Pre-assembled and pre-cabled in different aperture to highlight the processes

LED Signal Towers

- Modular and monolithic design are available.
- Patlite´s extensive product range cover highly advanced LED signal towers for industrial automation and security applications.
- Mechanical and electrical durability is a key feature of signal towers since machine operators rely on the signals they show. LED modules together with an impact and heat resistant ABS resin housing are the elements to give clear guidance of the operator for a long service life.
- Different aperture for different application (from 30 mm till 70 mm)
- This signal towers are designed for use in different environments till a protection up to IP 65. That makes them suiteable for the widest possible range of applications in general industries.

LU5   LU7   LME   MP/MPS
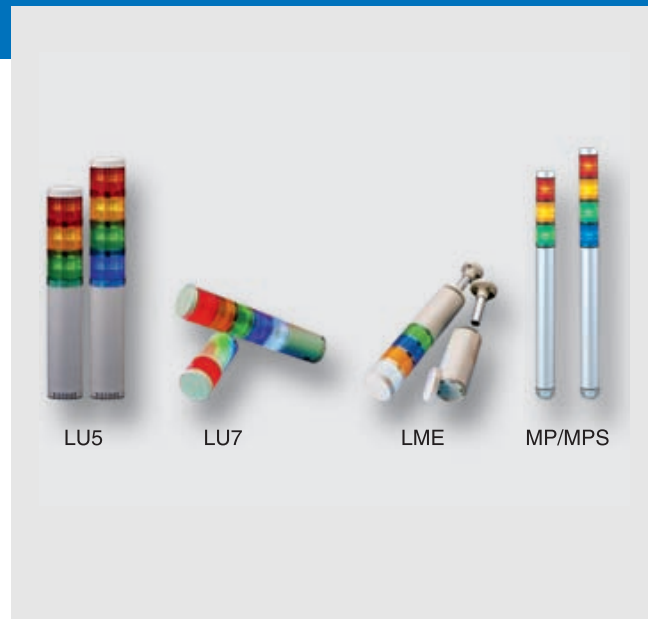
Features/Unique selling proposition

Modular system:

LU5 & LU7 series signal towers deliver the advantages of superior LED technology, innovative design, and the convenience of modular assembly with only 9 basic modular components to meet just about every indicating need.

LU5/LU7: Versatile modular Signal Tower featuring easy assembly and wiring designed for every need.

Monolithic system:

MP/MPS: Super slim 30 mm Signal tower ideal for small and mid-sized machines with a special pre-wired versatile 1 m connection cable.

LME: Versatile, cost and energy efficient LED Signal tower for every need and a special pre-wired versatile and flexible cable connection of 3 m.

LU5

Nomenclature/How to order

LED module

LU5-<u>E</u>-<u>R</u>
      1 2

1. E: LED unit
2. Color of LED
    R: Red
    Y: Yellow
    G: Green
    B: Blue
    C :   Clear/White

Base module

LU5-<u>02</u><u>U</u><u>FB</u>
      1 2 3

1. Rated voltage
    02:    24 VDC
2. Unit color
    Blank: Ivory white
    U: Silver color
3. Type
    Blank: Continuous light
    FB: Continuous or flashing light with audible alarm

Ordering Information

LED module

Module Color	Power Consumption	Rated Voltage	Operation Voltage	Operation Temperature Range	Mass	Order Code
Red	52 mA/1.25 W	24 VDC	Rated voltage ±10% (21.6~26.4 V)	-30°C~+60°C	44 g ±10%	LU5-E-R
Yellow						LU5-E-Y
Green	42 mA/1.0 W					LU5-E-G
Blue						LU5-E-B
Clear						LU5-E-C

Base module

Typ	Alarm/ Flash	Power Consumption	Rated Voltage	Operation Voltage	Operation Temperature Range	Mass	Open Collector	Order Code
Standard Body	Continuous	1.2 W	24 VDC	Rated voltage ±10% (21.6 ~ 26.4 V)	-30°C~+60°C	182g ±10%	PNP/ NPN	LU5-02*
	2 Sounds/ Flashlight					200g ±10%		LU5-02FB*

* Ivory white: black, silver: add "U"

Optional parts

Typ	Material	Order code
Wall Mount Bracket	Aluminum alloy die-cast	SZ-017
	ABS resin	SZ-020
Upper Bracket	Metal	SZ-60NPT
		SZ-60U
Mount Bracket	Aluminum alloy die-cast	SZ-016A
		SZ-70B

