

## Model: GP-CVM600P 系列

### ■ 產品特點

- 恆壓電源, 適合 LED 燈條, LED 電子廣告牌等相關運用.
- 全電壓工作區間 (90VAC ~ 305VAC).
- 具備短路保護、過電流、過電壓、過溫度多重保護功能.
- 內置主動型 PFC (功率因素校正)功能, 滿載時功率因素 >0.98 (115VAC).
- 電源效率最高達 96% (230VAC 滿載).
- 230VAC 時, 空載消耗功率小於 0.5W (適用-非調光型號).
- 230VAC 時, 待機功耗小於 0.5W (適用-調光型號).
- 提供 3 合 1 調光(dim-to-off) 和 DALI-2 功能.
- 雷擊保護 4KV/2KV.
- 安規認證: 歐盟 CE、英國 UKCA、DALI-2、IP67、MM(家具環境使用).
- 採用無鉛制程, 符合環保 RoHS 要求.
- 全封閉耐高溫鋁殼; 輸出和調光線符合新的隔離規定.

### ■ 安規認證



### ■ 尺寸

300 x 138x 47mm (L x W x H)



GP-CVM600P-12V  
GP-CVM600P-24V



GP-CVM600P-12VA / 12VD2  
GP-CVM600P-24VA / 24VD2



GP-CVM600P-xxV  
(xx = 36,48 or 54)



GP-CVM600P-xxVA  
GP-CVM600P-xxVD2  
(xx = 36,48 or 54)

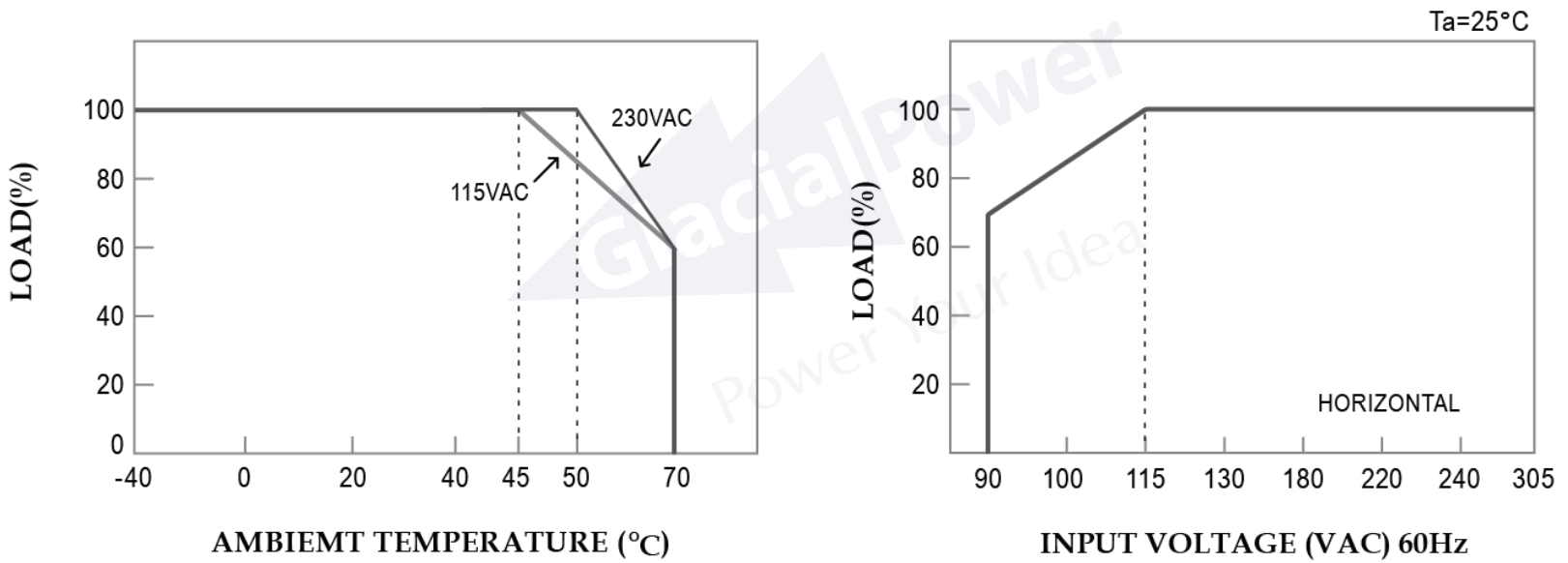
### ■ Specifications

Note: GP-CVM600P-xxV(X): xx=12, 24, 36, 48 or 54 (X)=Blank → Non DIM. , (X)=A → 3-in-1 DIM. , (X)=D2 → DALI-2 DIM.

