PATLITE ®

New Frontiers for Safety, Security and Comfort.

Innovative LED Modular Style
Signal Tower

LU5/LU7 series

LU5 series
50mm dia.

LU7 series
70mm dia.

www.patlite.co.jp/int/

## PATLITE Corporation

PATLITE's 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.

## Ultra Bright LEDs combined with an Innovative Prism Lens Design

Allows the light emitted from the signal tower to be seen from greater distances. This also allows for use of a smaller diameter light, reducing the cost of the light tower.
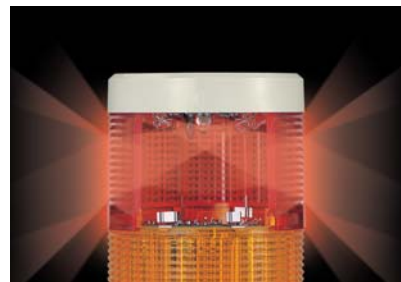
Ultra bright LED

Color-coordinated & Spring-loaded Terminal Block

Makes wiring easy and more reliable compared to screw-type connections. Each color corresponds to the color of the LED module to be used.
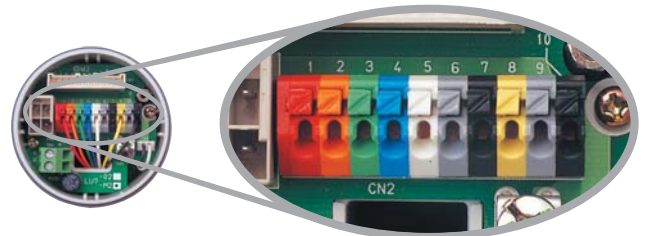
Wiring Terminals

Two, User-selectable, Alarms Integrated in the Base Module

Allows sound to enhance the critical nature of a visual signal, bringing more attention to certain conditions. Also, since the modules are built into the base, up to 5 LED modules can be used on the light tower.

2 Tones to select

ADJUSTABLE VOLUME

Delivers Sounds up to 90 dB at 1 m.

Alarm can be easily heard over ambient noise.

cULus   CE   **Type 4, 4X, 13**
(LU7 Only)

IP65
Environment Protection

RoHS
(LU7 Only)

Modular design

Makes it easy to configure and assemble a light tower and modules can be put away for when shipping the machine reducing the cost of shipping and the shipping crate.

Modular Construction

O-rings

Seal out liquids so that the tower achieves an IP-65 rating allowing the tower to be used in wet conditions.

IP65 Protection

NEW

Short Body

LU7-02S	LU7-02SU	LU7-02SK
Ivory White	Silver Color	Black

Standard Body

LU7-02U/-M2U	LU7-02K/-M2K
Silver Color	Black

Wall Mount Bracket

SZ-018	SZ-018U	SZ-018K
Ivory White	Silver Color	Black

Magnetic Bracket
(With M16 Cable Grand)

SZ-MB5070 To be released
Fit to the short and standard Bodies

LU5 series

50mm diameter

Innovative LED Modular Style Signal Tower

■LED Units

Model	LU5-E-R	LU5-E-Y	LU5-E-G	LU5-E-B	LU5-E-C
Unit color	LED unit RED	LED unit AMBER	LED unit GREEN	LED unit BLUE	LED unit CLEAR/WHITE
Rated voltage	24V DC				
Operating voltage range	Rated voltage ±10% (21.6~ 26.4V)				
Current/Power consumption	52mA/1.25W		42mA/1.0W		
Operating temperature range	−30℃～＋60℃				
Mass	44g±10%				

※Operates with base units, LU5-02 and LU5-02FB, listed below.

