## **RGS Battery Unit**

6, 12 and 24 volts



#### 10-year life expectancy, maintenance-free emergency lighting units.

The **RGS** Series battery units combine long-life expectancy, high performance design and a reasonable initial cost outlay. Ideally suited for a range of commercial applications, the long-life lead acid battery is specifically recommended for environments where the unit will be exposed to large variances in ambient temperature.







#### **Features**

- Rugged steel cabinet with corrosion-resistant undercoating – standard colour is factory white, polar white and black available as options
- Removable front panel on cabinet provides easy access and allows unit to be mounted at ceiling height
- Solid-state pulse-type charger current-limited, temperature-compensated, short-circuit proof and reverse-polarity protected.
- Unit comes standard with electronic lockout and brownout circuits

- Sealed dust-proof transfer relay, test switch and LED indicator lights
- Long-life, maintenance-free lead acid battery
- Wide range of lampheads available consult Ordering Information for complete list
- Standard 120/347Vac input voltage with line cord kit
- NEXUS® compatible (for more information on NEXUS®, please consult factory.)
- CSA C22.2 No. 141 certified

Project/Location		Date	
Contractor	Prepared by		
LUMACELL Model			

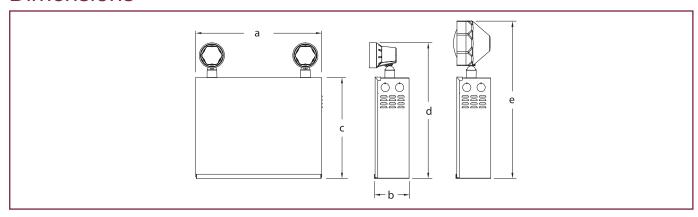


#### Wire Guards

460.0078-L	Wall Mount	"A" Cabinet
460.0081-L	Wall Mount	"B" Cabinet
460.0034-L	Wall Mount	"C" Cabinet

## **RGS SERIES**

#### **Dimensions**



Cabinet			Dimensions		
Cabillet	а	b	С	d	е
Α	13 <sup>1</sup> / <sub>4</sub> " (33.4 cm)	3 <sup>5</sup> / <sub>8</sub> " (9.2 cm)	10 <sup>1</sup> / <sub>2</sub> " (26.8 cm)	14 <sup>1</sup> / <sub>4</sub> " (36.0 cm)	16 <sup>1</sup> / <sub>2</sub> " (41.7 cm)
В	16 <sup>1</sup> / <sub>8</sub> " (41.0 cm)	5 <sup>1</sup> / <sub>2</sub> " (13.8 cm)	10 <sup>1</sup> / <sub>4</sub> " (26.1 cm)	13 <sup>7</sup> / <sub>8</sub> " (35.3 cm)	16 <sup>1</sup> / <sub>8</sub> " (41.0 cm)
С	23 <sup>1</sup> / <sub>8</sub> " (58.8 cm)	5 <sup>1</sup> / <sub>2</sub> " (13.8 cm)	10 <sup>1</sup> / <sub>4</sub> " (26.1 cm)	13 <sup>7</sup> / <sub>8</sub> " (35.3 cm)	16 <sup>1</sup> / <sub>8</sub> " (41.1 cm)

#### Replacement Lamps

Ordering Code	Lampe Type	Voltage-Wattage
570.0016-L	Mini tungsten (MT9W)	6V - 9W
570.0025-L	Mini tungsten (MT9W)	12V - 9W
570.0045-L	Mini tungsten (MT9W)	24V - 9W

For the complete list, please see the lamp chart on page 196 to 199.

## **RGS Battery Unit**

6, 12 and 24 volts



#### Typical Specification

Supply and install a complete emergency lighting system as described herein and shown on the drawings.

The Lumacell Smart Diagnostic micro-controller board shall supply the rated load for a minimum of a 1/2 hour to 87.5% of the rated battery voltage. The unit shall be rated 120V or 347V, 60 Hz and be CSA listed. The unit shall have an output of \_\_\_\_\_ volts.

The charger shall be fully computer tested and its charge voltage factory set to  $\pm$  1% tolerance. Chargers with field-adjusted potentiometers are not acceptable. A pulse-type charger shall be employed to promote long battery life and reduce the potential for grid corrosion. The charger shall provide a continuous high charge to recharge the battery, when the battery is at full capacity, the charger will shut-off. Periodically the charger shall provide a pulse of energy to keep the battery topped off. The pulse charger shall be precisely regulated by a micro-controller circuit, which samples the battery in

relation to its temperature, state or charge and input voltage fluctuations. The charger shall be current limited, temperature compensated, short-circuit proof 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 emergency lights when utility power dips below 75% of nominal voltage. A low voltage battery protection circuit shall be provided and will disconnect the load and circuitry form the fused output circuit when the battery reaches the end of discharge. The unit shall self-test for 1 minute every 30 days, 10 minutes on the 6th month and 30 minutes every 12 months. The unit shall be capable of full recharge in compliance with CSA specifications. The unit shall be furnished with sealed dust tight relay, a test switch and diagnostic LED indicator lights to continuously monitor the status of the unit: Battery Failure, Battery Disconnected, Charger Failure, Lamp Failure, Service Alarm, AC "ON", Charger High Rate. The emergency lighting heads shall require no tools to adjust or aim.