Model No.	GP-CVM600P-12V(X)	GP-CVM600P-24V(X)	GP-CVM600P-36V(X)	GP-CVM600P-48V(X)	GP-CVM600P-54V(X)	
輸出	直流電壓	12V	24V	36V	48V	54V
	額定電流	0~40A	0~25A	0~16.66A	0~12.5A	0~11.1A
	額定功率	480W	600W	599.76W	600W	599.4W
	紋波和噪音 (Max.) Note.2	150mV	150mV	250mV	250mV	350mV
	效率 (Typ.)	92.5%	95%	95.5%	96%	96%
	電壓精度 Note.3	± 5%	± 5%	± 5%	± 5%	± 5%
	PWM 調光頻率 (optional)	> 1600 Hz (for dimmable version)				
	啟動時間 (Max.)	0.5s / 230VAC, 1s / 115VAC, at full load. 0.7s / 230VAC for DALI-2 version				

輸入	額定電壓	100 ~ 277VAC 141~392VDC			
	電壓範圍	90 ~ 305VAC			
	頻率範圍	47 Hz ~ 63 Hz			
	交流電流 (Typ.)	6.4A at 115VAC / 3.2A at 230VAC , 5.2A at 115VAC / 2.6A at 230VAC only for 12V(X)			
	功率因數	>0.98 at 115VAC / >0.95 at 230VAC at full load. PF ≥ 0.9 at 70% load			
	總諧波失真	THD < 10% at 230VAC, full load. Note 4			
	浪湧電流 (Typ.)	Cold Start 55A (Td=2020us measured at 50% Ipeak) at 230VAC			
	斷路器可配置同型號電源供應器數量	B type : 1 unit (16A) / 2 unit (25A), C type : 1 unit (10A) / 2 units (16A) / 3 units (25A), D type : 4 units (16A) / 6 units (25A) at 230VAC			
	漏電流	<1mA / 240VAC			
調光控制 (3-in-1)	直流調光	DC 0-10V			
	PWM 調光	Puls:Hi=10V Low=0V, Duty:0%~100%, Fsw 0.5-3KHz			
	電阻調光	0KΩ~100KΩ or Electronic Potentiometer 0-10V			
調光控制 (DALI-2)	DALI-2 Standards	Compatibility with IEC 62386-101 ed2, 102 ed2 and 207 ed2			
	DALI bus current consumption	<2mA (typical 1.6mA)			
保護功能	過電流	105~180% rated current. Type: Hiccup mode (Auto recover after fault condition disappeared).			
	短路	Type: Hiccup mode (Auto recover after fault condition disappeared).			
	過電壓	13~19V	26~38V	38V~50V	50V~65V 56~70V
	過溫度	Tcase: 95°C ± 10°C Type: Shut down output, recovers automatically after temperature goes down.			
環境	操作溫度	-40°C ~50°C (Refer to output load derating curve).			
	操作濕度	20% ~ 90% RH non-condensing.			
	儲存溫度	-40 ~ +80°C			
	儲存濕度	10% ~ 90% RH			
	振動	10~500 Hz, 2G 10 min./1 cycle, period for 60 min. each along X, Y, Z axes.			
安規和電磁兼容	安全標準	EN61347-1, EN61347-2-13, independent, IP67 Approved.			
	耐壓	I/P-O/P: 3.75KVAC I/P-FG:1.88KVAC O/P-FG:0.5KVAC			
	隔離電阻	I/P-O/P,I/P-FG : 100M ohms , O/P-FG : 4M ohms / 500VDC at 25°C			
	EMI 傳導和輻射	Compliance to EN55015			
	諧波電流	Compliance to EN61000-3-2 Class C (≥ 75% load),EN61000-3-3			
	EMS 免疫	Compliance to EN61000-4-2,3,4,5,6,8,11;EN61547,criteria B			
其他	MTBF	120K hours min. MIL-HDBK-217F(25°C)			
	尺寸 (L x W x H)	300 x 138 x 47mm; 2450g/pcs			
Note	<ol style="list-style-type: none"> <li>1. 所有未特別提及的規格均在 230VAC 滿載和 25°C 環境溫度下測量。</li> <li>2. 紋波和噪聲是在 20MHz 帶寬下使用 12"雙絞線以 0.1uf 和 47uf 並聯電容器端接的方式測量的。</li> <li>3. 電壓容差：包括線路調節、負載調節和設置容差。</li> <li>4. THD &lt; 25% at 277VAC，滿載。</li> </ol>				

