

## 50W TCO Outdoor Dimming Driver

### GED50MV1P600

#### SAP: 95050425

Description: 0~10V/current Programmable Input

Voltage: 120V/277Vac±10%

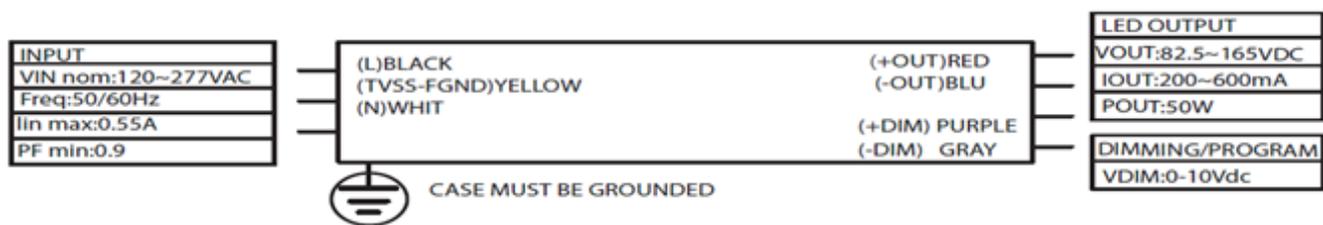
Input Frequency: 50Hz/60Hz

Surge Protection: 10KV/5KA

ROHS Compliant: Yes



Input Voltage(V)		PF. min	THD	Output power range(W)		Output voltage(V)		Programmable Current Range (A) ±5%		Max ouput current ripple	Dimming	Warranty Life
Nom	Frequency			min	max	Min	Max	Min	Max			
120-277Vac	50Hz/60Hz	≥0.9 @full load	≤20%	25.0	50.0	82.5	165.0	0.2	0.6	8% and 120Hz @25°C[(Pk-avg)/avg]	0-10V 10%-100%	10years @Tc 65C



## Product Features

### Physical

- Unit must be installed within an electrical enclosure.
- Enclosure wiring must be rated to 600V & 105°C or higher.

### Performance

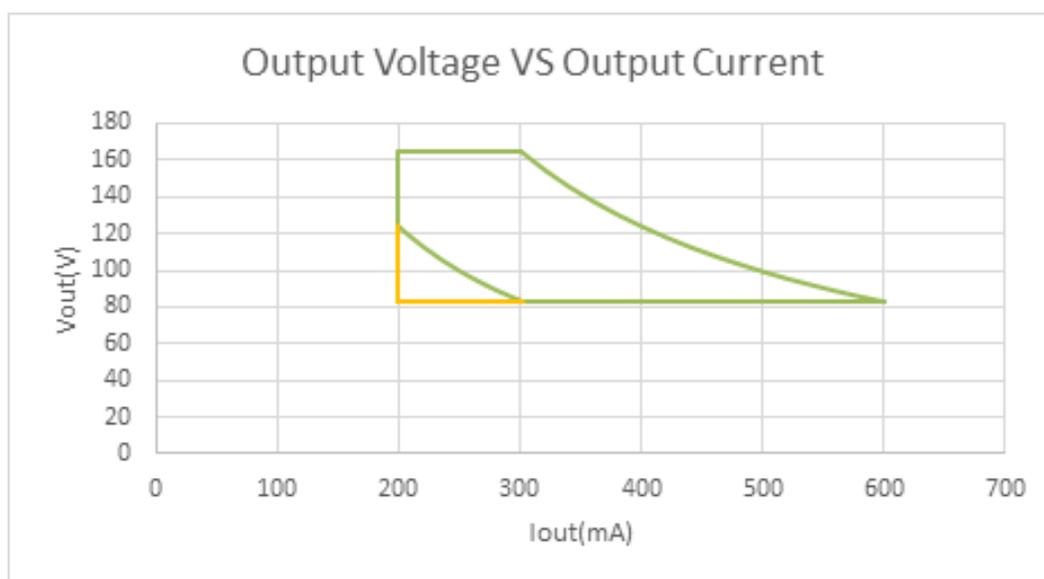
- Driver output is classified as Class 1 as stipulated in NFPA70 article 725 (National Electric Code).
- Dimming circuit is classified as Class 2 as stipulated in UL8750.
- Minimum ambient operating temperature: -40°C.
- Maximum allowable casing temperature: 85°C.
- The unit is UL recognized for operation in dry/damp locations (Outdoor Type 1).
- The unit is tolerant of extended open circuit and short circuit conditions.
- The unit is compliant to FCC Title 47 Part 15 Class A.
- The unit is resistant to surges as per IEEE/ANSI C136.2-2018 Enhanced (10kV/5kA).
- LED load is not protected if load is plugged in while driver is powered.