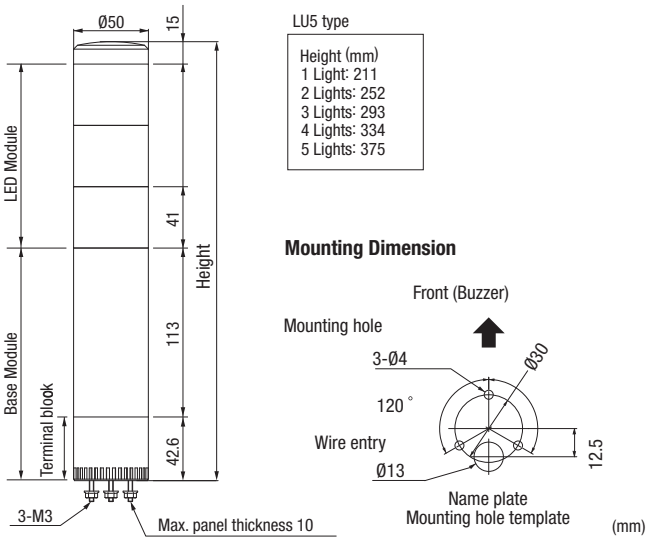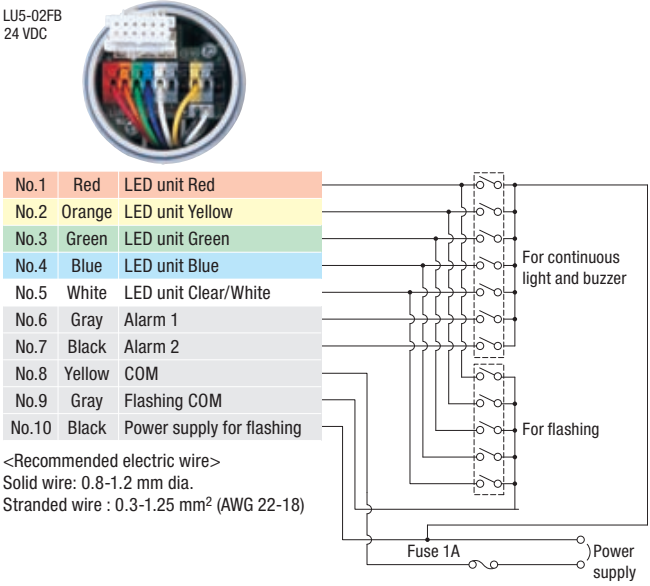| Typ	Height	Material	Order code
Pole	100 mm	Aluminium	Pole-100A21
	300 mm	Aluminium	Pole-300A21
	800 mm	Aluminium	Pole-800A21

Features

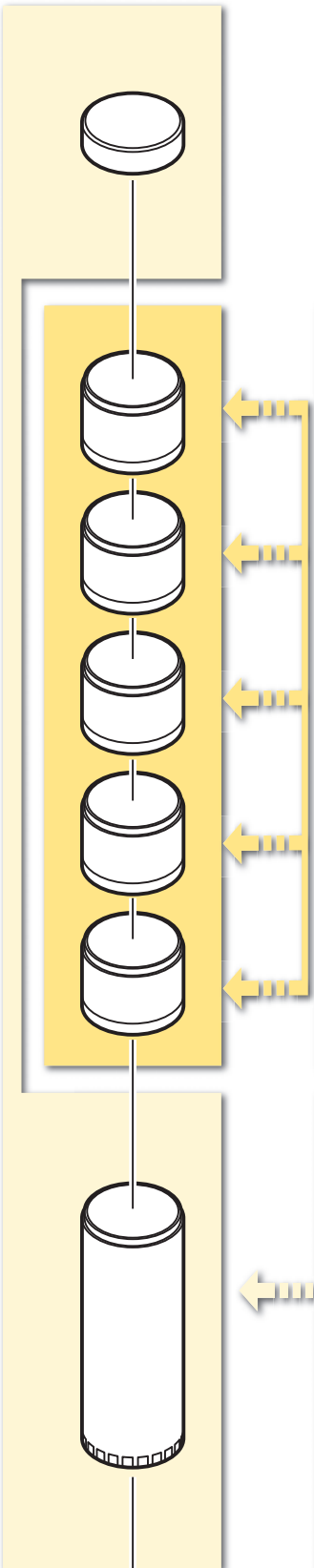LED module is stackable and reconfigurable even after installation
IP 65: Implemented O rings seal out liquids so that the tower can be used in wet conditions.
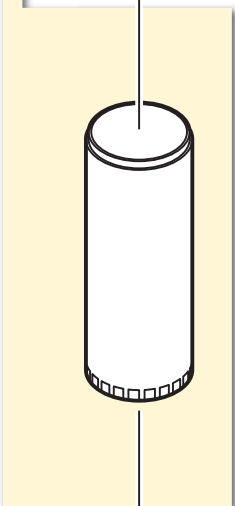
Dimensions