■ 降額曲線



■ 3-in-1 調光控制(DC/PWM/電阻)

◆ 3-in-1 調光功能說明

(1) 0-100KΩ 電阻調光(Typical):

Resistor	Single-driver	Short	9K	20K	30K	40K	50K	60K	70K	80K	95K	100K
	Multi-driver	Short/N	9K/N	20K/N	30K/N	40K/N	50K/N	60K/N	70K/N	80K/N	95K/N	100K/N
Vout Duty Cycle (%)		0%	2%	14.5%	25.9%	37.3%	48.7%	60.1%	71.5%	82.9%	100%	100%

※ The length of extended wire for DIM+/- shall not exceed 20 meters. (Wire ≤ 20m)

※ N=The number of dimmer drivers should not exceed 15. (N ≤ 15)

※ DIM+/- <7K or 7K/N Vout Duty cycle 0%

(2) DC : 0-10V 調光(Typical):

DIM(Voltage)	0V	0.9V	2V	3V	4V	5V	6V	7V	8V	9.5V	10V
Vout Duty Cycle (%)	0%	2%	14.5%	25.9%	37.3%	48.7%	60.1%	71.5%	82.9%	100%	100%

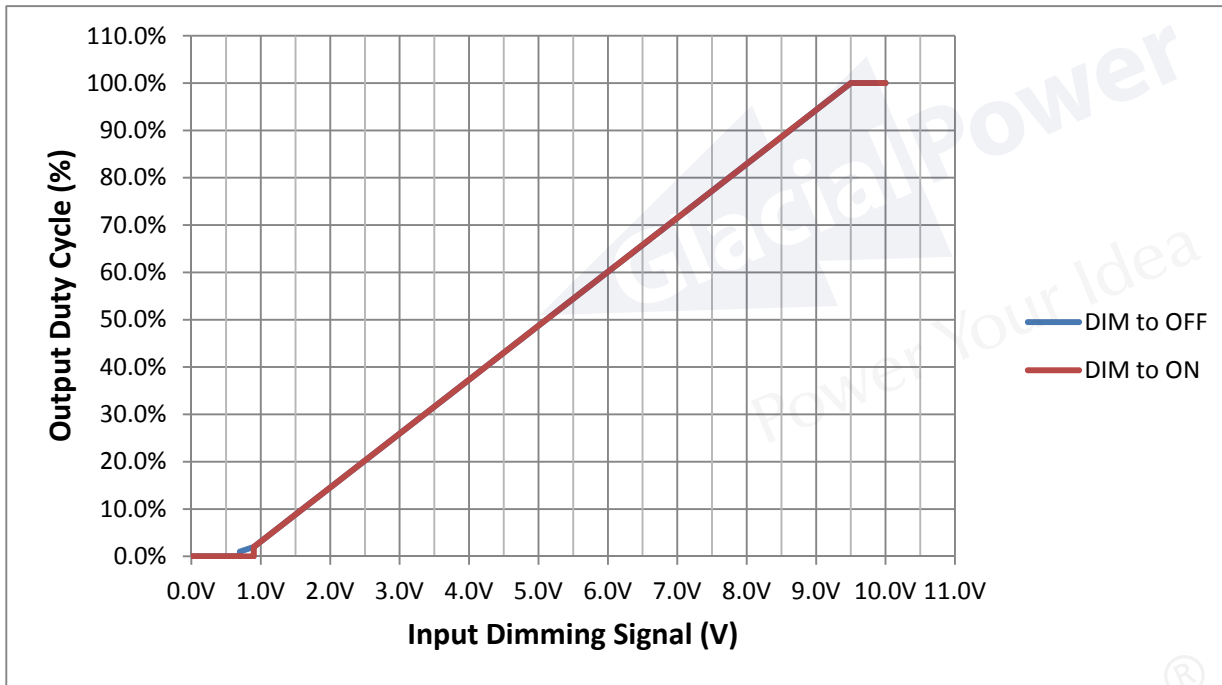
※ DIM+/- <0.7V Vout Duty Cycle 0%

(3) 10V / PWM 調光(Typical):