The unit shall be Lumacell model:



Single, regular head



Single, metal head

Project/Location			Date	
Contractor		Prepared by		
LUMACELL Model				



#### Power Consumption and Unit Rating

## **RGS SERIES**

Model	AC S	Wattage Capacity					
IVICACI	7.0 0	peoo	30min	1h00	1h30	2h00	4h00
RGS36		0.10/0.04 Amp	36	21	15	12	6
RGS72		0.22/0.08 Amp	72	42	30	24	12
RGS108		0.22/0.08 Amp	108	63	45	36	18
RGS180		0.22/0.08 Amp	180	105	75	60	30
RG12S36		0.09/0.03 Amp	36	21	15	12	6
RG12S72		0.15/0.06 Amp	72	42	30	24	12
RG12S100		0.34/0.12 Amp	100	58	42	33	17
RG12S144		0.40/0.14 Amp	144	84	60	48	24
RG12S200	120/347Vac	0.41/0.14 Amp	200	117	83	67	33
RG12S220		0.41/0.14 Amp	220	120	90	72	36
RG12S250		0.41/0.14 Amp	250	144	100	83	42
RG12S360		0.43/0.15 Amp	360	210	150	120	60
RG12S360HP		0.43/0.15 Amp	360	210	150	120	60
RG24S144		0.55/0.20 Amp	144	84	60	48	24
RG24S200		0.67/0.23 Amp	200	117	83	67	33
RG24S288		0.67/0.23 Amp	288	168	120	96	48
RG24S350		0.67/0.23 Amp	350	200	144	120	60
RG24S432		0.67/0.23 Amp	432	250	180	144	72
RG24S550		0.88/0.33 Amp	550	320	230	180	90
RG24S720		0.88/0.33 Amp	720	420	300	240	120
RG24S720HP		0.88/0.33 Amp	720	600	300	240	120

### Ordering Information

Series	Capacity Cabinet Size	# of heads	Head Style/Lamp Wattage (		AC Voltage	Options
6 volts  RG12S= 12 volts  RG24S=	Cabinet Size  36= 36 watts (A)*  72= 72 watts (A)*  108= 108 watts (B)*  36= 36 watts (B)*  36= 36 watts (A)*  100= 100 watts (A)*  144= 144 watts (A)*  200= 220 watts (B)*  250= 250 watts (B)*  250= 250 watts (B)*  260= 360 watts (B)*  200= 200 watts (B)*  360= 360 watts (B)*  200= 200 watts (B)*  360= 360 watts (C)*  432= 432 watts (C)*  550= 550 watts (C)*  720= 720 watts (C)*	Blank= no head 1= one head 2= two heads	MT9W= mini-tungsten, 6V, 12V, 24V, 9W, wedge base MT18W= mini-tungsten, 12V, 24V, 18W, wedge base MQ8W= mini-halogen, 6V, 12V, 8W, quartz bi-pin MQ12W= mini-halogen, 6V, 12V, 24V, 12W, quartz bi-pin MQM6W= mini-halogen, 6V, 6W, MR16 MQM10W= mini-halogen, 6V, 10W, MR16 MQM12W= mini-halogen, 12V, 24V, 12W, MR16 MQM12W= mini-halogen, 12V, 20W, MR16 LH9W= tungsten, 6V, 12V, 24V, 9W, wedge base LH18W= tungsten, 6V, 12V, 24V, 18W, wedge base LH25W= tungsten, 6V, 12V, 24V, 25W, DCB LHQ8W= halogen, 6V, 12V, 8W, quartz bi-pin LHQ12W= halogen, 6V, 12V, 24V, 20W, quartz bi-pin LHQ12W= halogen, 6V, 12V, 24V, 20W, quartz bi-pin LHQ55W= halogen, 12V, 55W*, quartz bi-pin LHQ70W= halogen, 12V, 55W*, quartz bi-pin LHQ70W= halogen, 24V, 70W**, quartz bi-pin SB9W= tungsten, 6V, 9W, sealed beam SB12W= tungsten, 6V, 12V, 18W, sealed beam SB18W= tungsten, 6V, 12V, 25W, sealed beam	Blank= factory white BK= black	Blank= 120/347Vac input ZB= 240 Vac input ZC= 277 Vac input ZE= 220 Vac, 50 Hz input	Blank=no options A= ammeter AT= Auto-Test ATN= Auto-Test non audible CT= cabtire DPF6= 6cct. fuse panel LD= lamp disconnect LTS= light activated test switch ***NEX= NEXUS® system interface (6 Volts, 12 Volts; consult factory) RRT= remote test receiver TD= time delay (programmable) TL= Twistlock plug TMBB= a.c./d.c. terminal block TMBD= d.c. terminal block TMBC= remote test transmitter HP= high power
	* Cabinet size is not part of the ordering information.		QSB8W= halogen, 6V, 12V, 8W, quartz sealed beam QSB12W= halogen, 6V, 12V, 12W, quartz sealed beam QSB20W= halogen, 6V, 20W, quartz sealed beam * Aluminum heads only. "* High temperature heads only.			**Not all options available with NEXUS*. Contact your sales representative. ****One per order.

