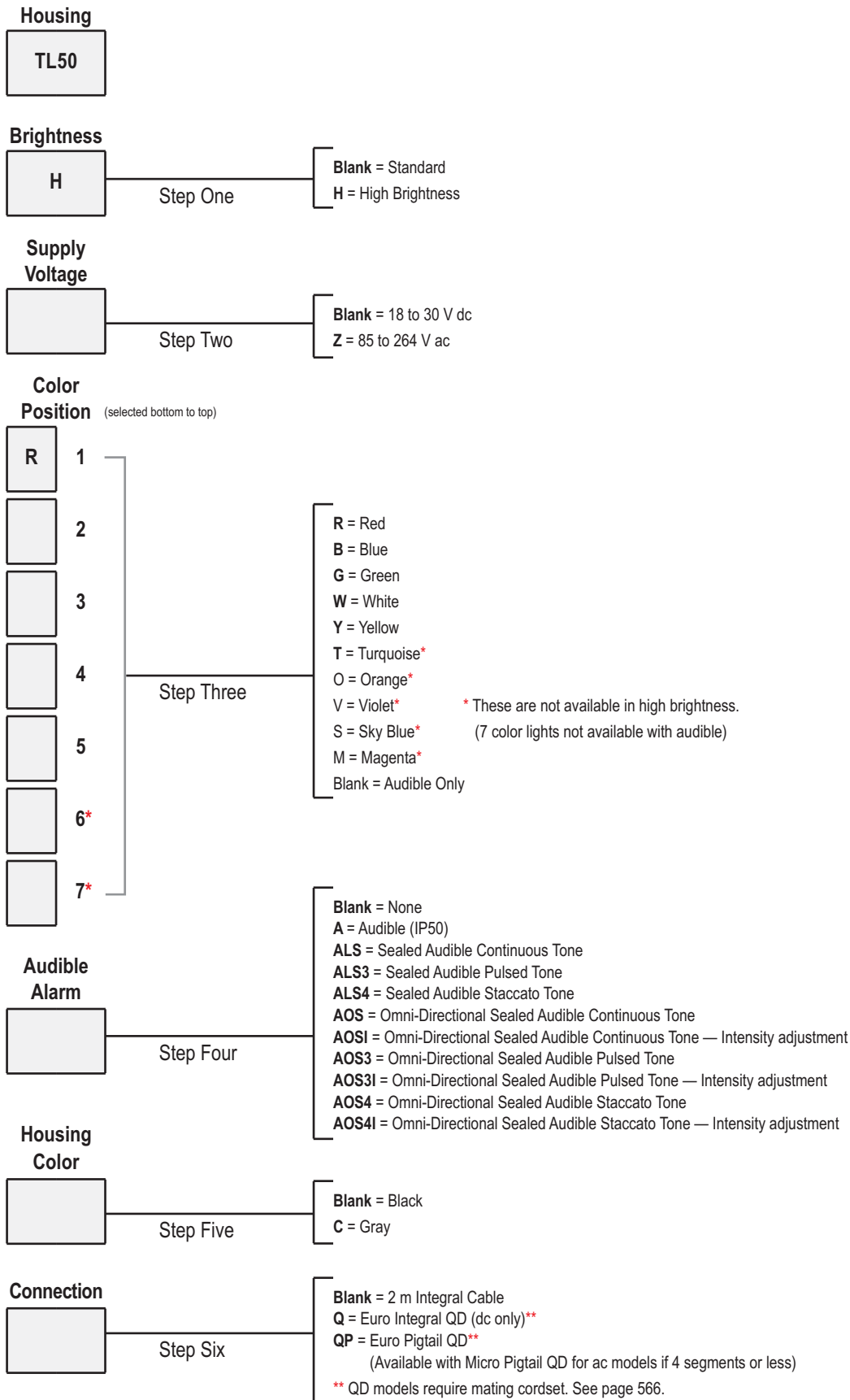


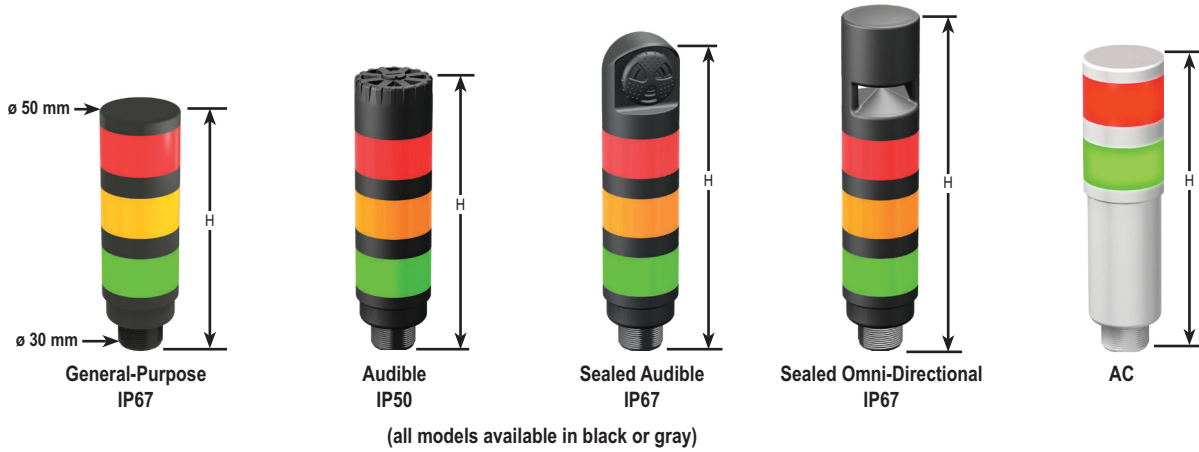
W = White



M = Magenta

## Choosing a TL50 model Example Model Number TL50HGYRQ





**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	Add 69 mm to any of these heights to get total height
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	
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	—	—	—	

For more specifications see page 559.

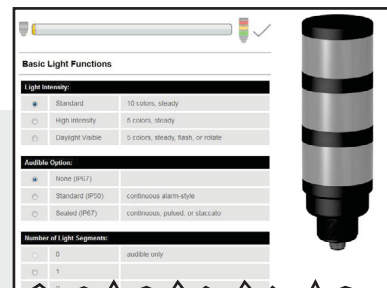
† Tower height (H) with top unscrewed approximately 3.5 mm to allow sound to escape.

**SureCross™ Wireless I/O & EZ-LIGHT® Indicators**


Machine monitoring enables an entirely new category of applications and machine diagnostics free from wired limitation. Contact factory for information.



EZ-LIGHT TL50 Tower Lights are built-to-order, prewired and configured with easy mounting and connecting. Configure the model for your application today and we'll assemble it for you! Visit [www.bannerengineering.com/towerlights](http://www.bannerengineering.com/towerlights)



## EZ-LIGHT® Tower Light Specifications

Supply Voltage and Current	<p><b>DC models:</b> 18 to 30 V dc (10% max. ripple); or 21 to 27 V ac</p> <p><b>Standard Brightness:</b> <b>Indicators:</b> 45 mA max. current per LED color <b>Standard Audible Alarm (IP50):</b> @ 25 mA max. current <b>Sealed Audible Alarm (IP67):</b> 35 mA max. current</p> <p><b>High Brightness:</b> max. current per LED color: <b>Indicators:</b> 18 V dc—100 mA; 30 V dc—60 mA; 21 V ac—80 mA; 27 V ac—70 mA <b>Standard Audible Alarm (IP50):</b> 25 mA max. current <b>Sealed Audible Alarm (IP67):</b> 35 mA max. current</p> <p><b>Audible only:</b> @ 45mA max.</p> <p><b>AC models:</b> 85 to 264 V ac; 50 or 60 Hz</p>
