

50 mm Control Tower™ Stack Lights

Product Overview/Product Selection



Bulletin 855E 50 mm Control Tower™ Lights

- UL Type 4/4X/13, IP65
- Stacking configurations 1...5 modules high
- “No Tools” lens assembly
- Surface, vertical, quick release, or pole mounting
- Top-mounted terminal blocks on all bases

Standards Compliance

UL 508
CSA C22.2 No. 14
EN/IEC 60947-1
EN/IEC 60947-5-1

Certifications

cULus Listed (File No. E14840,
Guides NKCR, NKCR7)
CE Marked

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Light Modules

855E – $\frac{10}{a}$ $\frac{FN}{b}$ $\frac{4}{c}$



Flashing Incandescent

a

Voltage	
Code	Description
00	0...250V AC/DC (no-lamp module*)
12	12V AC/DC
24	24V AC/DC
10	120V AC
20	240V AC

b

Light Module Type	
Code	Description
XN	Steady no lamp*
DN	Steady incandescent
FN	Flashing incandescent
TL	Steady socket - mount LED
GL	Flashing socket - mount LED
BR	Strobe

c

Lens Color	
Code	Description
3	Green
4	Red
5	Amber
6	Blue
7	Clear
8	Yellow

* Can only be selected with module type **XN**, voltage code **00**. Accepts socket mount LED and incandescent lamp types.

Voltage	Color	Illumination Type	Cat. No.
0...250V No-Lamp Module	Green	Steady Incandescent/LED	855E-00XN3
	Red		855E-00XN4
24V AC/DC	Green	Steady Incandescent	855E-24DN3
		Flashing Incandescent	855E-24FN3
		Steady LED	855E-24TL3
	Red	Steady Incandescent	855E-24DN4
		Flashing Incandescent	855E-24FN4
		Strobe	855E-24BR4
	Amber	Steady Incandescent	855E-24DN5
		Flashing Incandescent	855E-24FN5
		Steady LED	855E-24TL5
120V AC	Green	Steady Incandescent	855E-10DN3
		Flashing Incandescent	855E-10FN3
		Steady LED	855E-10TL3
	Red	Steady Incandescent	855E-10DN4
		Flashing Incandescent	855E-10FN4
		Strobe	855E-10BR4
	Amber	Steady Incandescent	855E-10DN5
		Flashing Incandescent	855E-10FN5
		Steady LED	855E-10TL5

50 mm Control Tower™ Stack Lights

Product Selection

Sound Modules

Sound modules have continuous and pulsing tones. Maximum sound output is 103 dB @ 1 meter. A reduced volume setting is available by changing the position of the volume dipswitch, producing a sound output of 88 dB @ 1 meter.

855E – $\frac{\text{B}}{a}$ $\frac{10}{b}$ $\frac{\text{TA3}}{c}$



Black Two-Tone Sound Module

a

Housing Color	
Code	Description
B	Black
G	Grey

b

Voltage	
Code	Description
12	12V AC/DC
24	24V AC/DC
10	120V AC
20	240V AC

c

Module Type	
Code	Description
SA3	Single circuit/single tone piezo style (continuous or pulsing tones modified by dip switch)
TA3	Two circuit/two tone piezo style (continuous or pulsing tones modified by energizing one or two circuits of sound module)

Voltage	Housing Color	Module Type	Cat. No.
24V AC/DC	Black	Single Circuit/Single Tone	855E-B24SA3
		Two Circuit/Two Tone	855E-B24TA3
	Grey	Single Circuit/Single Tone	855E-G24SA3
		Two Circuit/Two Tone	855E-G24TA3
120V AC	Black	Single Circuit/Single Tone	855E-B10SA3
		Two Circuit/Two Tone	855E-B10TA3
	Grey	Single Circuit/Single Tone	855E-G10SA3
		Two Circuit/Two Tone	855E-G10TA3

Standard Stack Light Bases Bases



Surface-Mount Base with Cap



Vertical-Mount Base with Cap



Pole-Mount Bases



Quick-Release Base

855E – B VM C
 a b c

a

Housing Color	
Code	Description
B	Black
G	Grey

b

Base Type	
Code	Description
CB	Surface mount with 1/2 in. NPT threading
RB	Surface mount with M20 metric threading
SB	Surface mount with PG16 threading
TM	25 mm tube mount
VM	Vertical mount
PM10	10 cm aluminum pole mount base
PM25	25 cm aluminum pole mount base
PM40	40 cm aluminum pole mount base
PM60	60 cm aluminum pole mount base
PM80	80 cm aluminum pole mount base
MM10	10 cm quick release base
MM25	25 cm quick release base
MM40	40 cm quick release base

c

Cap Option†	
Code	Description
Blank	No cap
C	Cap included

† Quick-release bases always include a cap.