**EXAMPLE: RGS36MT9W** 

# Glossary

Α	ammeter	Used to measure the current being supplied to the battery while in charge mode.
, ,	u	Automatically tests and continuously monitors your emergency lighting unit. If a problem occurs, the
I		unit will send a visual (flashing or blinking LED indicator) and audible warning. Complies with Fire
AT	Auto-Test	Code requirements.
		Automatically tests and continuously monitors your emergency lighting unit. If a problem accurs, the
		unit will send a visual (flashing or blinking LED indicator) warning. Complies with Fire Code
ATN	Auto-Test, non-audible	requirements.
СТ	Cab-tire	Unit supplied with a cab-tire cable used for special hardwire applications.
CM4	cold weether 100/co	120Vas input cold weather protection feature for applications where temperatures can reach 40° C
CW1	cold weather, 120Vac	120Vac input cold weather protection feature for applications where temperatures can reach -40° C
CW3	cold weather, 347Vac	   347Vac input cold weather protection feature for applications where temperatures can reach -40° C
DPF6	6cct. Fuse panel	Used to facilitate the connection of multiple input load circuits in high power battery units.
D110	Cook rado panor	Used to perform maintenance tests by means of radio transmitter along with a radio receiver (RRT
HHC	remote test transmitter	option) on battery units that are out of reach.
		Like a heatblanket, used to keep internal temperature optimal for battery units that are installed in
HTR	heather & thermostat	cold environments.
		When ordering a battery unit with the LC option, we supply and pre-install a line cord with a standard
		3 prong 120V plug. Just hang the fixture and plug it in to a standard receptacle! Only available on
LC	line cord (120V)	120V units.
		To disconnect the emergency lighting load in an area that is not in use during a prolonged power
LD	lamp disconnect	failure or while area is no longer being occupied.
LS	Laser	Used to remotely test battery units by means of pointing a laser at the battery unit.
		Used to remotely test battery units by pointing a flashlight at a photocell mounted on the bottom of a
LTS	light activated test switch	battery unit.
		A protective teflon coating that is applied to the glass lens of a lighting fixture to prevent broken
TC	teflon coated lens	shards from falling in the event the glass is accidently broken or vandalised.
		Head to parform maintenance toots by manne of radio regioner in conjugation with a transmitter/UHC
RRT	remote test receiver	Used to perform maintenance tests by means of radio reciever in conjunction with a transmitter(HHC option) on battery units that are out of reach. Simply point the receiver at the unit.
11111	Temote test receiver	The NEXUS system interface is a computerized maintenance system for emergency lighting that,
		once programmed, will perform the tests, keep written records and send notification if anything
		needs to be fixed. One full system can address hundreds of units in as many buildings as you need
NEX	Nexus system interface	from a single location.
		Normally, when the a.c. is restored, all emergency lighting lamps are turned off. However, in some
		cases such as when metal halide lamps are used, it is possible that the general lighting will not be
		availbe for several minutes after the blackout (or brownout) period. Battery units with the T3 option
		will keep some energy in store to ensure that the emergency lighting stays on or comes back on for
T3	15 minutes time delay	at least 15 minutes once the regular a.c. power has been restored.
TD	time delay (programmable)	Same as the T3 option but can be programmed for 5, 10, 15 or 20 minutes delay.
L_		Screws that require a special bit. Can be used on certain units to deny access to unauthorized
TP	tamper proof screws	personnel.
TL	twistlock plug	Used to facilitate the connection and removal of battery units for maintenance purposes.
TMBB	a.c./d.c. terminal block	Used to facilitate the connection of large gauge input cables.
TMBD	d.c. terminal block	Used to facilitate the connection of large gauge d.c. input cables.
	a.c. terminal block	Used to facilitate the connection of large gauge a.c. input cables.
V	voltmeter	Indicates voltage being supplied to the battery when in charge mode.