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 Circuitry	Protected against reverse polarity and transient voltages
Input Response Time	<b>Indicators ON/OFF:</b> 10 milliseconds (max.)
Audible Alarm	<p>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.</p> <p><b>Standard Audible Alarm:</b> 2.7 KHz ± 500 Hz oscillation frequency; max. intensity 92 db @ 1 meter (typical) <b>Sealed Audible Alarm:</b> 29 KHz to 250 Hz oscillation frequency; max. intensity 94 db @ 1 meter (typical)</p>
Audible Adjustments	<p><b>Standard Audible Alarm:</b> 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.</p> <p><b>Sealed Audible Alarm and Omni-Directional Sealed Audible Alarm with Intensity Adjustment:</b> Rotate the front cover until the desired intensity</p>
Construction	<b>Bases and Covers—</b> ABS <b>Light Segment—</b> Polycarbonate
Environmental Rating	<b>General-Purpose—</b> IEC IP67 <b>Audible—</b> IEC IP50 or IEC IP67, depending on model
Connections	Integral 4-pin, 5-pin or 8-pin Euro-style QD, 150 mm PVC pigtail with QD, or 2 m integral cable, depending on model
Operating Conditions	<p><b>General-Purpose:</b> -40° to +50° C <b>Audible:</b> -20° to +50° C <b>Relative Humidity:</b> 95% @ 50° C (non-condensing) <b>Storage Temperature:</b> -40° to +70° C</p>
Certifications	
Hookup Diagrams	<b>4-pin models:</b> LI09 (p. 1003) <b>5-pin: models:</b> LI10 (p. 1003) <b>8-pin models:</b> LI11 (p. 1003)