Housing Color	Base Type	With Cap Option	Without Cap Option
		Cat. No.	Cat. No.
Black	Surface Mount — 1/2 NPT Thread	855E-BCBC	855E-BCB
	Surface Mount — PG16 Thread	855E-BSBC	855E-BSB
	Surface Mount — M20 Thread	855E-BRBC	855E-BRB
	Vertical Mount	855E-BVMC	855E-BVM
	25 mm Diameter Tube Mount	855E-BTMC	855E-BTM
	10 cm Aluminum Pole Mount	855E-BPM10C	855E-BPM10
	25 cm Aluminum Pole Mount	855E-BPM25C	855E-BPM25
	40 cm Aluminum Pole Mount	855E-BPM40C	855E-BPM40
	60 cm Aluminum Pole Mount	855E-BPM60C	855E-BPM60
	80 cm Aluminum Pole Mount	855E-BPM80C	855E-BPM80
	10 cm Pole, Quick-Release Base	855E-BMM10C	—
	25 cm Pole, Quick-Release Base	855E-BMM25C	—
	40 cm Pole, Quick-Release Base	855E-BMM40C	—

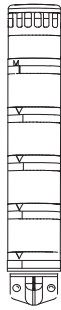
50 mm Control Tower™ Stack Lights

Product Selection

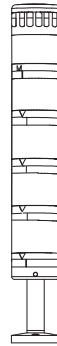
Pre-configured Tower Lights, One to Five Modules



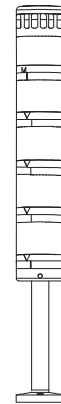
Surface Mount



Vertical Mount



10 cm Pole Mount



25 cm Pole Mount

855 EC - B 10 Y 3 L 5 B 3 F 7 Y 6
a *b* *c* *d* *e* *d* *e* *d* *e* *d* *e* *d* *e*
 (Level 1) (Level 2) (Level 3) (Level 4) (Level 5)
d+e *d+e* *d+e* *d+e* *d+e*

a

Base Type	
Code	Description
EC	Surface mount - 1/2 in. NPT threading
ES	Surface mount - PG16
EV	Vertical mount
EM	25 mm tube mount
EP	10 cm pole mount
EE	25 cm pole mount

c

Voltage	
Code	Description
12	12V AC/DC
24	24V AC/DC
10	120V AC
20	240V AC

e

Lens Color	
Code	Description
1	Sound module*
3	Green
4	Red
5	Amber
6	Blue
7	Clear
8	Yellow

b

Base & Cap Color	
Code	Description
B	Black
G	Grey

d

Module Type	
Code	Description
D	Steady incandescent
F	Flashing incandescent
Y	Steady LED
L	Flashing LED
B	Strobe
P	Single-circuit piezo sound module
Q	Two-circuit piezo sound module‡

* Sound module option can only be selected with Module Type options P or Q in table e. They must be located in the top position of the stack.
 ‡ If the two-circuit sound module (option Q in Table d) is selected, the maximum number of light modules allowed is three.

Mechanical Ratings				
Shock and Vibration		Based on the weight and style of mounting; tower lights are subject to damage from shock and vibration. Listed below are reference guidelines for maximum acceptable conditions.		
		1 Module Stack	3 Module Stack	5 Module Stack
Standard Bases	Surface Mount Base or 10 cm Aluminum Pole Base	150 G Shock 5 G Vibration	45 G Shock 1.5 G Vibration	35 G Shock 0.75 G Vibration
	Vertical Base or 25 cm Aluminum Pole Base	95 G Shock 3.5 G Vibration	30 G Shock 1.25 G Vibration	20 G Shock 0.5 G Vibration
Recommended Wire Sizes		0.5...1.5 mm ² (22...16 AWG)		
Recommended Terminal Torque		0.87 N•m (7 lb•in)		

Environmental Ratings		
Ingress Ratings	Light Modules with Cap	UL Type 4/4X/13, IP65
	Sound Modules	UL Type 4/4X/13, IP65
	Surface, Vertical, Tube Mount Bases	UL Type 4/4X/13, IP65
	Pole Mount Bases	UL Type 4/4X/13, IP65
Temperature Ratings — All Products	Operating Temperature	-25...+50 °C (-13...+122 °F)
	Storage Temperature	-40...+85 °C (-40...+185 °F)

Materials	
Bases, Caps, Lens Covers, Sound Module Housings, Lenses	Polycarbonate
Lamp Socket	Polycarbonate
Rubber Seals and Gaskets	Nitrile Rubber
Pole (for aluminum pole assembly)	Aluminum
Pole Base Footing (for aluminum pole base)	Polycarbonate
Insulation Sleeve (for pole insulation)	Polyolefin
Mounting Screw Washers	Polypropylene