Ø50
15

LED Module

LU5 type

Height (mm)
1 Light: 211
2 Lights: 252
3 Lights: 293
4 Lights: 334
5 Lights: 375

41

Height

113

Mounting Dimension

Front (Buzzer)

Mounting hole

3-Ø4

120°

Wire entry

Ø13

Ø30

12.5

Base Module

Terminal block

42.6

3-M3

Max. panel thickness 10

Name plate
Mounting hole template

(mm)

Wiring diagram

LU5-02FB
24 VDC

No.1	Red	LED unit Red
No.2	Orange	LED unit Yellow
No.3	Green	LED unit Green
No.4	Blue	LED unit Blue
No.5	White	LED unit Clear/White
No.6	Gray	Alarm 1
No.7	Black	Alarm 2
No.8	Yellow	COM
No.9	Gray	Flashing COM
No.10	Black	Power supply for flashing

<Recommended electric wire>
Solid wire: 0.8-1.2 mm dia.
Stranded wire : 0.3-1.25 mm^2 (AWG 22-18)

For continuous
light and buzzer

For flashing

Fuse 1A

Power
supply

LED Units

Model	LU5-E-R	LU5-E-Y	LU5-E-G	LU5-E-B	LU5-E-C
Unit Color	🔴	🟠	🟢	🔵	⚪
Rated Voltage	24 VDC				
Operating Voltage Range	Rated Voltage±10%(21.6~26.4 V)				
Current/Power Consumption	52 mA/1.25 W		42 mA/1.0 W		
Operating Temperature Range	-30°C~+60°C				
Mass	44 g±10%				

🔴 RED	🟠 YELLOW	🟢 GREEN	🔵 BLUE	⚪ CLEAR/WHITE

BASE Units

Model	LU5-02	LU5-02FB	
Color	⚪ ⚪		
Standard Body/Short Body	Standard		
Rated Voltage	24 VDC		
Operating Voltage Range	Rated voltage±10%(21.6~26.4 V)		
Buzzer	–	*Buzzer 1	**Buzzer 2
Current Consumption	–	50±10 mA	24±10 mA
Power Consumption	–	1.2±0.25 W	0.58±0.25 W
Sound Level	–	Max:85±5dB(at 1m)	
Flashing Cycle	–	6±12 flashes per minutes	
Operating Temperature	-30°C~+60°C		
Range	Upright, Indoor only		
Mounting Direction	IP65		
Protection Rating	182 g±10%	200 g±10%	
Mass	PNP/NPN		

Open Collector
* Buzzer 1 : Continuous Sound   **Buzzer 2 : Intermittent Sound
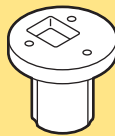
⚪ Ivory White	⚪ Silver Color(U)

Optional Parts

How to order
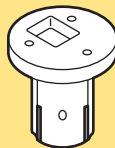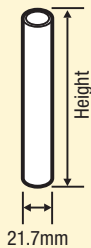
Optional Parts
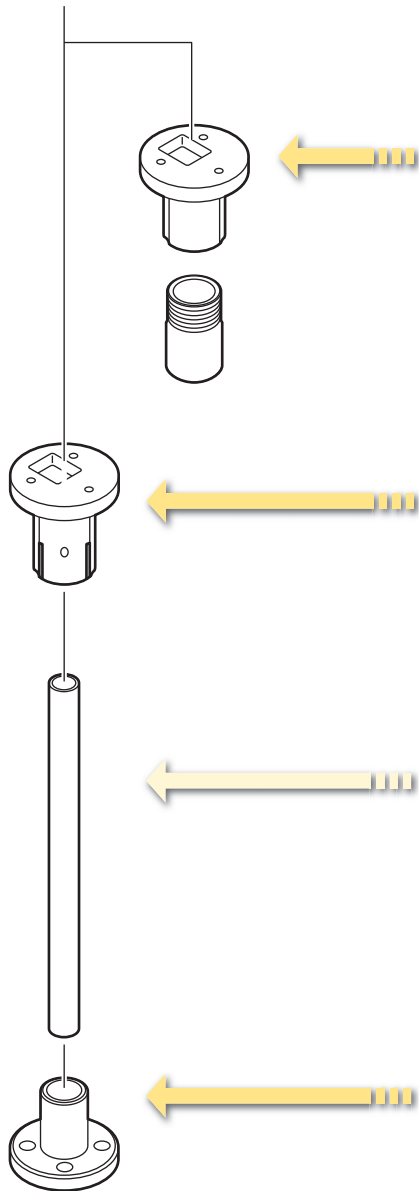
Upper Bracket