## TL50 Beacon Tower Lights

Banner's TL50 Beacon Tower Lights are extremely rugged and built for use in the toughest industrial environments. A sleek and stylish design make it suitable for use in outdoor environments.

- Highly visible indication for indoor or outdoor applications
- Compact, stylish design with rotating and flashing options
- Audible alert: continuous, pulsed and staccato models available
- Omni-Directional audible models provide clear annunciation in the noisiest environments
- Models available with rugged, water-resistant IP67 housing
- Cordsets and brackets see page 566

### Audible Types



**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)

### Light Position & Color Options



Position 5 (not available with audible)

Position 4

Position 3

Position 2

Position 1

- G = Green
- Y = Yellow
- R = Red
- B = Blue
- W = White

## Choosing a TL50BL model Example Model Number TL50BLG2YR1Q

### Housing

TL50BL

### Supply Voltage

Step One

**Blank** = 12 to 30 V dc  
**Z** = 85 to 264 V ac

### Color/Function (selected bottom to top)

#### Position

<b>G</b>	1	2
<b>Y</b>	2	
<b>R</b>	3	1
	4	
	5*	

Step Two

<b>Color</b>	<b>Function</b>
<b>R</b> = Red	<b>Blank</b> = ON Solid
<b>B</b> = Blue	<b>1</b> = Rotating
<b>G</b> = Green	<b>2</b> = Flashing
<b>W</b> = White	
<b>Y</b> = Yellow	
<b>Blank</b> = Not Used	
* Not available with audible	

### Audible Alarm

Step Three

**Blank** = None  
**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 — Intensity adjustment  
**AOS3** = Omni-Directional Sealed Audible Pulsed Tone  
**AOS3I** = Omni-Directional Sealed Audible Pulsed Tone — Intensity adjustment  
**AOS4** = Omni-Directional Sealed Audible Staccato Tone  
**AOS4I** = Omni-Directional Sealed Audible Staccato Tone — Intensity adjustment