## UL Conditions of Acceptability – E340135

- The unit has been examined to comply with Class 1 Output Criteria.
- The unit is only to be used in dry or damp locations.
- The metal casing must be connected to **EARTH**.
- TVSS-GND (Yellow wire) shall be connected to fixture ground after hi-pot test using closest tab screw. **THIS IS NOT A SAFETY GROUND!**

## Technical Information

### GED50MV1P600

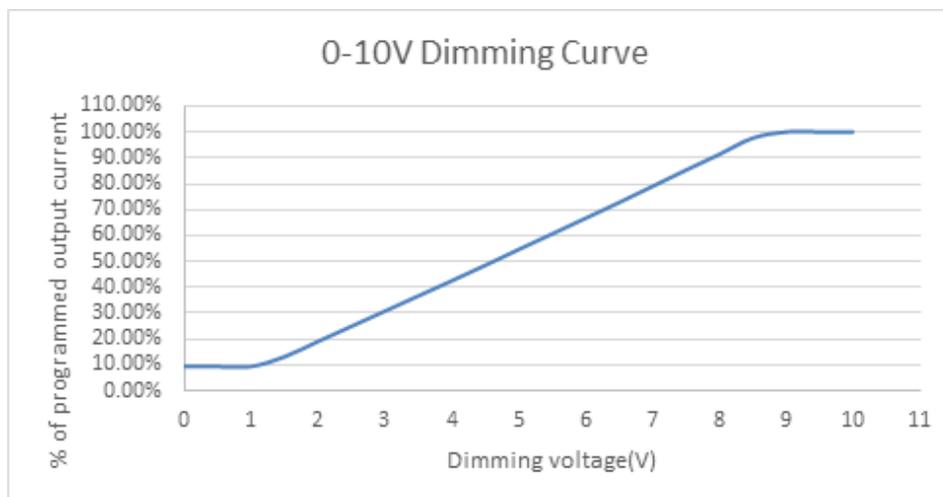
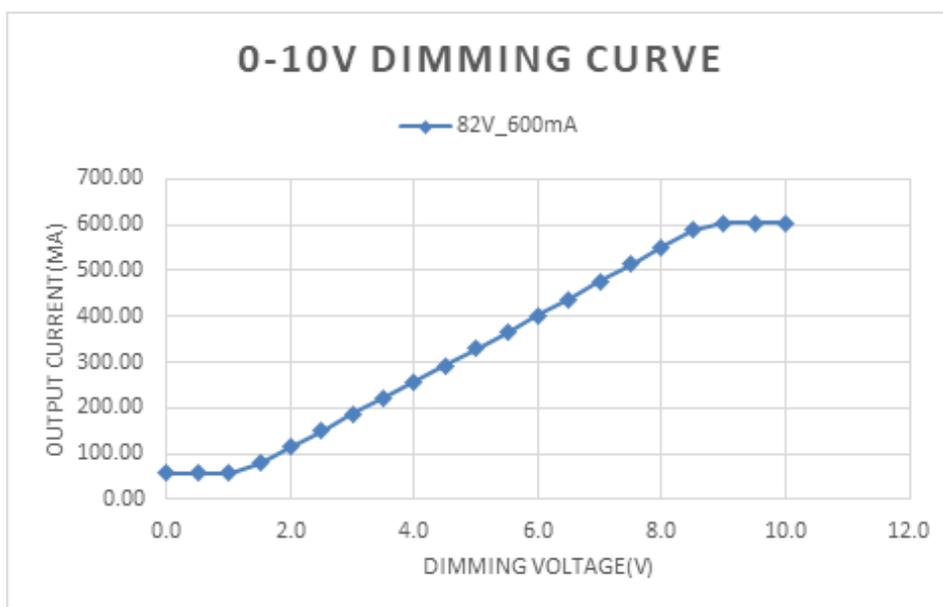
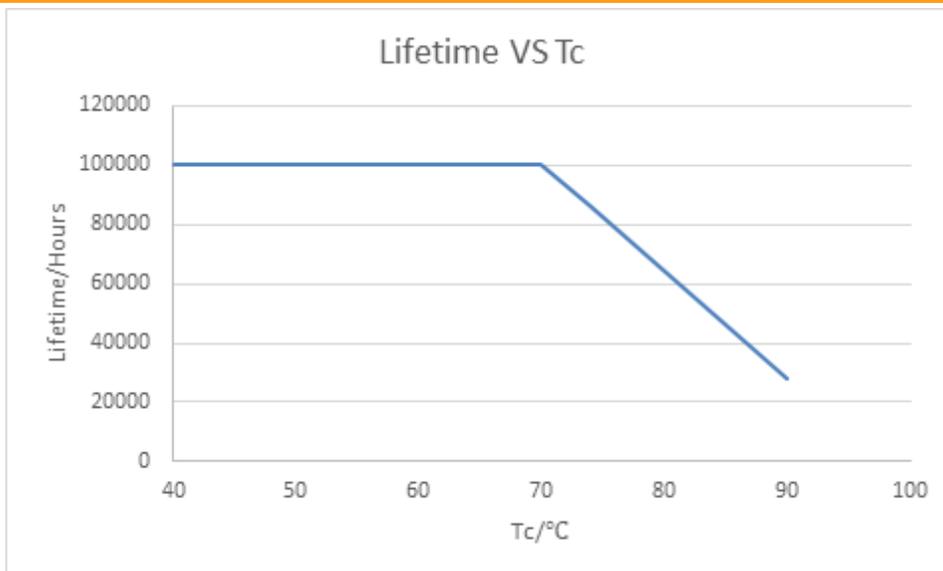