SZ-60NPT (for 1/2" NPT Pole)

Upper Bracket

SZ-60-U

Pole

Height

21.7mm

Steel Pole

Model	POLE-800S21	POLE-300S21	POLE-100S21
Height	800mm	300mm	100mm

Aluminum Pole

Model	POLE-800A21	POLE-300A21	POLE-100A21
Height	800mm	300mm	100mm

Mount Bracket

SZ-016A
(For Ø21.7mm Pole)

SZ-70-B
(For Ø21.7mm Aluminium
Pole Only)

Wall Mount Bracket

SZ-020
(For Ø21.7mm Pole)

SZ-017
(For Ø21.7mm Pole)

Specifications

Size	50 mm diameter
Input voltage options	24 VDC
Functions available	Continuous only Continuous, Flashing, Alarms
Mounting options	Direct mount only, includes 3 mounting nuts
Body styles	Component style, wiring terminals provided Interchangeable and stackable after purchase
Body colours	Beige
Tiers	1-5 modules can be stacked
Module colors	Red / Yellow / Green / Blue / Clear
Alarms (FB style only)	Alarm 1: selectable, single-tone, continuous alarm, 85 dB (at 1 m) Alarm 2: selectable, single tone, intermittent (slow beep) alarm, 85 dB (at 1 m)
Ratings	CE UL Listed (US) UL Listed (Canada) RoHS
Protection	IP-65 Type 4 / 4X / 13 (indoor only)
Control options	Dry contact closure such as switches or relay contacts Open-collector transistor (NPN or PNP) for 24 VDC Direct voltage control for 24 VDC, continuous and alarm functions only

LU7

Ordering Information
LED module

Typ	Module Color	Power Consumption	Rated Voltage	Operation Voltage	Operation Temperature Range	Mass	Order Code
Standard	Red	52 mA/ 1.25 W	24 VDC	Rated voltage ±10% (21.6~26.4 V)	-30°C~+60°C	60 g ±10%	LU7-E-R
	Yellow						LU7-E-Y
	Green	42 mA/1.0 W					LU7-E-G
	Blue						LU7-E-B
	Clear/ White						LU7-E-C
Strobe	Red	290 mA	24 VDC	Rated voltage ±10% (21.6~26.4 V)	-30°C~+60°C	70 g	LU7-XE-R
	Yellow						LU7-XE-Y
	Green	140 mA					LU7-XE-G
	Blue	270 mA					LU7-XE-B
	Clear/ White	280 mA					LU7-XE-C

Base module

Typ	Alarm/ Flash	Power Consumption	Rated Voltage	Operation Voltage	Operation Temperature Range	Mass	Open Collector	Order Code
Short Body	Continuous	1.2 W	24 VDC	Rated voltage ± 10% (21.6~26.4 V)	-30°C~+60°C	150 g ±10%	PNP/ NPN	LU7-02S*
Standard Body	Continuous					250 g ±10%		LU7 - 02*
	2 Sounds/ Flashlight					280 g ±10%		LU7 -02FB*

* Ivory white: blank, black: add "K", silver: add "U"

Optional parts

Typ	Material	Order code
Wall Mount Bracket	Aluminum alloy die-cast	SZ-017
	PBT/ ABS resin	SZ-018
		SZ-018U
		SZ-018K
	ABS resin	SZ-020
Upper Bracket	Metal	SZ - 50U
		SZ - 50UU
		SZ - 50KU
		SZ - 50NPT
Mount Bracket	Aluminum alloy die-cast	SZ-016A
		SZ-70B