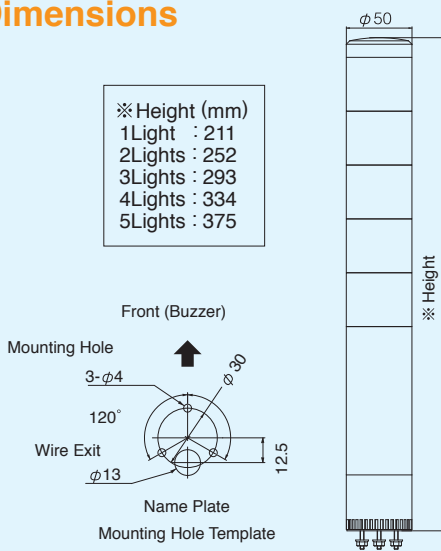## ■Base Units

Model	LU5-02	LU5-02FB		Unit Color Variation
Rated voltage	24V DC			Ivory White Silver Color
Operating voltage range	Rated voltage ±10% (21.6～26.4V)			NEW
Buzzer	—	*Buzzer 1	**Buzzer 2	
Current consumption	—	50±10mA	24±10mA	
Power consumption	—	1.2±0.25W	0.58±0.25W	
Sound level	—	85±5dB (at 1m)		
Flashing cycle	—	60±12 flashes per minute		
Operating temperature range	−30℃～＋60℃			
Mounting direction	Upright, indoor only			LU5-02 LU5-02U
Protection rating	IP65			LU5-02FB LU5-02UFB
Mass	182g±10%	200g±10%		
Open Collector	PNP/NPN			

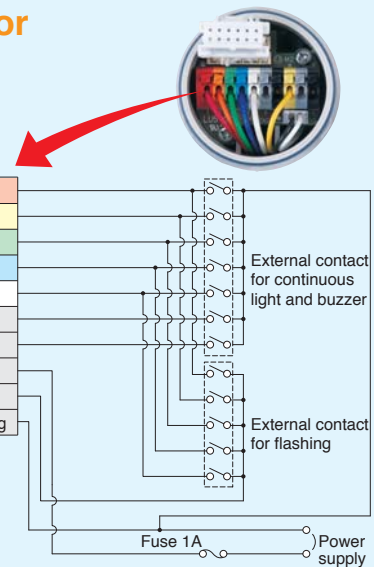※*Buzzer 1:Continuous sound   **Buzzer 2:Intermittent sound

Dimensions

φ50

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

※Height

Front (Buzzer)

Mounting Hole

3-φ4

φ30

120°

Wire Exit

φ13

12.5

Name Plate

Mounting Hole Template

Wiring example for Base unit

LU5-02FB
24V DC

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

External contact for continuous light and buzzer

External contact for flashing

<Recommended electric wire>
Solid wire :
   φ0.8 - φ1.2mm
Stranded wire :
   0.3-1.25mm² (AWG 22-18)

Fuse 1A   )Power supply

【External contact capacity】

Voltage		24V DC
LED unit	Current consumption	Red・Amber : 52mA Green・Blue・Clear/White : 42mA
〔1-Light〕	Contact capacity	Is≧100mA, Vs≧35V AC
Buzzer	Current consumption	50mA
	Inrush current	100mA
	Contact capacity	Is≧100mA, Vs≧35V AC
Power supply	Current consumption	360mA
	Contact capacity	Is≧500mA Vs≧35V AC

※Is : Current capacity   Vs : Withstand voltage

【External contact fuse】

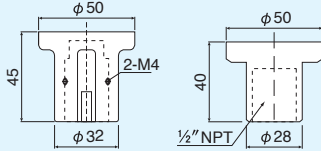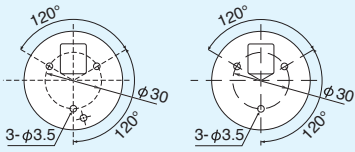| Voltage	Amperage rating of fuse
All model	250V 1A

※Use a fuse conforming to the rated current of the machine which you install product.
(Example: UL class J type fuse)