Note: the operation window is tested at room temperature = 25°C

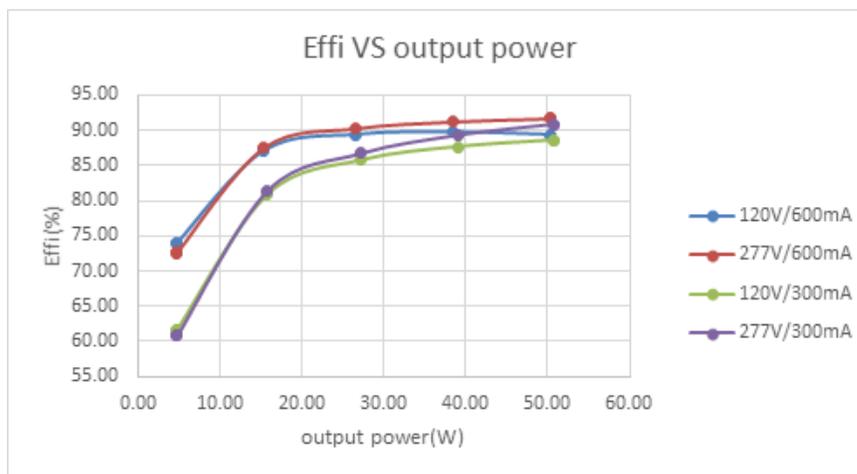
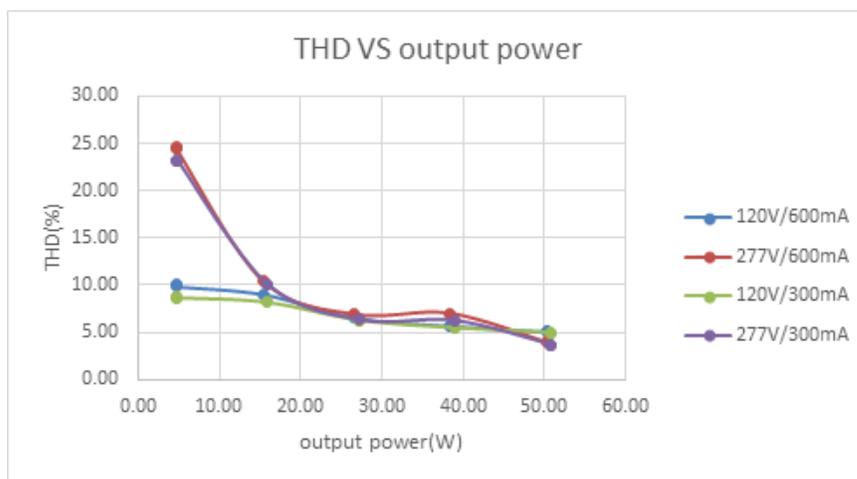
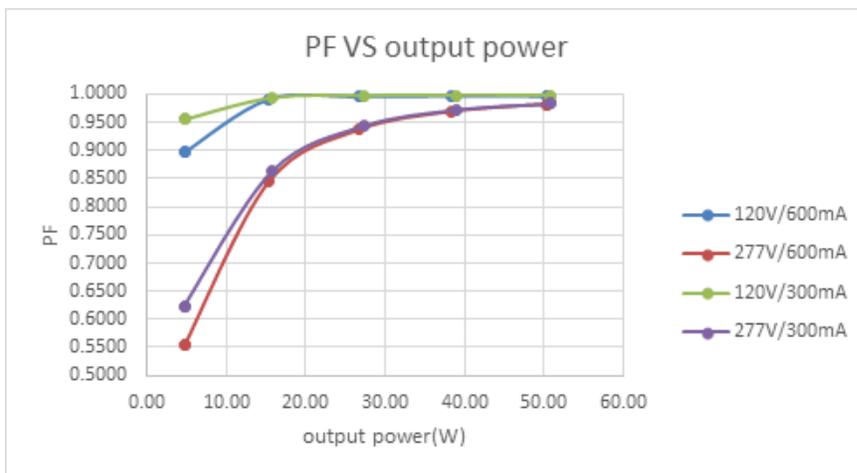
**Green Area:** Operation Window (PF > 0.9, THD < 20%)