Typ	Height	Material	Order code
Pole	100 mm	Aluminium	Pole-100A21
		Steel	Pole-100S21
	300 mm	Aluminium	Pole-300A21
		Steel	Pole-300S21
	800 mm	Aluminium	Pole-800A21
		Steel	Pole-800S21

Voice and Sound Module
(unique sound module in all directions)

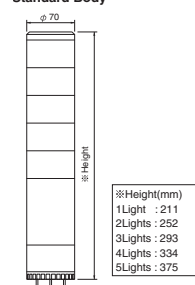| Rated Voltage	Power Consumption	Mass	Order code
24 VDC	3.5 W	170 g	LU7-V1

Features

Easy alignment:
Color-coordinated Terminal Block:
Corresponds to the lens colors for quick wiring verification in the base unit.
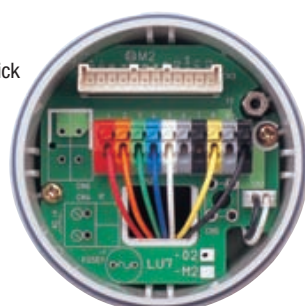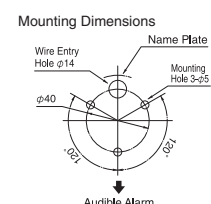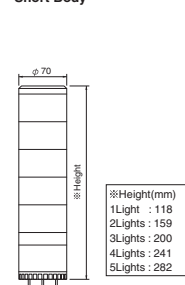

LU7-02FB

LU7 Standard Body
φ 70
※Height

※Height(mm)
1Light : 211
2Lights : 252
3Lights : 293
4Lights : 334
5Lights : 375

LU7-02S Short Body
φ 70
※Height

※Height(mm)
1Light : 118
2Lights : 159
3Lights : 200
4Lights : 241
5Lights : 282

Mounting Dimensions
Wire Entry Hole φ14
Name Plate
Mounting Hole 3-φ5
φ40
120°
120°
Audible Alarm

How to order

Voice and Sound Module

Model	LU7-V1
Type	Voice Synthesizer
Rated Voltage	24 VDC
Power Consumption	3.5 W
Weight	0.17 kg

LED Units

Model	LU7-E-R	LU7-E-Y	LU7-E-G	LU7-E-B	LU7-E-C
Unit Color	●	●	●	●	○
Rated Voltage	24 VDC				
Operating Voltage Range	Rated Voltage±10%(21.6~26.4 V)				
Current/Power Consumption	52 mA/1.25 W		42 mA/1.0 W		
Operating Temperature Range	-30°C~+60°C				
Mass	60 g±10%				

LED Strobe Module

Model	LU7-XE-R	LU7-XE-Y	LU7-XE-G	LU7-XE-B	LU7-XE-C
Unit Color	●	●	●	●	○
Rated Voltage	24 VDC				
Power Consumption	290 mA	290 mA	140 mA	270 mA	280 mA
Mass	0.07 kg				

● RED   ● YELLOW   ● GREEN   ● BLUE   ○ CLEAR/WHITE

BASE Units

Model	LU7-02S	LU7-02	LU7-02FB
Color		○ ◐ ●	
Standard Body/Short Body	Short	Standard	
Rated Voltage	24 VDC		
Operating Voltage Range	Rated voltage±10%(21.6~26.4 V)		
Buzzer	–	*Buzzer 1	**Buzzer 2
Current Consumption	–	50±10 mA	24±10 mA
Power Consumption	–	1.2±0.25 W	0.58±0.25 W
Sound Level	–	Max:90±5dB(at 1m)	
		Min:70dB or Less(at 1m)	
Flashing Cycle	–	60±12 flashes per minute	
Operating Temperature Range	-30°C~+60°C		
Mounting Direction	Upright, Indoor only		
Protection Rating Mass	IP65		
	150 g±10%	250 g±10%	280 g±10%
Open Collector	PNP/NPN		

Standard Body

Short Body

* Buzzer 1 : Continuous Sound   **Buzzer 2 : Intermittent Sound

○ Ivory White   ◐ Silver Color(U)   ● Black(K)

