

Bulletin 856T 70 mm Control Tower Stack Lights

These devices give you the flexibility to meet the widest range of applications with a reduced number of components. This system uses a modular design that incorporates brighter LED illumination and a broad offering of sound technologies. All signals in the system are 24V AC/DC powered, which means that just three power modules can cover the entire system. They can be purchased as separate components or as a preconfigured, factory-assembled stack light for optimal flexibility.

Light Modules



Steady LED Module



Multi-function LED Module



Steady/Flashing Beacon Style

856T – $\frac{\text{B}}{\text{a}}$ $\frac{\text{T}}{\text{b}}$ $\frac{4}{\text{c}}$

a	
Housing Color	
Code	Description
B	Black

b	
Module Type	
Code	Description
T	Steady LED
B	Multi-function LED steady/flashing/strobe 1/strobe 2
R	Rotating LED
MC	7-color LED (RGB) ^{(1) (2)}
GB	Steady/flashing, non-stackable beacon style
SB	Strobe 1/strobe 2, non-stackable beacon style ⁽³⁾
RB	Rotating LED, non-stackable beacon style ⁽⁴⁾
MB	7-color LED (RGB), non-stackable beacon style ^{(1) (2)}

c	
Output Color	
Code	Description
3	Green
4	Red
5	Amber
6	Blue
7	Clear
8	Yellow
9	Magenta ⁽⁵⁾
Blank	For use with Module Type MC and MB only

- (1) Output Color must be Blank (Table [c](#)).
(2) Can use three circuits to display up to seven colors, two circuits to display three colors, or one circuit to display one color.
(3) Can only be used with Output Color 4, 5, or 6 (Table [c](#)).
(4) Can only be used with Output Color 4 or 5 (Table [c](#)).
(5) Cannot be used with Module Type R and GB (Table [b](#)).

Table 127 - Decibel Rating (Sound Modules)

Device	Decibel Rating ⁽¹⁾	Volume Control	No. of Tones
856T-BP1, Piezo, Top mount	105 dB(A), max	Adjustable -20 dB	8
856T-BTR3, Transducer	Rated: 105 dB(A) (107 dB(A), max @ 2700 Hz)	Adjustable -10 dB (also three adjustment pots for tone customization)	80 tones, seven stages configured via DIP switch and three inputs
856T-BPL1, Piezo, In-line	102 dB(A), max	Adjustable -20 dB	8

(1) All dB(A) ratings are determined at a distance of 1 m (3.3 ft) from sound module.

Table 128 - Light Output

Device	Light Output [mcd]
Steady	
856T-BT3 (Green)	7200
856T-BT4 (Red)	5200
856T-BT5 (Amber)	9500
856T-BT6 (Blue)	1300
856T-BT7 (White)	17,200
856T-BT8 (Yellow)	15,800
856T-BT9 (Magenta)	5600
Multifunction	
856T-BB3 (Green)	12,600
856T-BB4 (Red)	6900
856T-BB5 (Amber)	16,700
856T-BB6 (Blue)	2300
856T-BB7 (White)	30,300
856T-BB8 (Yellow)	27,800
856T-BB9 (Magenta)	9900
Rotating	
856T-BR3 (Green)	6300
856T-BR4 (Red)	5000
856T-BR5 (Amber)	8300
856T-BR6 (Blue)	1100
856T-BR7 (White)	15,000
856T-BR8 (Yellow)	13,800

Device	Light Output [mcd]
Multicolor	
856T-BMC	4800
Seven colors: • Green • White • Red • Magenta • Yellow • Turquoise • Blue (Selectable via three inputs)	
Beacon (Steady/Flashing)	
856T-BGB3 (Green)	8400
856T-BGB4 (Red)	7200
856T-BGB5 (Amber)	11,100
856T-BGB6 (Blue)	1500
856T-BGB7 (White)	20,000
856T-BGB8 (Yellow)	18,400
Steady or flashing function selectable via DIP switch or by using two inputs (Flashing frequency = 2 Hz)	
Beacon (Strobe)	
856T-BSB4 (Red)	10,600
856T-BSB5 (Amber)	21,300
856T-BSB6 (Blue)	2900
Single or double strobe function selectable via DIP switch (1.4 Hz)	
Beacon (Rotating)	
856T-BRB4 (Red)	7500
856T-BRB5 (Amber)	23,200
Two speeds: • Speed 1 = 90 RPM • Speed 2 = 180 RPM (Selectable via DIP switch)	
Beacon (Multicolor)	
856T-BMB	8100
Seven colors: • Green • White • Red • Magenta • Yellow • Turquoise • Blue (Selectable via three inputs)	

Table 129 - Operating Voltage ⁽¹⁾

Device	Operating Voltage	
	Nominal Voltage	Voltage Range
All modules	24V AC/DC, 50/60 Hz	21...30V DC/ 21.6...26.4V AC
856T-B24C		
856T-BAC3C, three-circuit SMPS	120/240V AC	90...250V AC, 50/60Hz
856T-BAC7C, seven-circuit SMPS	120/240V AC	90...250V AC, 50/60Hz

(1) Maximum input switching frequency for SMPS (that is, from a PLC) is 5 Hz.