### Housing Color

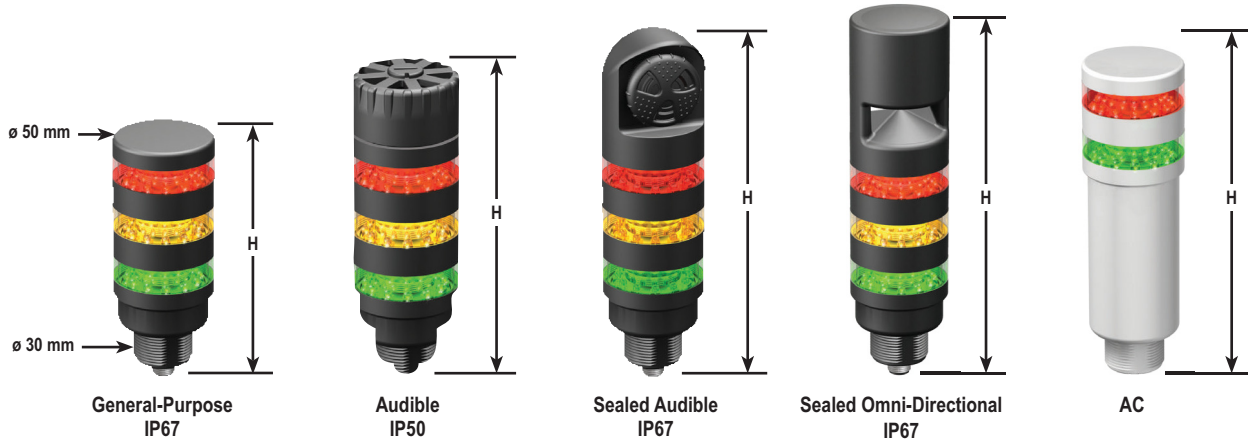
Step Four

**Blank** = Black  
**C** = Gray

### Connection

Step Five

**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)  
\*\* QD models require mating cordset. See page 566.



(all models available in black or gray)

**TL50BL**

Color Count	Tower Height (H) General-Purpose IP67	Tower Height (H) Audible <sup>†</sup> IP50	Tower Height (H) Sealed Audible IP67	Tower Height (H) Sealed Omni-Directional IP67	Tower Height (H) AC
1	46.2 mm	77.1 mm	100.2 mm	129.1 mm	Add 69 mm to any of these heights to get total height
2	72.0 mm	102.9 mm	126.0 mm	169.8 mm	
3	97.8 mm	128.7 mm	151.8 mm	210.5 mm	
4	123.6 mm	154.5 mm	177.6 mm	—	
5	149.4 mm	—	—	—	

For more specifications see page 563.

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

## Beacon Tower Light Specifications

<b>Supply Voltage and Current</b>	<p><b>DC models:</b> 12 to 30 V dc (10% max. ripple); or 21 to 27 V ac</p> <p><b>Indicators</b> — max. current per LED color:</p> <ul style="list-style-type: none"> <li>@ 12 V dc: 125 mA</li> <li>@ 30 V dc: 60 mA</li> <li>@ 21 V ac: 80 mA</li> <li>@ 27 V ac: 70 mA</li> </ul> <p><b>Standard Audible Alarm:</b> 25 mA max. current  <b>Sealed Audible Alarm:</b> 35 mA max. current</p> <p><b>AC models:</b> 85 to 264 V ac</p>
<b>Indicators</b>	1-5 colors depending on model; Green, Red, Yellow, Blue and White LEDs are independently selected
<b>Supply Protection Circuitry</b>	Protected against reverse polarity and transient voltages
<b>Input Response Time</b>	1 ms (max.)
<b>Audible Alarm</b>	<p>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, 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.</p> <p><b>Standard Audible Alarm:</b> 2.7 KHz <math>\pm</math> 500 Hz oscillation frequency; max. intensity 92 db @ 1 meter (typical)  <b>Sealed Audible Alarm:</b> 2.9 KHz <math>\pm</math> 250 Hz oscillation frequency; max. intensity 94 db @ 1 meter (typical)</p>
<b>Audible Adjustments</b>	<p><b>Standard Audible Alarm:</b> 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.</p> <p><b>Sealed Audible Alarm and Omni-Directional Sealed Audible Alarm with Intensity Adjustment:</b> Rotate the front cover until the desired intensity</p>
<b>Construction</b>	<p><b>Bases and Covers:</b> ABS</p> <p><b>Light Segment:</b> Polycarbonate</p>
<b>Environmental Rating</b>	<p><b>General-Purpose:</b> -40° to +50° C</p> <p><b>Standard and Sealed Audible:</b> -20° to +50° C</p> <p><b>Max. Rel. Humidity:</b> 95% @ 50° C (non-condensing)</p>
<b>Connections</b>	Integral 4-pin, 5-pin or 8-pin M12/Euro-style QD, 150 mm PVC pigtail with QD, or 2 m (6.5') integral cable, depending on model. See page 566.
<b>Operating Conditions</b>	<p><b>Temperature:</b></p> <ul style="list-style-type: none"> <li><b>General-Purpose:</b> -40° to +50° C</li> <li><b>Standard and Sealed Audible:</b> -20° to +50° C</li> </ul> <p><b>Max. Rel. Humidity:</b> 95% @ 50° C (non-condensing)</p> <p><b>Storage Temperature:</b> -40° to +70° C</p>
<b>Certifications</b>	