Performance Ratings					
Description		12V AC/DC	24V AC/DC	120V AC	240V AC
Light Output	Steady Incandescent	0.5 MSCP 6.3 Lumens	2.5 MSCP 31.4 Lumens	3.0 MSCP 37.7 Lumens	0.49 MSCP 6.2 Lumens
	Flashing Incandescent	0.5 MSCP 6.3 Lumens	2.5 MSCP 31.4 Lumens	3.0 MSCP 37.7 Lumens	0.49 MSCP 6.2 Lumens
	Strobe	1 Joule per lamp			
	Steady, Flashing Socket Mount LED Red	900...2240 mcd			
	Steady, Flashing Socket Mount LED Green	900...1800 mcd			
	Steady, Flashing Socket Mount LED Amber	1400...3550 mcd			
	Steady, Flashing Socket Mount LED Blue	224...560 mcd			
	Steady, Flashing Socket Mount LED White and Yellow	900...1800 mcd			

Operating Voltage				
Description	12V AC/DC	24V AC/DC	120V AC	240V AC
Light Modules and Sound Modules	12V AC/DC (± 10%)	24V AC/DC (± 10%)	110V AC 50Hz (± 10%) 120V AC 60Hz (± 10%)	230V AC 50 Hz (± 10%) 240V AC 60 Hz (± 10%)

Lamp Life Ratings (Design Life) Average Life Under Static, No Vibration, Conditions				
Description	12V AC/DC	24V AC/DC	120V AC	240V AC
Incandescent Modules*‡	8 000 hrs	7 000 hrs	3 000 hrs	1 600 hrs
LED Modules	100 000 hrs			
Strobe Modules	15 000 hrs			
Sound Modules	20 000 hrs			

* First failures at about 35% of average life. Severe vibration may reduce life to 44% of average life.
 ‡ Flashing applications may reduce life to 50% of average life.

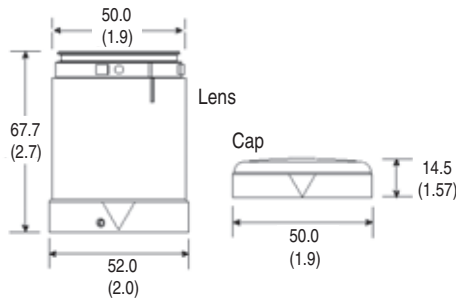
50 mm Control Tower™ Stack Lights

Specifications/Approximate Dimensions

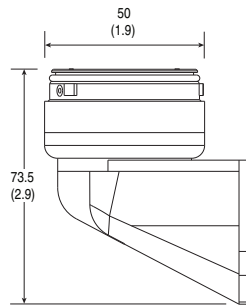
Current Consumption					
Description		12V AC/DC	24V AC/DC	120V AC	240V AC
Light Only Modules	Steady Incandescent	208 mA	271 mA	58 mA	23 mA
	Flashing Incandescent	208 mA	271 mA	58 mA	23 mA
	Steady or Flashing LED	42 mA	29 mA	21 mA	20 mA
	Strobe	95 mA	60 mA	55 mA	30 mA
Sound Modules	Single-Tone Sound Module	12 mA	25 mA	33 mA	33 mA
	Two-Tone Sound Module				
Flashing Frequency (Light Only Modules)					
Flashing Incandescent Modules		12V module approximately 1.5 Hz 24V, 120V, and 240V modules approximately 2 Hz Time ON/Time OFF = 1:1			
Flashing LED Modules		Flashing frequency approximately 1.5 Hz Time On/Time OFF = 1:1			
Strobe Modules		Flashing frequency approximately 2 Hz (flash duration 1/50,000 second)			
Flashing and Tone frequency (Light Modules/with Sound Set at Continuous Tone)					
Tone Frequency		Tone frequency is preset at 2800 Hz			
Flashing and Tone Pulsing Frequencies (Light Modules/with Sound Set at Pulsing Tone)					
Tone Frequency		Tone Frequency is preset at 2800 Hz			
dB Rating (Sound Modules)					
All dB(A) ratings determined at a distance of 1 meter from sound module					
Single Tone Sound Module (SA3)		Maximum volume ranges from 88 or 103 dB(A) (volume adjustable by dipswitch)			
Two Tone Sound Module (TA3)					
Leakage Current Impact					
All light modules and sound modules are capable of absorbing up to 3 mA of leakage from solid-state outputs without module activation					

Approximate Dimensions

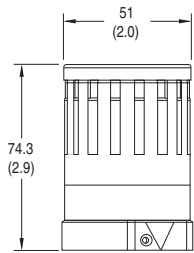
Dimensions in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.