Optional Parts

Optional Parts
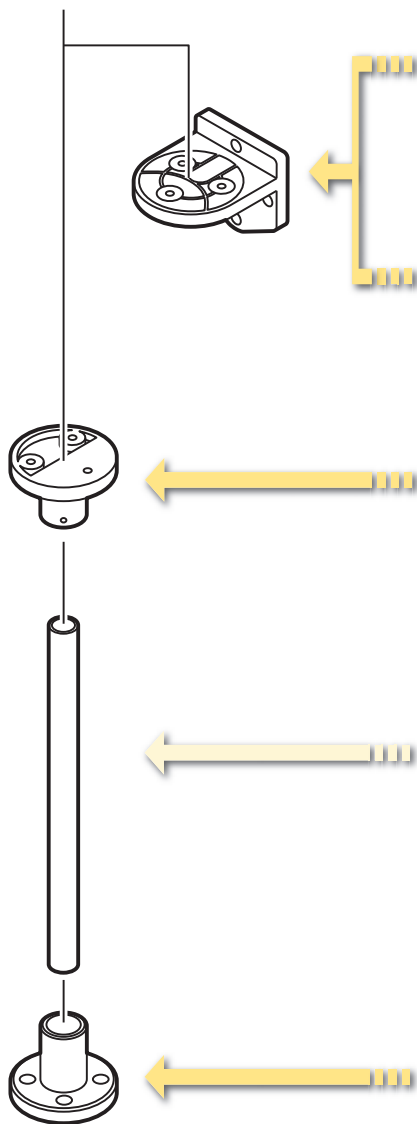
Wall Mount Bracket
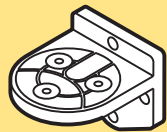
Model	SZ-18	SZ-18U	SZ-18K
Color	Ivory White	Silver Color (U)	Black (K)

Upper Bracket

SZ-50NPT (For 1/2" NPT Pole)

Upper Bracket

Model	SZ-50-U	SZ-50U-U	SZ-50K-U
Color	Ivory White	Silver Color (U)	Black (K)

Pole

Height

21mm

Steel Pole

Model	POLE-800S21	POLE-300S21	POLE-100S21
Height	800mm	300mm	100mm

Aluminum Pole

Model	POLE-800A21	POLE-300A21	POLE-100A21
Height	800mm	300mm	100mm

Mount Bracket

SZ-016A
(For Ø21.7mm Pole)

SZ-70-B
(For Ø21.7mm Aluminium Pole Only)

Wall Mount Bracket

SZ-020
(For Ø21.7mm Pole)
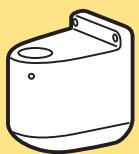
SZ-017
(For Ø21.7mm Pole)

Specifications

Size	70 mm diameter
Input voltage options	24 VDC
Functions available	Continuous only Continuous, Flashing, Alarms
Mounting options	Direct mount only: includes three mounting nuts
Body style	Component Style, wiring terminals provided Interchangeable and stackable after purchase
Body color	Beige Black Silver
Tiers	1-5 modules can be stacked
Module colors	Red / Yellow / Green / Blue / Clear Standard LED Modules Strobe-flash LED Modules (24 V bases only)
Alarms (FB style only)	Alarm 1: selectable, single-tone, continuous alarm, 90 dB (at 1 m) Alarm 2: selectable, single tone, intermittent (slow beep) alarm, 90 dB (at 1 m)
Ratings	CE UL Listed (US) UL Listed (Canada) RoHS
Protections	IP-65 Type 4/4X/13 (indoor only)
Control options	Dry contact closure such as switches or relay contacts Open-collector transistor (NPN or PNP) for 24 VDC Direct voltage control for 24 VDC, continuous and alarm functions only

Nomenclatur/ How to order:

