

# Universal Central Battery System with Auto Load Diagnostics *Series CBL*

For all Sigtex Emergency Lighting Products

CBL.12.21.08

## GENERAL DESCRIPTION

The most efficient way to comply with the Life Safety Code by minimizing battery maintenance. Capable of reducing operating expense by more than 90% compared to self-contained battery systems (unit equipment) and large inverter systems. Models are available to deliver from 100 to 1000 watts of emergency power to any combination of emergency luminaires and exit signs, for a minimum of 90 minutes. Any general lighting luminaire can be converted to emergency operation from the CBL system using the Sigtex Emergency Lighting Control, Series ELC. Valuable options include an LCD test panel with diagnostic data display and programmable test protocols, a fast charger capable of recharging any system in less than 12 hours, and a self-contained printer for instant written test reports.

## CONSTRUCTION & OPERATION

Supplies emergency power at 24VDC for 90 minutes to any combination of general lighting luminaires fitted with the Series ELC Emergency Lighting Control, MOONLITE LED emergency lighting fixtures, and exit signs.

Up to eight 24V emergency branch circuits with wire size from #18AWG to #8AWG can be installed with 1-hour rated metal jacket type "MC" cable, per NEC 700.9 (d)(1). If required, loads may be rated for Class 2 wiring. Hard conduit Class 1 wiring is not required unless specified by local codes.

120 VAC standard input, optional 277, 347 or 480 VAC.

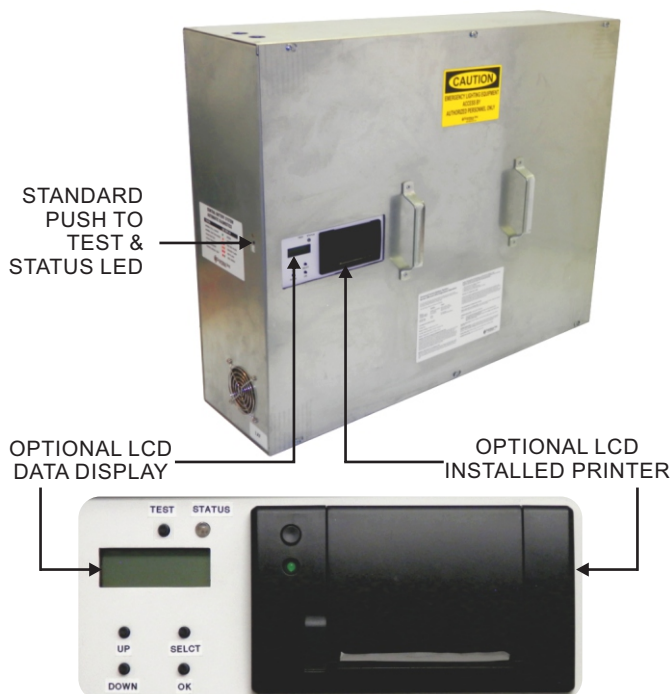
NEMA Type 1, UL 50 steel cabinet for surface or optional recess mount.

Four CBL models are offered to supply from 100 to 1,000 watts emergency power. Less than 25 watts power consumption in standby mode.

Batteries are readily accessible for inspection and maintenance by facilities personnel, allowing timely replacement when indicated by the diagnostic system.

100 or more emergency lighting fixtures and exit signs may be connected to a single central battery panel.

Optional installed printer will produce test reports on demand as required by NFPA 101, Paragraph 7.9.3.1.3 (5).



## ELECTRONICS

Computer-based, self-test/self-diagnostic functions comply with NFPA Life Safety Code 101 (2012) Paragraph 7.9.3.1.3.

Automatic self-testing diagnostics is standard, with multicolor LED status display

Optional LCD display with diagnostic control center enables RT Clock to set start time for diagnostic testing as required, to avoid test activation of emergency lighting in dark areas or in sensitive areas when building is occupied. Displays show fault reports, battery charge, voltage and current load, battery temperature, and complete fault history.

Optional installed printer enables easy compliance with LSC 101 Paragraph 7.9.3 for written reports. Any LCD display can be printed as required.

Optional Branch Circuit Load Monitoring automatically reports current flow on 8 individual branch circuits, reducing troubleshooting of possible locations following a fault report (requires LCD option for display).

Standard 24V charging system is computer controlled and optimizes current flow for maximum battery life. Optional fast charger recycles system from complete discharge to full capacity in less than 12 hrs.

## CERTIFICATIONS & CODES

Listed under UL Standard 924, and meets applicable requirements of CSA C22.2 No. 141, NFPA 101 Para 7.9.3.1.3, and NEC 700.12 (c).

## WARRANTY

3 year total customer satisfaction warranty. For details see product catalog technical data section.