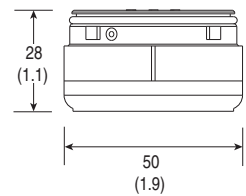
Light Modules



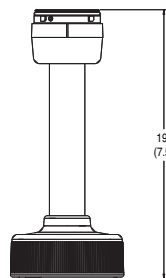
Vertical Mount Base



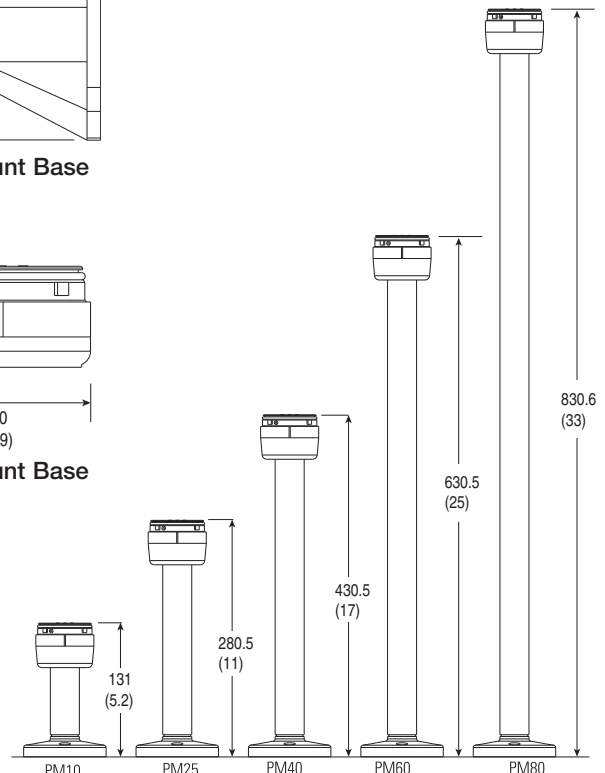
Sound Module



Surface Mount Base



Quick Release Base



Pole Mount Bases

70 mm Control Tower™ Stack Lights

Product Overview/Product Selection



Bulletin 855T — 70 mm Control Tower™ Stack Lights

- Surface, vertical, quick release, or pole mounting options
- Light modules - UL Type 4/4X/13, IP65
- Sound modules - piezo and transducer options
- DeviceNet bases available

Standards Compliance

UL 508
 CSA C22.2 No. 14
 EN/IEC 60947-1
 EN/IEC 60947-5-1

Certifications

cULus Listed (File No. E14840,
 Guides NKCR, NKCR7)
 CE Marked

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Product Selection Light Modules

855T - B 10 FN 4
 a b c d



Red Flashing Incandescent (Black Housing)

a

Housing Color	
Code	Description
B	Black
G	Grey

c

Module Type	
Code	Description
XN	Steady no-lamp*
DN	Steady incandescent
FN	Flashing incandescent
TL	Steady LED
GL	Flashing LED
RL	Rotating LED, simulated with fixed LEDs†
BR	Strobe

d

Light Color	
Code	Description
3	Green
4	Red
5	Amber
6	Blue
7	Clear
8	Yellow

b

Voltage	
Code	Description
00	0...250V AC/DC (Use only with Module Code XN)
12	12V AC/DC
24	24V AC/DC
10	120V AC
20	240V AC

* Use only with Voltage Code 00. Accepts LED module or incandescent lamp.
 † Only available with Voltage Codes 10 or 24, and Color Codes 3, 4, or 5.

Voltage	Color	Illumination Type	Black Housing Color	Grey Housing Color
			Cat. No.*	Cat. No.*
0...250V No-Lamp Module	Green	Steady Incandescent/LED	855T-B00XN3	855T-G00XN3
	Red		855T-B00XN4	855T-G00XN4
24V AC/DC	Green	Steady Incandescent	855T-B24DN3	855T-G24DN3
		Flashing Incandescent	855T-B24FN3	855T-G24FN3
		Steady LED	855T-B24TL3	855T-G24TL3
	Red	Steady Incandescent	855T-B24DN4	855T-G24DN4
		Flashing Incandescent	855T-B24FN4	855T-G24FN4
		Strobe	855T-B24BR4	855T-G24BR4
	Amber	Steady Incandescent	855T-B24DN5	855T-G24DN5
		Flashing Incandescent	855T-B24FN5	855T-G24FN5
		Steady LED	855T-B24TL5	855T-G24TL5
120V AC	Green	Steady Incandescent	855T-B10DN3	855T-G10DN3
		Flashing Incandescent	855T-B10FN3	855T-G10FN3
		Steady LED	855T-B10TL3	855T-G10TL3
	Red	Steady Incandescent	855T-B10DN4	855T-G10DN4
		Flashing Incandescent	855T-B10FN4	855T-G10FN4
		Strobe	855T-B10BR4	855T-G10BR4
	Amber	Steady Incandescent	855T-B10DN5	855T-G10DN5
		Flashing Incandescent	855T-B10FN5	855T-G10FN5
		Steady LED	855T-B10TL5	855T-G10TL5

* Refer to configurator options for additional selections.