**Yellow Area:** Driver operates normally but input PF specification may not be met.

- Driver Design Life is 100,000 hours at T<sub>c</sub> < 70C. See life estimation curve based on T<sub>c</sub> temp in data below.
- Driver designed for less than .1% failures/1000 hr at T<sub>c</sub> = 70C.
- Other factors such as AC line event or thermal excursions above T<sub>c</sub> = 70 can shorten life expectancy.



## Power Factor



GED50MV1P600		
Input Inrush Current		
Input Voltage (Vrms)	Peak Current Pulse(A)	Pulse Duration (50% of Peak), uS
120	20.3	155
277	46.3	168

## Product Label

UltraMax® Programmable LED Driver

GED50MV1P600  
SAP:95050425

120-277V

Measure 40mm from the end

Measure 30mm down side

Tc

INPUT	LED OUTPUT
VIN nom:120~277VAC	VOUT:82.5~165VDC
Freq:50/60Hz	IOUT:200~600mA
Iin max:0.55A	POUT:50W
PF min:0.9	

(L)BLACK (+OUT)RED  
(TVSS-FGND)YELLOW (-OUT)BLU  
(N)WHIT

(+DIM) PURPLE  
(-DIM) GRAY

DIMMING/PROGRAM  
VDIM:0-10Vdc

CASE MUST BE GROUNDED

**WARNING/AVERTISSEMENT**  
Risk of electric shock. Risque de choc électrique.

Turn power off before servicing.  
Properly ground the power supply and fixture.  
IMPORTANT: After Hipot test, connect the yellow wire (TVSS-FGND) to fixture's ground using the closest tab screw.  
Couper l'alimentation électrique avant l'installation ou l'entretien.  
Relier correctement la mise à la terre du bloc d'alimentation au luminaire.  
IMPORTANT: Après le test d'isolation électrique, relier le fil jaune (TVSS-FGND) à la mise à la terre du luminaire en utilisant le vis de montage la plus proche.

UL LISTED LED DRIVER E340135

LED Isolated Driver  
Class P  
Class 1 for NA  
Class 2 control wires  
High Power Factor  
Min Start Temp -40°C  
Tc=85°C max  
For Connections Use Wire Rated for at Least 90°C (194°F)  
FCC Part 15 Class A  
CAN ICES-005 (A) / NMB-005 (A)  
Install and ground per National Electric Code  
For Dry or Damp Locations

Firmware:  
Assembled in Vietnam  
Designed&Distributed  
by GE Current, a Daintree company  
Nela Park, Cleveland, Ohio 44112  
For technical assistance call:  
1-800-327-0097

S/N:

GED50MV1P600

## Current Programming Interface

### Instructions for programming with engineering GUI

- This driver requires 0-10V programming interface controller and software to program to desired output current.
- The programming interface leads are polarized and proper polarity matching is required for the programmer to work correctly. The purple wire is the + polarity and connects to the purple 0-10V dimming wire of the LED driver. The gray (or pink) wire is the common or negative polarity and connects to the corresponding 0-10V dimming wire of the LED driver.
- Power on LED driver and programming interface
- Open engineering programming GUI and select driver programming page 
- Input desired maximum current value to be programmed
- Set minimum dimming level to 10%
- Enter 600mA into Max output register for the LED driver
- Select and actuate write button to complete the programming of driver.
- Other driver programming software may be different but the parameters listed for for this driver need to be entered for proper driver programming.

