Complete 50 mm LED Tower Light Family

Give machines a voice, provide critical information for operators and show process status

• Quickly and clearly discern ON and OFF states from across the factory

• Create your ideal hardware configuration from a full set of options

• Show advanced process details with multicolor RGB IO-Link® models

BANNER®

Your Best Design — Built by Banner

Bright segments visible from long distances

Pro models available in all styles with 1 to 10 segments, plus audible options

Lights appear gray when OFF, eliminating false indication

Continuous, pulsed and staccato tones available

Standard Audible (IP50)
max. intensity
92 db @ 1 meter

Sealed Audible (IP67)
max. intensity
94 db @ 1 meter

Sealed Omni-Directional Audible (IP67)
Standard: max. intensity
99 db @ 1 meter
Intensity Adjust: max. intensity
95 db @ 1 meter

IP67 housing for use in industrial and outdoor environments
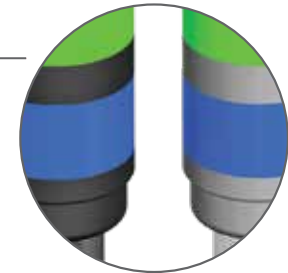
Match your machine with a choice of black or gray housing
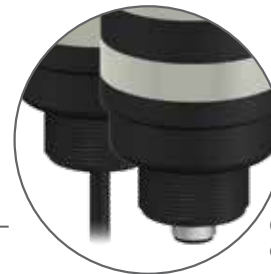
Cable, QD and pigtail QD connections available

Standard models for traditional applications

Beacon models for use in high ambient light environments

Compact models for tight spaces and added intensity

Banner's Complete Tower Light Lineup

TL70

TL50

TL30

TL70
Modular 70 mm design provides solutions with wireless options, multicolor segments and multifunction audible segments

TL50
Sealed 50 mm design with advanced IO-Link functionality and three segment styles delivers versatility for all applications

TL30
Slim 30 mm design provides clear, comfortable light for small machines, dense and close-range installations
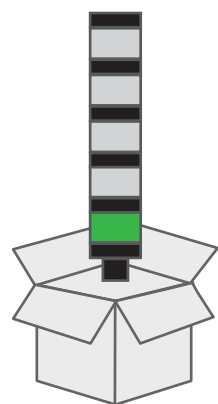
Ready to use right out of the box

Multiple input power options

IO-Link and discrete control options

Light sements can be laser marked with custom text or images

TL50 Core Tower Lights

- Traditional option to deliver status info to operators and supervisors
- High brightness and compact models for long-range and tight installations
- Ten colors and up to seven segments provide extensive options
- IO-Link provides simple control of segment state and flash rate

Housing: TL50

Brightness: H

- **Blank** = Standard
- **H** = High Brightness
- **C** = Compact

Supply Voltage:

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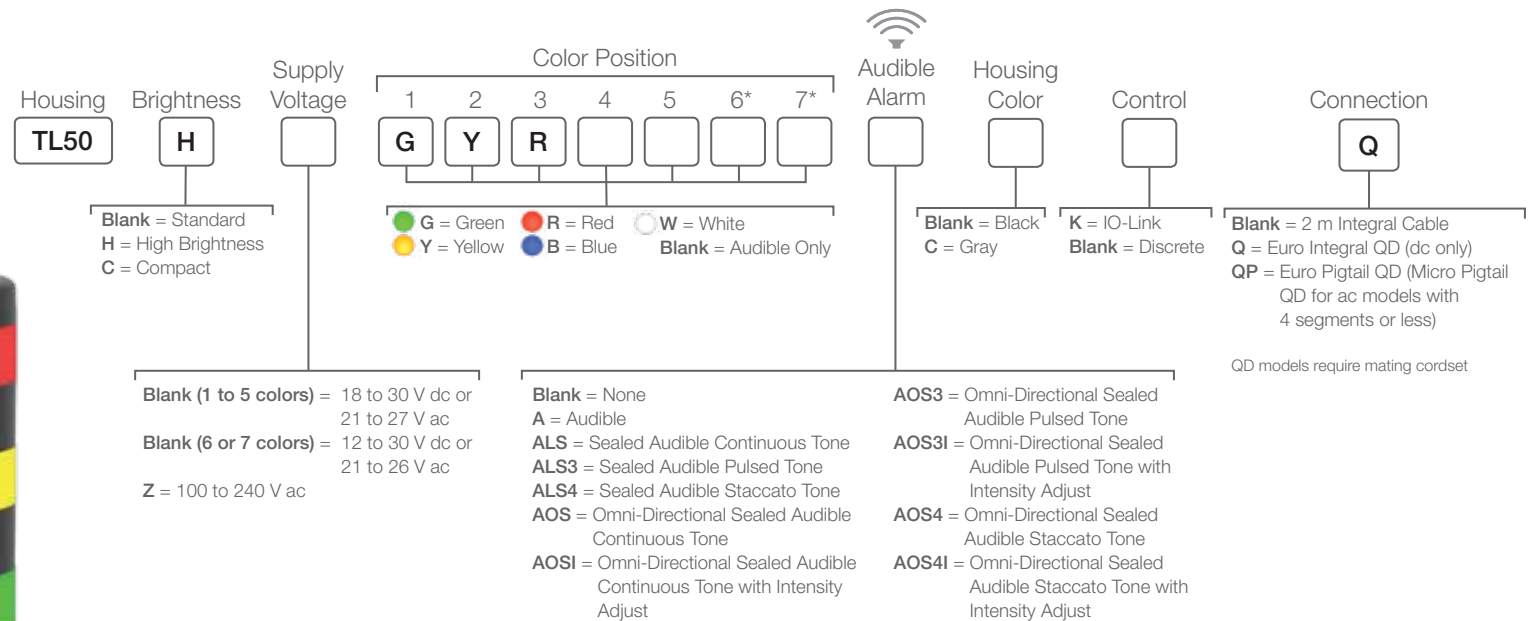- **Blank (6 or 7 colors)** = 12 to 30 V dc or 21 to 26 V ac
- **Z** = 100 to 240 V ac