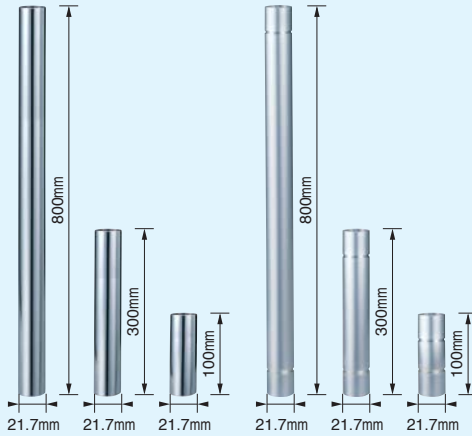## ■Optional Parts

Upper Bracket

SZ-60-U
（For φ21.7mm Pole）

SZ-60NPT
（For ½″ NPT Pole）

120°
120°
φ30
3-φ3.5
120°

120°
120°
φ30
3-φ3.5
120°

φ50
45
2-M4
φ32

φ50
40
½″NPT
φ28

Pole

Steel Pole　　**Aluminum Pole**

800mm
300mm
100mm
21.7mm　21.7mm　21.7mm

800mm
300mm
100mm
21.7mm　21.7mm　21.7mm

800mm : **POLE-800S21**
300mm : **POLE-300S21**
100mm : **POLE-100S21**

800mm : **POLE-800A21**
300mm : **POLE-300A21**
100mm : **POLE-100A21**

Mount Bracket

SZ-016A
（For φ21.7mm Pole）

SZ-70-B
（For φ21.7mm Aluminum Pole Only）

Mounting Hole
4-φ5
φ54
45
φ68

φ40
120°　120°
40
φ60
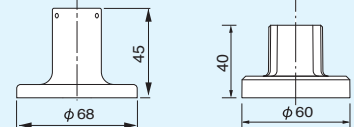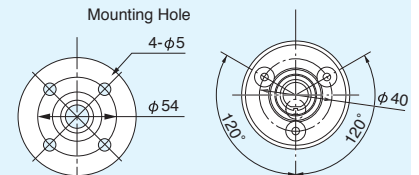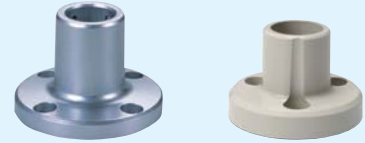
Wall Mount Bracket

SZ-020
（For φ21.7mm Pole）

SZ-017
（For φ21.7mm Pole）

Mounting Dimensions
□35
4-φ5
φ30
72
57
82
68
47.5
55

Max.Mounting Hole Size
10
40
59　55
Mounting Hole
（φ20）
45°
2-M4
60
46
80　93
43
60
10
3-φ5.5
80
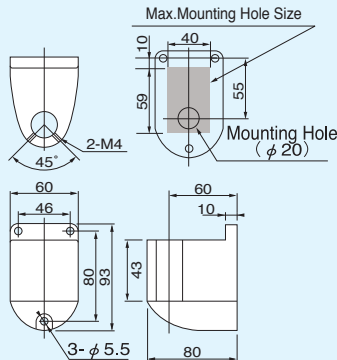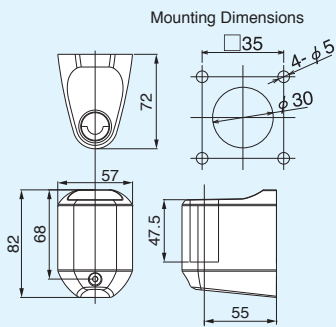
Model	Material
SZ-60-U	ADC12
SZ-60NPT	Aluminum
POLE-□□□S21	Steel
POLE-□□□A21	Aluminum
SZ-016A	ADC12
SZ-70-B	ABS resin
SZ-020	ABS resin
SZ-017	ADC12

※ADC12···Aluminum alloy die-cast

Magnetic Bracket

SZ-MB5070　To be released　NEW
（With M16 Cable Grand）

Cable gland
M16
φ15
φ30
φ4.20
14
120°
φ40
φ63
14
Magnet Base
43
φ70
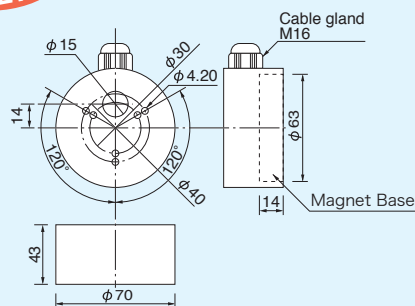
LU7 series
70mm diameter

Innovative LED Modular Style Signal Tower

■LED Units

Model	LU7-E-R	LU7-E-Y	LU7-E-G	LU7-E-B	LU7-E-C
Unit color	LED unit RED	LED unit AMBER	LED unit GREEN	LED unit BLUE	LED unit CLEAR/WHITE
Rated voltage	24V DC				
Operating voltage range	Rated voltage ±10% (21.6～26.4V)				
Current/Power consumption	52mA/1.25W		42mA/1.0W		
Operating temperature range	−30℃～＋60℃				
Mass	60g±10%				

※ Operates with all voltage base units LU7-02, LU7-02FB, LU7-M2 and LU7-M2FB listed below.

