



S12E & S24E SERIES

Steel Housing
12V up to 400W & 24V-400W Capacities
Lead-Calcium battery

shown with ELF645 heads

FEATURES

Housing

- 20 gauge steel housing with removable front access panel
- Corrosion-resistant baked enamel gray finish standard, mist white and black optional
- Provision for mounting up to 3 lighting heads
- Various choices of lighting head styles and lamp types

Mounting

- Wall Mount
- 1/2" conduit knock-outs, rear keyhole slots and universal knock-outs to mount to any standard 4" junction box

Electronics

- Automatic, temperature compensated, pulse-type charger
- High capacity, automatic, dust-tight instantaneous transfer relay
- Low voltage disconnect prevents over discharge of battery
- Automatic brownout protection is provided
- Battery lock-out prevents battery discharge during installation
- Fused output circuit
- Input: 120/277 VAC, 60Hz 0.3/0.15A

Improved Diagnostics option

- Units equipped with Improved Diagnostics shall self-test, by simulating a power failure, in accordance with NFPA101, Life Safety Code one minute monthly, 30 minutes every six months and 90 minutes annually. For complete information refer to page 8.

NEXUS® option

- Units equipped with NEXUS® self-testing monitoring system circuitry shall self-test, in accordance with NFPA101 Life Safety Code for a minimum of 30 seconds monthly, 30 minutes every six months and 90 minutes annually as well as keep a history of all testing logs, plus feature real-time diagnoses, and provide the exact fixture location while notifying service personnel of the status of the fixture via email. For complete information refer to page 4-5.

Controls

- Red charger monitor LED indicates charging of the battery
- Amber AC-ON LED indicates AC power is on
- Momentary test switch allows for quick operational check of entire system

Choice of Sealed Maintenance-Free Battery

- 12V or 24V Lead-Calcium battery

Approvals

- UL 924 Standard

Warranty (subject to proper installation and maintenance)

- Unit has a three year full warranty (excluding lamps and fuses)¹
- Lead-Calcium battery has a three year full, plus three year pro-rata warranty

¹ For LED lamps warranty, refer to page 168 paragraph 3.2

ACCESSORIES (Order as a separate item)

Wire Guard (S12E4)	WG3-L
Wire Guard (S12E5/S12E6/S24E4)	WG4-L
Mounting Platform (S12E4)	MP-A
Mounting Platform (S12E5/S12E6/S24E4)	MD-12
Mounting Bracket (S12E4/S24E4)	MB-A

SPECIFICATIONS

Supply and install **Lightalarms® S12E, S24E** Series.

The emergency lighting unit shall be a self-contained fixture including a sealed maintenance-free Lead-Calcium battery of 12V or 24V of wattage as specified on the unit rating chart. The unit shall supply the rated wattage load for a minimum of 90 minutes to 87-1/2% of rated battery voltage. The unit shall be rated 120/277VAC, 60Hz and be UL924 listed.

The unit charger shall utilize an integrated circuit which samples the battery in relation to temperature, state of charge and input voltage fluctuations. The charger shall be current limited, temperature compensated, short-circuit protected and reverse polarity protected. The unit shall be furnished with an electronic lockout circuit which will connect the battery when the AC circuit is activated, and an electronic brownout circuit which will activate the unit when utility power dips below 80-85% of nominal voltage. A low voltage battery protection circuit shall be provided and will disconnect the load and circuitry from the battery when it reaches 87-1/2% of its nominal voltage. The unit shall be capable of full recharge in compliance with UL924 specifications. The unit shall be furnished with sealed dust-tight relay, a test switch and dual diagnostic LED indicator lights (hi-charged and AC pilot). The cabinet shall be 20 gauge steel with a removable front panel. Unit shall have 1/2" conduit knock-outs, rear keyhole slots and universal knock-outs to mount to any standard 4" junction box with provision for mounting up to 3 heads on top of cabinet.

Units specified with Improved Diagnostics (audible or non-audible) will continuously monitor every critical function of the unit, attached remote lighting heads and/or attached AC/DC Exit Signs. Operational status of the battery, charger and lamps are indicated by individual LED status indicators. Once a malfunction is detected, if audible, a high-pitch audible alarm will sound, and the appropriate LED status indicator will illuminate alerting of the unit malfunction. If non-audible, only the LED status indicator will illuminate alerting of the unit malfunction. The microcontroller shall automatically self-test, by simulating a power failure, in accordance with NFPA101 Life Safety Code for one minute monthly, 30 minutes every six months and 90 minutes annually.