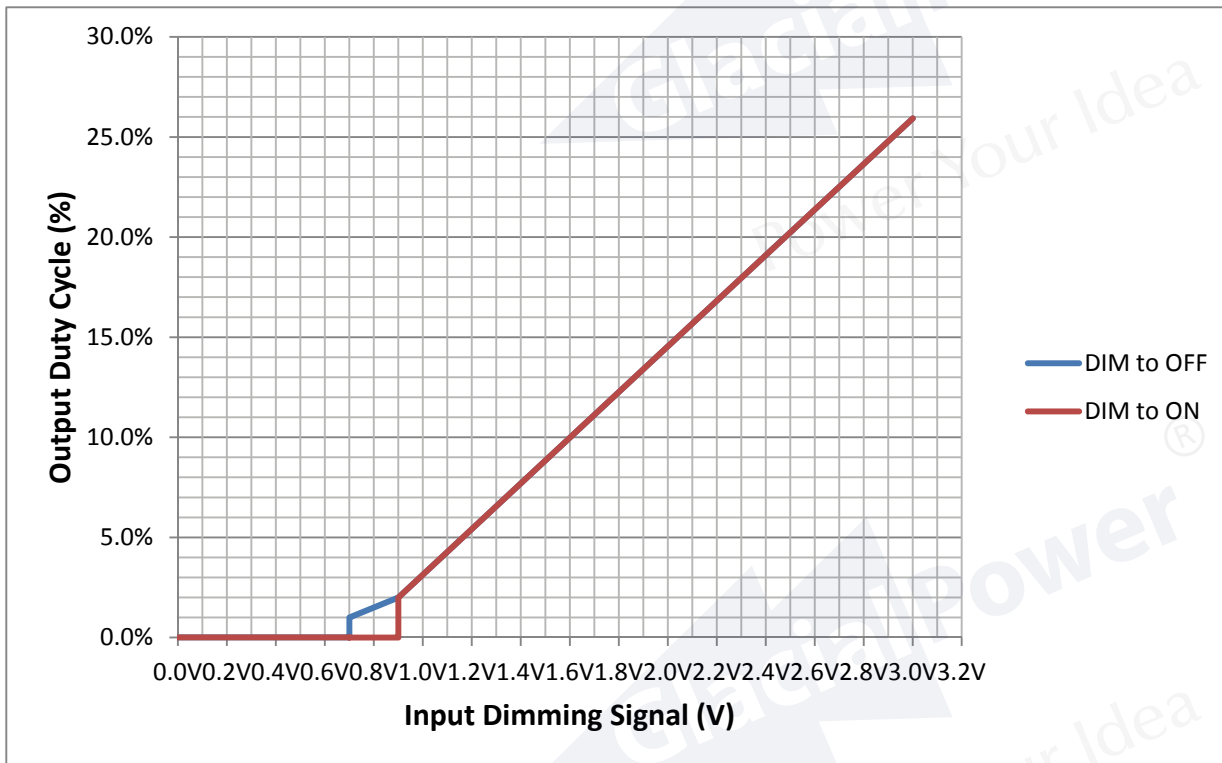
DIM(10V/PWM Duty)	0%	9%	20%	30%	40%	50%	60%	70%	80%	95%	100%
Vout Duty Cycle (%)	0%	2%	14.5%	25.9%	37.3%	48.7%	60.1%	71.5%	82.9%	100%	100%