■Base Units

Model	LU7-02S	LU7-02	LU7-02FB	LU7-M2	LU7-M2FB
Rated voltage	24V DC			90～250V AC (50/60Hz)	
Operating voltage range	Rated voltage ±10% (21.6～26.4V)			90～250V AC (50/60Hz)	
Buzzer	—		*Buzzer 1 | **Buzzer 2	—	*Buzzer 1 | **Buzzer 2
Current consumption	—		50±10mA | 24±10mA	—	50±10mA | 24±10mA
Power consumption	—		1.2±0.25W | 0.58±0.25W	—	1.8±0.25W | 1.3±0.25W
Sound level	—		Max: 90±5dB (at 1m)	—	Max: 90±5dB (at 1m)
			Min: 70dB or Less (at 1m)		Min: 70dB or less (at 1m)
Flashing cycle	—		60±12 flashes per minute	—	60±12 flashes per minute
Operating temperature range	−30℃～＋60℃			-25℃～+55℃	
Mounting direction	Upright, indoor only			Upright, indoor only	
Protection rating	IP65			IP65	
Mass	150g±10%	250g±10%	280g±10%	310g±10%	340g±10%
Open Collector	PNP/NPN			NPN	

※ *Buzzer 1:Continuous sound　　**Buzzer 2:Intermittent sound

Unit Color Variation

Short Body

LU7-02S ・ LU7-02SU ・ LU7-02SK

Standard Body

LU7-02/-M2 ・ LU7-02U/-M2U ・ LU7-02K/-M2K

| Ivory White | Silver Color | Black |

Wiring example for Base unit

LU7-02FB 24V DC

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

External contact for continuous light and buzzer

External contact for flashing

<Recommended electric wire>
Solid wire:φ0.8 -φ1.2mm
Stranded wire:0.3-1.25mm² (AWG 22-18)

Fuse 1A) Power supply

LU7-02FB

LU7-M2FB 90-250V AC

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

External contact for continuous light and buzzer

External contact for flashing

<Recommended electric wire>
Solid wire:φ0.8 -φ1.2mm
Stranded wire:0.3-1.25mm² (AWG 22-18)

| P1 | AC in (L) |
| P2 | AC in (N) |

Fuse 1A) Power supply

<Recommended electric wire>
Solid wire:φ0.6 -φ1.7mm
Stranded wire:0.3-2.5mm² (AWG 22-14)

LU7-M2FB

Dimensions

LU7-02S Short Body

φ70

LU7 Standard Body

φ70
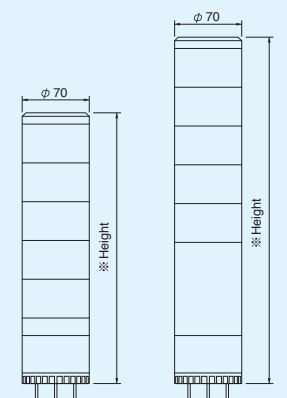
※Height

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

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

Mounting Dimensions

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

【External contact capacity】

Voltage specs		24V DC	90～250V AC
LED unit 〔1-Light〕	Current consumption	Red・Amber : 52mA	Green・Blue・Clear/White : 42mA
	Contact capacity	Is≧100mA, Vs≧35V AC	
Buzzer	Current consumption	50mA	
	Inrush current	100mA	
	Contact capacity	Is≧100mA, Vs≧35V AC	
Power supply	Current consumption	360mA	40mA (250V)～110mA (90V)
	Contact capacity	Is≧500mA Vs≧35V AC	9A (90V)～25A (250V) Vs≧250V AC

※Is : Current capacity　　Vs : Withstand voltage

【External contact fuse】

Voltage	Amperage rating of fuse
All model	250V 1A

※ Use a fuse conforming to the rated current of the machine which you install product. (Example: UL class J type fuse)

