

USBLEDEM-CP

CONSTANT-POWER EMERGENCY LED DRIVER



ILLUMINATION

- Provides constant power output to the load during emergency mode operation
- Can be operated as NORMALLY-ON, NORMALLY-OFF or SWITCHED LOAD

ELECTRICAL

- Universal 120-277V, 50-60 Hz input
- Charge/Power "ON" LED indicator light and push-to-test switch for mandated code compliance testing
- Long life, maintenance-free, rechargeable sealed NiCd battery
- Output short/overcurrent protection: Electronic limiting with operating resuming upon removal of fault
- 90-minute minimum emergency operating time over full temperature range (other run times available upon request)
- Output classification: Class 2 Compliant (excludes -MV/-HV models)
- Surge protection: Per C62.41 (TVS)
- Input overcurrent protection: Fusible link
- 24-hour maximum battery recharge time

MOUNTING

- Suitable for installation inside, on top or in remote* of the fixture

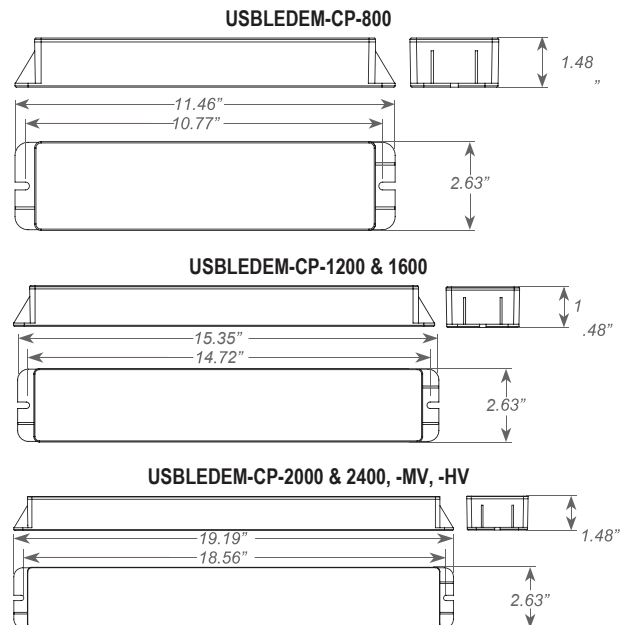
HOUSING

- LED illuminated and remote mounted test switch
- Injection-molded, engineered grade, 5VA flame retardant, high-impact resistant, thermoplastic in a black finish

OPTIONS

- CEC: Certified to CEC under Title 20 regulations

(Standard & - CEC Models)



LISTINGS AND WARRANTIES

- Five year warranty on all electronics and housing
- Meets UL924, NFPA 101 Life Safety Code, NEC, OSHA, Local and State Codes
- Suitable for damp locations (0°C – 50°C)
- UL Classified for factory or field installation

ORDERING INFORMATION

Lumen output based on LED light source having efficacy of 140-160 lumens/watt. Actual output may vary depending on light source utilized.

Provides regulated power from 5.0 watts to 17.0 watts (up to 800 to 2400 lumens)

*Available as standard with -MV/-HV models.

MODEL	OUTPUT RATINGS				OPTIONS	
	CURRENT (mA)	VOLTAGE (VDC)	POWER (W)	LUMENS	CEC ¹	Title 20 Compliant
EBLEDEM-CP	800	250-100	20-50	5.0	800	CEC ¹ Title 20 Compliant
	1200	390-156	20-50	7.8	1200	
	1600	535-214	20-50	10.7	1600	
	2000	685-274	20-50	13.7	2000	
	2400	850-340	20-50	17.0	2400	
	MV	340-154	50-110	17.0	2400	
HV	170-77	100-220	17.0	2400		

ELECTRICAL INFORMATION

MODEL	INPUT CURRENT (A)	INPUT POWER (W)
USBLEDEM-CP-800/ USBLEDEM-CP-800-CEC	0.061	3.9
USBLEDEM-CP-1200/ USBLEDEM-CP-1200-CEC	0.065	4.8
USBLEDEM-CP-1600/ USBLEDEM-CP-1600-CEC	0.087	5.7
USBLEDEM-CP-2000/ USBLEDEM-CP-2000-CEC	0.110	6.9
USBLEDEM-CP-2400/ USBLEDEM-CP-2400-CEC	0.110	7.9
USBLEDEM-CP-MV	0.110	7.9
USBLEDEM-CP-HV	0.110	7.9

USBLEDEM-CP SERIES SYSTEM COORDINATION GUIDELINES

These guidelines were developed to allow the lighting system Designer/Specifier to predict the operating performance levels of LED luminaires when powered by an electrically compatible USBLEDEM-CP Series model. It is ultimately the responsibility of the Designer/Specifier to insure that the as installed system delivers code-compliant path of egress illumination.

1) DETERMINE ELECTRICAL COMPATIBILITY

- A) Verify that the Luminaire LED Driver, where applicable, is Class 2 compliant (when using non-MV, non-HV models)
- B) Verify that the Luminaire LED Lamp(s) have an operating voltage that's in the 20Vdc–50Vdc or 50Vdc–110Vdc or 100Vdc–220Vdc range (depending on the USBLEDEM-CP model being used)
- C) Verify that the Luminaire LED Lamp(s) have a power rating equal to, or greater than, the emergency power rating of the USBLEDEM-CP model under consideration

Please refer to Table 1

2) CALCULATE LUMEN OUTPUT DURING EMERGENCY OPERATION

- A) Access luminaire data by logging onto Design Lites Consortium
- B) Select "Search the DLC Qualified Product List" on the DLC homepage
- C) Enter manufacturer name and P/N of luminaire under consideration in the "search by keyword" text window
- D) Select "Search" tab to open the "Qualified Products List"
- E) Determine luminaire Lumens per Watt efficacy in "Rated Data" specifications
- F) Multiply luminaire Lumens per Watt by Emergency Output of the USBLEDEM-CP model under consideration

Please refer to Table 1

This figure is the Lumens available from the luminaire during emergency operation

3) DETERMINE SUITABILITY OF MEANS OF EGRESS LIGHTING LEVELS

- A) Using industry standard lighting design software, along with IES files for the luminaire under consideration, verify that the as installed available Lumens (as calculated in 2F above) are sufficient to meet Code-compliant path of egress illumination levels.

While the USBLEDEM-CP series has been found compliant with the requirements of UL Standard 924, it is ultimately the responsibility of the Designer/Specifier to assure the as-installed system delivers code-compliant path of egress illumination in accordance with Federal, State or local municipal requirements.

TABLE 1	
MODEL	OUTPUT POWER (constant)
USBLEDEM-CP-800/ USBLEDEM-CP-800-CEC	5.0 watts
USBLEDEM-CP-1200/ USBLEDEM-CP-1200-CEC	7.8 watts
USBLEDEM-CP-1600/ USBLEDEM-CP-1600-CEC	10.7 watts
USBLEDEM-CP-2000/ USBLEDEM-CP-2000-CEC	13.7 watts
USBLEDEM-CP-2400/ USBLEDEM-CP-2400-CEC	17.0 watts
USBLEDEM-CP-MV	17.0 watts
USBLEDEM-CP-HV	17.0 watts