Table 130 - Current Consumption and Life

Device	Nominal Current	Inrush Current	Life
Power Modules			
856T-B24C	—	—	—
856T-BAC3C, three-circuit SMPS	150 mA, max	6 A, max	30,000 hr
856T-BAC7C, seven-circuit SMPS	340 mA, max	3.5 A, max	30,000 hr
Sound Modules			
856T-BP1, Piezo, Top mount	120 mA	1.8 A DC 2.15 A AC	20,000 hr
856T-BTR3, Transducer	200 mA	1.06 A DC 1.24 A AC	20,000 hr
856T-BPL1, Piezo, In-line	120 mA	1.8 A DC 2.15 A AC	20,000 hr
Steady Light Modules			
856T-BT3, Green	58 mA	—	>60,000 hr
856T-BT4, Red		—	>40,000 hr
856T-BT5, Amber		—	>60,000 hr
856T-BT6, Blue		—	
856T-BT7, White		—	
856T-BT8, Yellow		—	
856T-BT9, Magenta		—	
Multifunction Light Modules			
856T-BB3, Green	100 mA	1.79 A DC 2.66 A AC	>60,000 hr
856T-BB4, Red		1.82 A DC 2.66 A AC	>40,000 hr
856T-BB5, Amber		1.79 A DC 2.66 A AC	>60,000 hr
856T-BB6, Blue			
856T-BB7, White			
856T-BB8, Yellow			
856T-BB9, Magenta			

Device	Nominal Current	Inrush Current	Life
Rotating Light Modules			
856T-BR3, Green	40 mA	1.79 A DC 2.64 A AC	>60,000 hr
856T-BR4, Red	45 mA	1.79 A DC 2.66 A AC	>40,000 hr
856T-BR5, Amber	40 mA	1.79 A DC 2.64 A AC	>60,000 hr
856T-BR6, Blue			
856T-BR7, White			
856T-BR8, Yellow			
Multicolor Light Modules			
856T-BMC	110 mA	1.30 A DC 1.94 A AC	30,000 hr
Beacon Light Modules (Steady/Flashing)			
856T-BGB3, Green	100 mA	0.74 A DC 1.24 A AC	>60,000 hr
856T-BGB4, Red	108 mA	0.70 A DC 1.16 A AC	>40,000 hr
856T-BGB5, Amber	100 mA	0.74 A DC 1.24 A AC	>60,000 hr
856T-BGB6, Blue			
856T-BGB7, White			
856T-BGB8, Yellow			
Beacon Light Modules (Strobe)			
856T-BSB4, Red	190 mA	0.76 A DC 1.11 A AC	>40,000 hr
856T-BSB5, Amber		0.77 A DC 1.11 A AC	>60,000 hr
856T-BSB6, Blue			
Beacon Light Modules (Rotating)			
856T-BRB4, Red	65 mA	0.74 A DC 1.09 A AC	>40,000 hr
856T-BRB5, Amber		0.75 A DC 1.11 A AC	>60,000 hr
Beacon Light Modules (Multicolor)			
856T-BMB	200 mA	1.65 A DC 2.46 A AC	30,000 hr

Table 131 - Standards and Certifications

Attribute	Bulletin 856T — 70 mm Control Tower Stack Lights
Standards Compliance	- UL 60947-5-1 - CSA C22.2 No. 14 - CE - EN 60947-5-1:2004 + A1:2009 - EN 61000-6-2:2005 - EN 61000-6-3:2007 + A1:2011 - EN 50581: 2012 2014/35/EU (Low Voltage Directive) 2014/30/EU (EMC Directive) 2011/65/EU (RoHS Directive)
Certifications	- c-UL-us Listed (File No. E14840, Guides NKCR, NKCR7) - CE Marked - KCC (Registration No. R-REM-RAA-856T) - China RoHS - WEEE - RCM (EN 61000-6-2:2005 and EN 61000-6-3:2007 + A1:2011)