## FIXTURE SCHEDULE

MODEL	CATALOG NO
APPROVAL	JOB INFORMATION



# Universal Central Battery System with Auto Load Diagnostics Series CBL

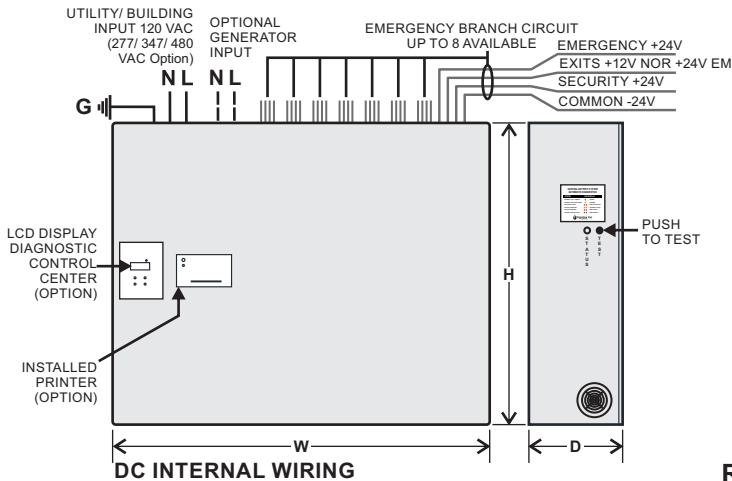
## For all Sigtex Emergency Lighting Products

CBL.12.21.08

### SUGGESTED SPECIFICATIONS:

Power for emergency lighting shall be provided by Sigtex Inc Central Battery System Series CBL, including optional security or night lighting, with input of 120 VAC or optional higher voltage, and uninterrupted output of 24 VDC for loads as specified for at least 90 minutes in emergency operation. The system shall be capable of supplying power to all Sigtex emergency lighting remote fixtures, including COVERLITE and MOONLITE™ models, LED exit signs, and all luminaires fitted with Sigtex ELC Emergency Lighting Control. Panel construction shall be from sheet steel, UL listed, and meet NEMA I requirements. Battery diagnostics will perform automatic testing as required to meet national and local codes, and status will be displayed with a multicolor LED on the panel, and manual push-to-test switch.

### PANEL LAYOUT & DIMENSIONS:



CBL MODEL	100	250	500	1000
Max AC POWER Standby	20W	20W	20W	20W
Max AC POWER Standard Charging	45W	45W	45W	45W
Max AC POWER Fast Charging Option	150W	150W	150W	150W
Max AC POWER SEC Option/Std Charging	100W	170W	300W	550W
Max AC POWER SEC/Fast Chg Option	250W	400W	650W	1150W
RECHARGE TIME HRS: STANDARD	20	50	72	90
RECHARGE TIME HRS: CHG OPTION	NA	8	10	12
PANEL SIZE STD H x W x D ins	24x24x8	24x24x8	30x24x8	30x24x8
PANEL WEGHT LBS	12	60	100	180
(2 x 12v SLA) BATTERY CAPACITY Amp-Hr	8	26	50	100

### REMOTE EMERGENCY LIGHTING FIXTURES & EXITS

The following products operate from emergency power supplied from the Central battery System at 24VDC input. Please refer to individual specification sheets for each model for further details:

SERIES	DESCRIPTION
ELC	Emergency Lighting Control
Moonlite LED	LED Emergency Lighting Fixtures
Exits	Die Cast, Edge Lit, & Universal Thermo- plastic Coverlite LED Concealed Emergency
CVLRE	Local Circuit Monitor (LCM) Inputs.
LCM	Standard CBL models supplied with (2) LCM relay. Up to (4) relays may be installed.

### EXIT LIGHTING

STANDARD: MAX. 40 EXIT SIGNS PER CBL

### OPERATING TEMPERATURES

Standard: -20C to +50C  
With BH Option: -40C to +50C

### WIRING CONNECTIONS

EXIT SIGNS: YELLOW & BLACK  
EMERGENCY FIXTURES:  
RED, BLACK, & BLUE (IF SEC)  
CVLRE: BLACK, YELLOW & RED

### BRANCH CIRCUIT WIRING:

EXITS ONLY: 2 WIRE SYSTEM  
EM LIGHTING ONLY: 2 WIRE SYSTEM  
EXITS & EM LIGHTING: 3 WIRE SYSTEM  
EXITS & EM WITH SECURITY LIGHTING (OPTION S): 4 WIRE SYSTEM

See Series CBM data sheet for information on Central Battery with Monitoring & Reporting System (MARS).

### ORDERING INFORMATION- Example: CBL 500 - 277 - LCD - 2LCM - 4ECR

CBL		OPTIONS	
MODEL	90 MINUTE OUTPUT WATTS <sup>1</sup>	AC INPUT VOLTS	
CBL	100	120	ASA <sup>2</sup>
	250	277	BCM
	500	347	LCD
	1000	480	BMI
			CHG
			LOK
			NAT
			PRT
			FAI
			CVL
			ECR(1-6)
			LCM(3-4)
			FEMA <sup>3</sup>
			NEM4
			GEN120
			GEN277
			RT
			TD
			BH
			T
			S (X)

<sup>1</sup>Output Watts for Extended Run Time =  
90 Min Output Watts X 90/ Desired Run Time (Mins)

Example: Output Watts for 2 Hrs from 500W  
unit = 500 x 90/120 = 375 Watts

**Sigtex Inc**  
LIGHTING  
220 VFW Avenue, Grasonville, MD 21638  
TEL: (410) 827-8300 Fax: (410) 827-8866  
sales@sigtexinc.com www.sigtexinc.com

<sup>2</sup> Flashing exits & Moonlite LED®. Contact factory for details.

<sup>3</sup> 1000W model only. 2 HR run time for 1/2 HP fan motor.

**DISTRIBUTOR:**