RoHS **CE** **c(UL)us** | *IP65 Environment Protection* | *Type 4,4X,13*

■ Optional Parts

Upper Bracket

SZ-50NPT
（For ½″ NPT Pole）

SZ-50-U
Ivory White

SZ-50U-U
Silver Color

SZ-50K-U
Black

（For φ21.7mm Pole）

120°
3-φ4.5
φ120
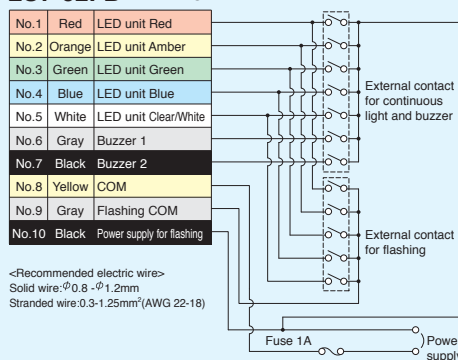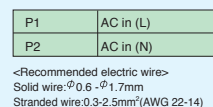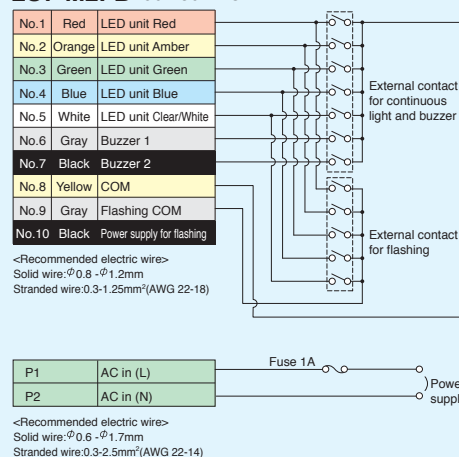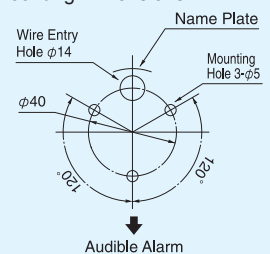φ40
φ70
35
25
2-M4
φ28

120°
120°
φ40
3-φ4.5
φ70
40
½″NPT
φ27

Pole

Steel Pole

800mm
300mm
100mm
21.7mm | 21.7mm | 21.7mm

800mm : **POLE-800S21**
300mm : **POLE-300S21**
100mm : **POLE-100S21**

Aluminum Pole

800mm
300mm
100mm
21.7mm | 21.7mm | 21.7mm

800mm : **POLE-800A21**
300mm : **POLE-300A21**
100mm : **POLE-100A21**

Adaptor

SZ-904

φ27.2
43
18
M22×P1.5
3/4″ NPT

Wall Mount Bracket

SZ-018
Ivory White

SZ-018U
Silver Color

SZ-018K
Black

70
70
5
12
φ54
45
87
19.6
120°
φ40
120°

SZ-020
（For φ21.7mm Pole）

Mounting Dimensions

□35
4-φ5
30
72
57
82
68
47.5
55

SZ-017
（For φ21.7mm Pole）

Max.Mounting Hole Size
40
10
59
55
45°
2-M4
Mounting Hole
（φ20）
60
46
80
93
43
3-φ5.5
60
10
80

Mount Bracket

SZ-016A
（For φ21.7mm Pole）

SZ-70-B
（For φ21.7mm
Aluminum Pole Only）

Mounting Hole
4-φ5
φ54
45
φ68

120°
120°
φ40
40
φ60

Pre-assembled

SZ-50T

φ70
323
Mounting Hole
4-5.2×7
φ73
Pole Bottom
Line
65
12
φ100±0.5

SZ-50L

φ70
313
282
Mounting Hole
4-5.2×7

R20
81
60
32
5
φ22
20

Ground Screw
M4×12
66
31
4.5
81
Hexagon Nut
Mounting Hole
2-φ11
M22

Model	Material			
	Upper Bracket	Pole	L Bracket	Bushing	Mounting Bracket
SZ-50T	ADC12	Steel	—	—	ADC12
SZ-50L	ADC12	Steel	SPHC	EPT	—

Model	Material
SZ-50-U	ADC12
SZ-50U-U	ADC12
SZ-50K-U	ADC12
SZ-50-NPT	Aluminum
POLE-□□□S21	Steel
POLE-□□□A21	Aluminum
SZ-016A	ADC12
SZ-904	Aluminum
SZ-70-B	ABS resin
SZ-017	ADC12
SZ-020	ABS resin

※ ADC12···Aluminum alloy die-cast   SPHC···Hot rolled mild (sheet) steel   EPT···Ethylene propylen rubber