MP-502-RYGBC-B0438
1　2　3　　4　　　5

1. MP:　Standard Body
   MPS:　Short Body
2. Stack
   1~5
3. Rated voltage
   02:　24 V AC/DC

4. Color of LED
   R:　Red
   Y:　Yellow
   G:　Green
   B:　Blue
   C:　Clear/White
   Top to bottom

5. Color of lense
   Blank:　Colored lens
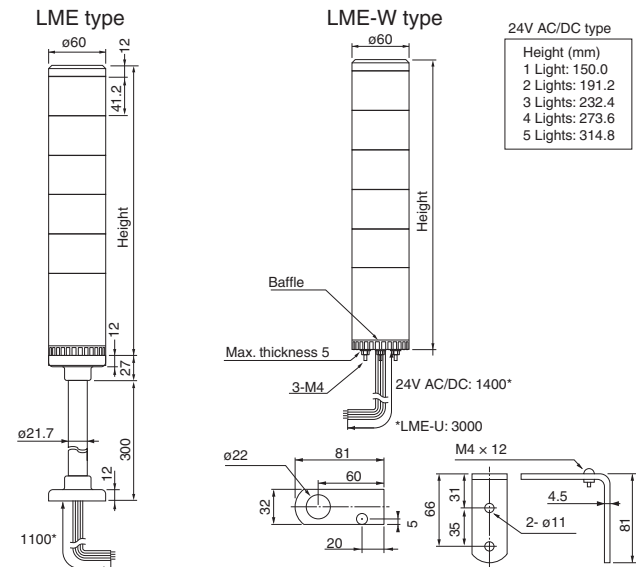   B0438: Clear lens

Ordering information

Num-ber of stacks	Rated voltage	Power Consump-tion	Open collector	Order code
1	24 VAC/VDC	0.7 W	NPN/PNP	MP/MPS-102
2		1.4 W		MP/MPS-202
3		2.0 W		MP/MPS-302
4		2.6 W		MP/MPS-402
5		3.2 W		MP/MPS-502

Features

Patented reflection system increases visibility.
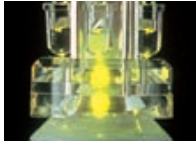
High intensity LED

Good visibility from any direction

Interchangeable LED modules

· Changeable color sequence: Easy to add/remove up to 5 colored modules even after installation.
· Note: LED modules of the same color will light up simultaneously.

The wiring remains the same.

Each color of LED module corresponds to the lead wire color.

Dimensions

MP type
Height (mm)
1 Light: 265
2 Lights: 300
3 Lights: 335
4 Lights: 370
5 Lights: 405

MPS type
Height (mm)
1 Light: 90
2 Lights: 125
3 Lights: 160
4 Lights: 195
5 Lights: 230

Washer
ø30
ø22.5
Max. panel thickness 5
Nut (M22 x P1.5mm)
Mounting hole
ø22
27
31

MP-220 (MPS-45)

Lead wire length (from wire exit)
MP: 1,000mm
MPS: 1,180mm

Optional mounting bracket (SZ-013)
Bolt (M8)
Nut (M8)
(mm

Wiring diagram

For continuous light

LED R Red
LED Y Orange
LED G Green
LED B Blue
LED C White
Yellow

Fuse 1A
Power supply

※ MP/MPS has no polarity.

Specifications

Size	30 mm diameter
Input voltage options	24 VAC/VDC
Functions available	Continuous only
Mounting options	Direct mount only: includes M22 mounting nut and sealing gasket
Body style	pre-assembled, pre-wired Interchangeable and stackable after purchase
Body color	Silver
Tiers	1-5 modules can be stacked
Module colors	Red / Yellow / Green / Blue / Clear-White (for sunlight applications: clear-lense modules in all colors available)
Ratings	CE UL Component Recognition (US) UL Component Recognition (Canada) RoHS
Protection	IP-65
Control options	Dry contact closure such as switches or relay contacts Open-collector transistor (NPN or PNP) for 24 VDC Direct voltage control