Color Position: 1 = G, 2 = Y, 3 = R, 4, 5, 6*, 7*

- 🟢 **G** = Green
- 🟡 **Y** = Yellow
- 🔴 **R** = Red
- 🔵 **B** = Blue
- ⚪ **W** = White
- **Blank** = Audible Only

Audible Alarm:

- **Blank** = None
- **A** = Audible
- **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

Housing Color:

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

Control:

- **K** = IO-Link
- **Blank** = Discrete

Connection: Q

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

QD models require mating cordset

* Positions 6 and 7 not available in high brightness or AC models. Position 7 not available with audible

TL50BL Core Beacon Tower Lights

- Highly visible indication for high ambient light areas and long range visibility
- Sealed IP67-rated, UV stable housing is suitable for outdoor use
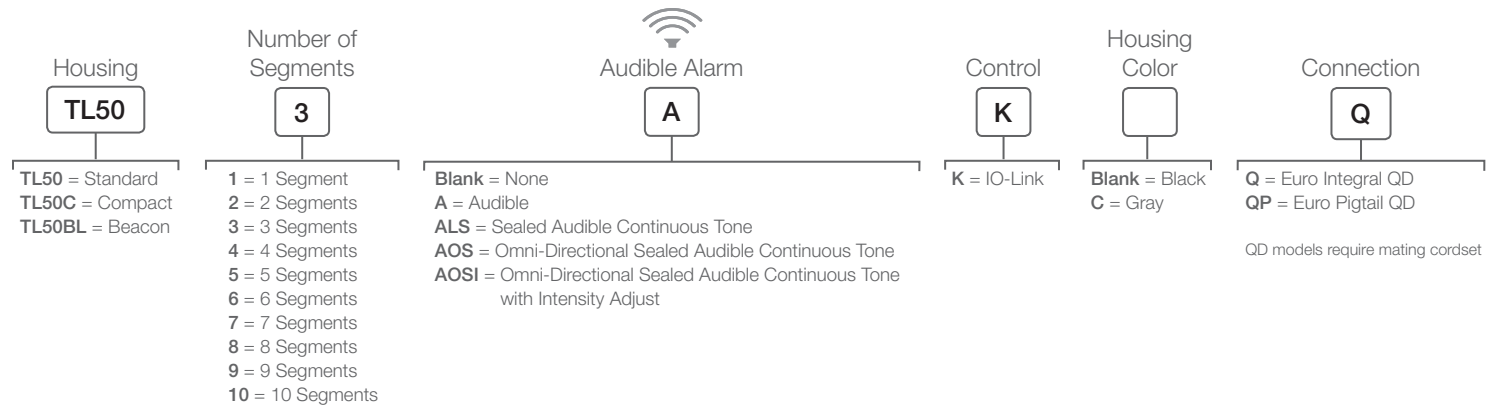- Compact, stylish design with rotating and flashing options
- IO-Link provides control of segment state and flash rate

Colors (C) /Function (F)

Housing	Supply Voltage	C1	F1	C2	F2	C3	F3	C4	F4	C5*	F5*	Audible Alarm	Housing Color	Control	Connection
TL50BL		G	2	Y		R	1								Q

Blank = 12 to 30 V dc
21 to 27 V ac
Z = 100 to 240 V ac

Colors
- **G** = Green
- **Y** = Yellow
- **R** = Red
- **B** = Blue
- **W** = White
- **Blank** = Not Used

Function
- **Blank** = ON Solid
- **1** = Rotating
- **2** = Flashing

Blank = None
A = Standard Audible
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

Blank = Black
C = Gray

K = IO-Link
Blank = Discrete

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

* Not available with audible

TL50 Pro Tower Lights with IO-Link

- Up to ten segments for advanced status signaling and high-resolution process details
- Full control of color, flashing, rotation and intensity settings
- Advanced animations like run and level mode provide dynamic visual response
- Parameter and process data options enable fast and complete control of functionality

Housing	Number of Segments	Audible Alarm	Control	Housing Color	Connection
TL50	**3**	**A**	**K**		**Q**