Every **S12E, S24E** Series unit shall be fully warranted for three years, subject to proper installation and maintenance.

Unit shall be **Lightalarms®** catalog number _____.

HEAD STYLE WITH LAMP TYPE CHOICES

LAMP TYPE	HEAD STYLE				
	ELF645 (pg.108)	ELF2 (pg.105)	ELF3 (pg.106)	DR1130 (pg.104)	ELF623 (pg.107)
Wedge Based Incandescent	X	X			X
BI-Pin Halogen	X	X			X
PAR36 Sealed Beam Incand.	X				
PAR36 Sealed Beam Halogen	X				
MR16 Halogen			X	X	
MR16 LED			X	X	



TYPE _____

CATALOG # _____

NOTES _____

Suited for applications requiring high capacity for multiple remote capabilities or extended operating times



Available Head Style Choices: ELF645 ELF2 ELF3 DR1130
 Head Style Suffix: /Blank /ELF2 /ELF3 /DR1130

DIMENSIONS

Dimensions are approximate and subject to change.

200W unit use C Cabinet dimensions
 300W and 400W unit use D Cabinet dimensions

CABINET	DIMENSIONS			
	a	b	c	d
C	18-3/8" (46.67cm)	16-1/2" (41.91cm)	7-1/4" (18.41cm)	12-1/4" (32.38cm)
D	18-3/8" (46.67cm)	27" (68.58cm)	7-1/4" (18.41cm)	12-1/4" (32.38cm)

POWER CONSUMPTION / UNIT RATING CHART

SERIES	DC SPECS						AC SPECS	
	BATTERY TYPE	DC VOLTAGE	87.5% BATTERY CAPACITY (IN WATTS) ¹				UNITS DUAL VOLTAGE ²	CURRENT MAXIMUM
			90 MIN.	2 HRS.	3 HRS.	4 HRS.		
S12E4	Lead-Calcium	12V	200	150	107	85	120VAC 277VAC	.3A .15A
S1245		12V	300	225	165	127		
S12E6		12V	400	300	214	170		
S24E4		24V	400	300	120	60		

¹ National Electrical Code Specification
² All units 120/277 dual voltage, information based on wiring to specific voltage type

ORDERING FORMAT

# OF HEADS	SERIES/ CAPACITY	HEAD STYLE	LAMP TYPE	FINISH	OPTIONS
0= No heads 1= 1 head 2= 2 heads 3= 3 heads	S12E4= 12V-200W ¹ S12E5= 12V-300W S12E6= 12V-400W S24E4= 24V-400W	/Blank= ELF645 (PAR36, Plastic) /ELF2= ELF2 (PAR18, Plastic) /ELF3= ELF3 (MR16, Plastic) /DR1130= DR1130 (MR16, Metal)	Add lamp suffix to indicate lamp type, voltage and wattage. For available Lamp Types within a specified Head Style, refer to that Head Style page for proper lamp suffix with Blank (ELF645) , page 105 with ELF2 , page 105 with ELF3 , page 106 with DR1130 , page 104 with ELF623 , page 107 Lamp Type MUST: 1) Match Battery Voltage 2) Total of all lamps wattage must not exceed battery watt capacity for 90 min.	-G= Gray -M= Mist White -B= Black	Blank= No Options -ID= Improved Diagnostics (audible) ¹ -IDNA= Improved Diagnostics (non audible) ¹ -T1= Time Delay (5 minute) -T2= Time Delay (10 minute) -T3= Time Delay (15 minute) -A= Ammeter ² -V= Voltmeter ² -DS= Lamp Disconnect Switch -VS= Vandal-Resistant Screws -3CP= 120V Cord & Plug, 3 wire, 3ft long ³ -NEX= Nexus® Wired -NEXRF= Nexus® Wireless

¹ -ID & -IDNA include a time delay feature that can be enabled/ disabled in the field or set by the factory by including -ID-TD* or -IDNA-TD*

² -A & -V not available with -ID, -IDNA, -NEX, -NEXRF option

³ -3CP custom lengths available. Consult your sales representative

EXAMPLE: 2S12E4/L25-G