LME

Nomenclature/How to order

LME-502UFBW-C-RYGBC-Z
1 2 3 4 5 6   7

1. Stack
   1 ~ 5

2. Rated Voltage
   02:    24V AC/DC

3. Body Color
   Blank: Ivory white
   N: Black color
   U: Silver color

4. Type
   Blank: Continuous light
   FB: Continuous light or flashing light
          with audible alarm

5. Mount
   Blank: Pole mount
   K: Pole Mount (with SZ-020)
   W: Direct mount

6. Cable
   C: Special pre-wired
          cable connection of 3 m

7. Color of LED
   R: Red
   Y: Yellow
   G: Green
   B: Blue
   C: Clear/White

8. Color of Lens
   Blank: Colored lens
   Z: Clear lens

Ordering Information

Number of Stacks	Mount	Model	Rated Voltage	Power Consumption	Open Collector	Order code	
						Continuos light	Continuous light with audible alarm
1	Pole Mount	LME-102	24 VAC/DC	2.2 W	NPN/ PNP	LME-102-C	LME-102-FB-C
	Direct Mount		24 VAC/DC			LME-102W-C	LME-102-FBW-C
2	Pole Mount	LME-202	24 VAC/DC	3.4 W		LME-202-C	LME-202-FB-C
	Direct Mount		24 VAC/DC			LME-202W-C	LME-202-FBW-C
3	Pole Mount	LME-302	24 VAC/DC	3.8 W		LME-302-C	LME-302-FB-C
	Direct Mount		24 VAC/DC			LME-302W-C	LME-302-FBW-C
4	Pole Mount	LME-402	24 VAC/DC	4.2 W		LME-402-C	LME-402-FB-C
	Direct Mount		24 VAC/DC			LME-402W-C	LME-402-FBW-C
5	Pole Mount	LME-502	24 VAC/DC	4.6 W		LME-502-C	LME-502-FB-C
	Direct Mount		24 VAC/DC			LME-502W-C	LME-502-FBW-C

Optional parts

Typ	Material	Order code
Wall Mount Bracket	Aluminum alloy die-cast	SZ-017
	ABS resin	SZ-020
	PBT/ ABS resin	SZ-028
Mount Bracket	Aluminum alloy die-cast	SZ-016A
	Aluminum alloy die-cast	SZ-010

Typ	Height	Material	Order code
Pole	100 mm	Aluminium	Pole-100A21
		Steel	Pole-100S21
	300 mm	Aluminium	Pole-300A21
		Steel	Pole-300S21
	800 mm	Aluminium	Pole-800A21
		Steel	Pole-800S21

Dimensions

LME type

ø60
12
41.2
Height
12
27
ø21.7
300
12
1100*

LME-W type

ø60
Height
Baffle
Max. thickness 5
3-M4
24V AC/DC: 1400*
*LME-U: 3000

24V AC/DC type

Height (mm)
1 Light: 150.0
2 Lights: 191.2
3 Lights: 232.4
4 Lights: 273.6
5 Lights: 314.8

ø22
32
81
60
20
5
M4 × 12
66
31
35
4.5
81
2- ø11

Wiring diagram

LME(–W)/LME(–W)-S·Q/LMS [Continuous type]

■ 24V AC/DC

LED, R Red
LED, Y Orange
LED, G Green
LED, B Blue
LED, C White
For continuous light
Yellow
Fuse
1A
⊖ ※
Power
supply
⊕
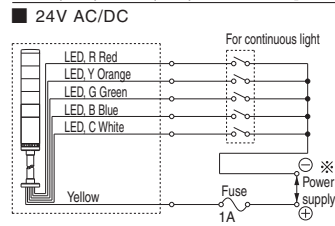
Features

Interchangeable LED modules

· Changeable color sequence: Easy to add / remove up to 5 colored modules even after installation.
· Note: LED modules of the same color within a signal tower will light up simultaneously.

The wiring remains the same

Each color of LED module corresponds to the lead wire color.

Easy to add and remove

If the number of LED module is changed, center shaft must be purchased.

Dual reflection system

PATLITE's original dual reflection system with its exclusive hybrid prism-cut lens and 5 color LED modules create bright, distinctive, even illumination.

To bring more attention to certain conditions, two, User-selectable, Alarms integrated in the Base module with adjustable volume up to 85 dB at 1m are available.

Specifications

Size	60 mm diameter
Input voltage options	24 VAC/VDC
Functions available	Continuous only Continuous, Flashing, Alarms
Mounting options	Pole mount: with 300 mm aluminum pole, plastic circular bracket Direct mount: includes 3 mounting nuts
Body style	Pre-assembled, pre-wired Interchangeable and stackable after purchase
Body color	Beige (optional: Black or Silver)
Tiers	1-5 modules can be stacked
Module colors	Red / Yellow / Green / Blue / Clear/White (for sunlight applications: clear-lense modules in all colors available)
Alarms (FB style only)	Alarm 1: selectable, single-tone, intermittent (fast beep) alarm, 85 dB (at 1 m) Alarm 2: selectable, single tone, intermittent (slow beep) alarm, 85 dB (at 1 m)
Ratings	CE UL Component Recognition (US) UL Component Recognition (Canada) RoHS
Protection	IP-65 (LME, LME-W) IP-54 (LME-FB, LME-FBW) Type 4/4X/13 (indoor, direct-mount only)
Control options	Dry contact closure such as switches or relay contacts Open-collector transistor (NPN or PNP) for 24 VDC Direct voltage control for 24 VDC, continuous and alarm functions only

Cat. No. F09E-EN-01   **In the interest of product improvement, specifications are subject to change without notice.**