Housing
TL50 = Standard
TL50C = Compact
TL50BL = Beacon

Number of Segments
1 = 1 Segment
2 = 2 Segments
3 = 3 Segments
4 = 4 Segments
5 = 5 Segments
6 = 6 Segments
7 = 7 Segments
8 = 8 Segments
9 = 9 Segments
10 = 10 Segments

Audible Alarm
Blank = None
A = Audible
ALS = Sealed Audible Continuous Tone
AOS = Omni-Directional Sealed Audible Continuous Tone
AOSI = Omni-Directional Sealed Audible Continuous Tone with Intensity Adjust

Control
K = IO-Link

Housing Color
Blank = Black
C = Gray

Connection
Q = Euro Integral QD
QP = Euro Pigtail QD

QD models require mating cordset

IO-Link®

5 Advantages of IO-Link

1. Standardized and Reduced Wiring
2. Increased Data Availability
3. Remote Configuration and Monitoring
4. Simple Device Replacement
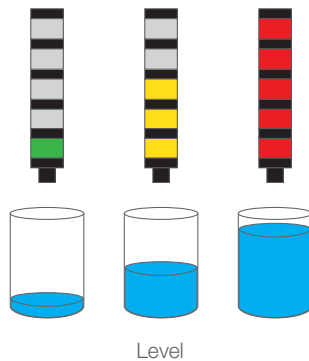5. Extended Diagnostics

Fill Level Monitoring

Challenge

• Operators, material handlers and supervisors need to see the level of product in the hopper

• Local displays aren't visible from separate, distant locations in the factory

• Product overflow creates a mess, and an empty hopper stops production

Solution

• The TL50 Pro tower light shows fill level through distinct, color-coded segments, and is visible from across the factory floor

• The IO-Link master directly converts the laser measurement into an easy to understand fill level based on user defined thresholds

• Product level is optimized for daily production needs
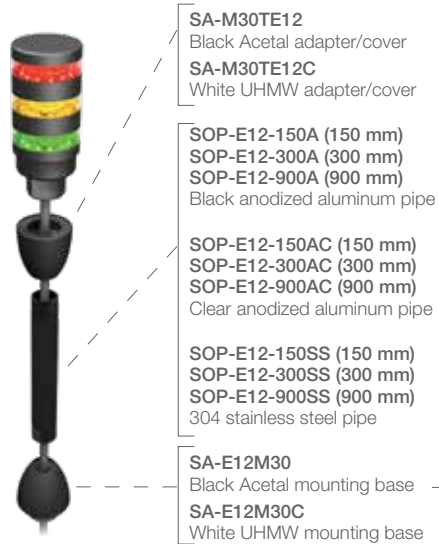
Modes and Animations

Level	Spectrum	50/50	Rotate
	Strobe	Scroll	Flash	Bounce

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

or

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

Flush Foldable Bracket
for use with elevated mount systems

SA-FFB12
Black
SA-FFB12C
Gray

Supply Voltage	TL50 and TL50C: < 5 segments: 18 to 30 V dc or 21 to 27 V ac; 100 to 240 V ac > 5 segments: 12 to 30 V dc or 21 to 26 V ac TL50BL: 12 to 30 V dc or 21 to 27 V ac; 100 to 240 V ac IO-Link: 18 to 30 V dc
Construction	Bases and Covers: ABS Light Segment: Polycarbonate
Environmental Rating	General-Purpose and Sealed Audible: IEC IP67 Standard Audible: IEC IP50
Operating Temperature	General-Purpose: −40 to +50 °C (−40 to +122 °F) Standard and Sealed Audible: −20 to +50 °C (−4 to +122 °F)
Certifications	CE UL LISTED

Mounting Brackets

SMB30MM

SMB30A

SMBAMS30P

SMB30RAVK

Sealed Right-Angle Brackets

LMBE12RA

LMB30RA

LMBE12RAC

LMB30RAC

Cordsets for AC Models

4-Pin Micro-Style
Straight connector models listed; for right-angle models, add RA to the end of model number (example, MQAC2-406RA)

MQAC2-406
2 m (6.5')
MQAC2-415
5 m (15')
MQAC2-430
9 m (30')

5-Pin Micro-Style
Straight connector models

MQAC2-506
2 m (6.5')
MQAC2-515
5 m (15')
MQAC2-530
9 m (30')

Cordsets for DC Models

4-Pin M12/Euro-Style
use with 3-color and IO-Link models

Straight connector models listed; for right-angle models, add RA to the end of model number (example, MQDC-406RA)

MQDC-406
2 m (6.5')
MQDC-415
5 m (15')
MQDC-430
9 m (30')

5-Pin M12/Euro-Style
use with 4-color models

Straight connector models listed; for right-angle models, add RA to the end of model number (example, MQDC1-506RA)

MQDC1-506
2 m (6.5')
MQDC1-515
5 m (15')
MQDC1-530
9 m (30')

8-Pin M12/Euro-Style
use with 5+ -color models

Straight connector models listed; for right-angle models, add RA to the end of model number (example, MQDC2S-806RA)

MQDC2S-806
2 m (6.5')
MQDC2S-815
5 m (15')
MQDC2S-830
9 m (30')

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more sensors, more solutions