Magnetic Bracket

SZ-MB5070 **To be released** **NEW**
（With M16 Cable Grand）

Cable gland
M16
φ15
φ30
φ4.20
14
φ63
43
φ40
φ70
14
Magnet Base

LU7 series
70mm diameter

Innovative LED Modular Style Signal Tower

LEAD Free CE c(UL)us

IP65 Environment Protection

■LED Strobe Module

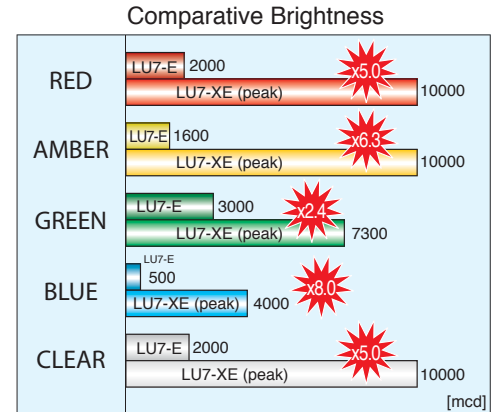## Stackable LED strobe module saves energy and requires low maintenance.

· LED strobe module for LU7 series tower.[1]
· Double-flash for a visually stunning display.[2]
· Super bright LEDs provide enhanced visibility and longer service life than conventional xenon strobe.
· LED module is stackable and reconfigurable even after installation.
· Colors available in Red, Yellow, Green, Blue and Clear.

[1] For use with the LU7-02 and LU7-02FB bases only.
[2] The Strobe Module's "double-flash" pattern is activated using the Continuous Common Terminal of the LU7-02 or LU7-02FB base.

ø70

48.9 (mm)
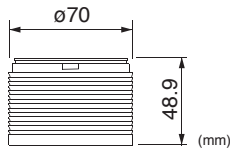
Color	Model	Rated Voltage	Power Consumption	Mass
Red	LU7-XE-R	DC 24V	290mA	0.07kg
Amber	LU7-XE-Y	DC 24V	290mA	0.07kg
Green	LU7-XE-G	DC 24V	140mA	0.07kg
Blue	LU7-XE-B	DC 24V	270mA	0.07kg
Clear	LU7-XE-C	DC 24V	280mA	0.07kg

Comparative Brightness

RED	LU7-E 2000	x5.0	LU7-XE (peak) 10000
AMBER	LU7-E 1600	x6.3	LU7-XE (peak) 10000
GREEN	LU7-E 3000	x2.4	LU7-XE (peak) 7300
BLUE	LU7-E 500	x8.0	LU7-XE (peak) 4000
CLEAR	LU7-E 2000	x5.0	LU7-XE (peak) 10000

[mcd]

MP3 LEAD Free CE c(UL)us

IP65 Environment Protection
(Indoor only)

■Voice and Sound Module

Unique sound module in all directions

· Volume adjustable from 0dB to large output level of 80dB at 1m (alarm type).
· High quality MP3 supported voice and sound module replays up to 4 alarms or messages with 32 seconds of total program time.
· Playback sound selected by the position of internal jumper pin.
· CE / UL compliant.

ø70

100.5 (mm)
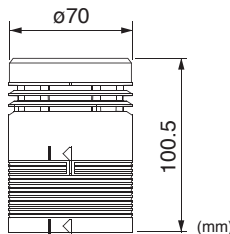
Head cover is supplied with the base unit.

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

LU7-V1

Stackable audible alarm
· Available for all LU7 base units.
· Easily mounted at the top of the light stack.

Selectable playback sound
· The jumper position determines the sound

ISO14001/ISO9001 Certified

LLOYD'S REGISTER QUALITY ASSURANCE · ISO 14001

UKAS ENVIRONMENTAL MANAGEMENT
001

Headquaters/Sanda Plant/Techno Center

⚠ CAUTION

To ensure correct use of these products, read the Instruction Manual prior to use. Failure to follow all safeguards can result in fire, electric shock, or other accidents. Specifications are subject to change without notice.

http://www.patlite.co.jp/int/   E-mail: overseas@patlite.co.jp

PATLITE ECO PROJECT

For the benefit of mankind and the earth, Patlite is committed to developing environmentally friendly products.

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