※ DIM+/- <7% Vout Duty Cycle 0%

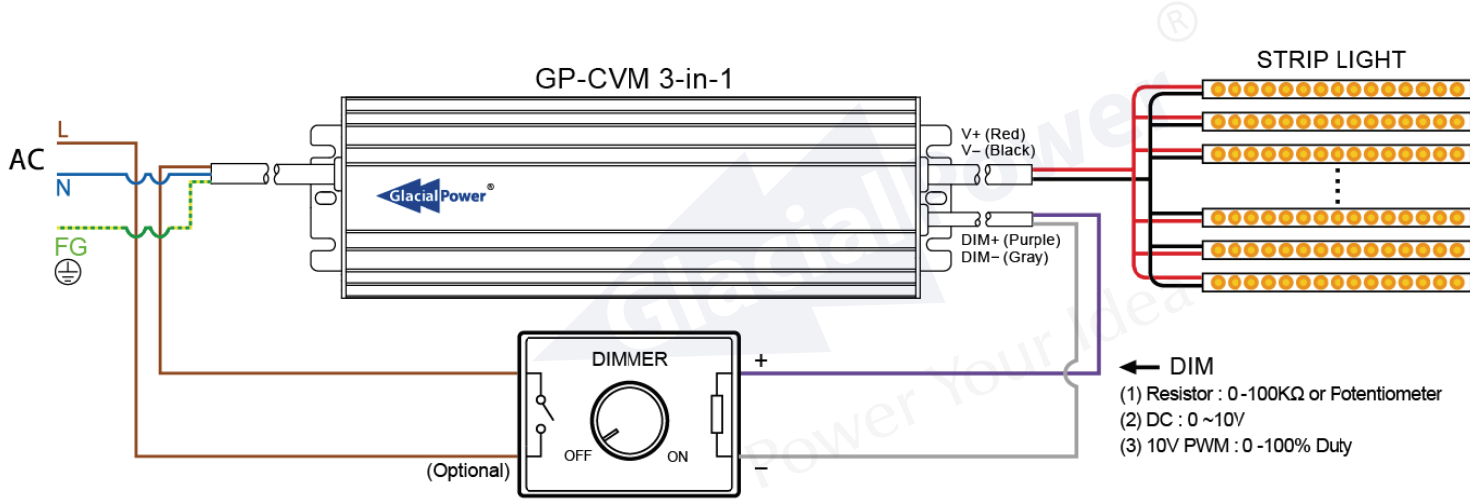
◆調光曲線



◆調光曲線(Enlarge)



◆ 接線圖



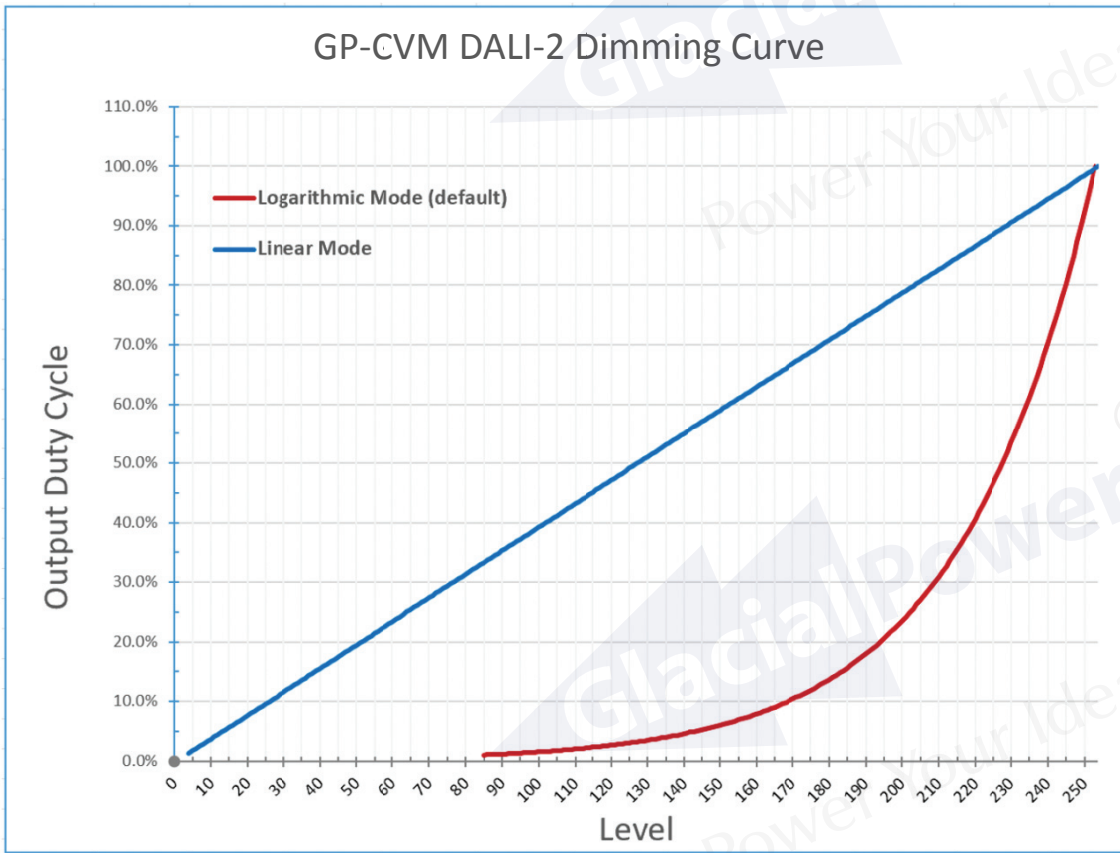
■ DALI 界面

◆ DALI 功能說明

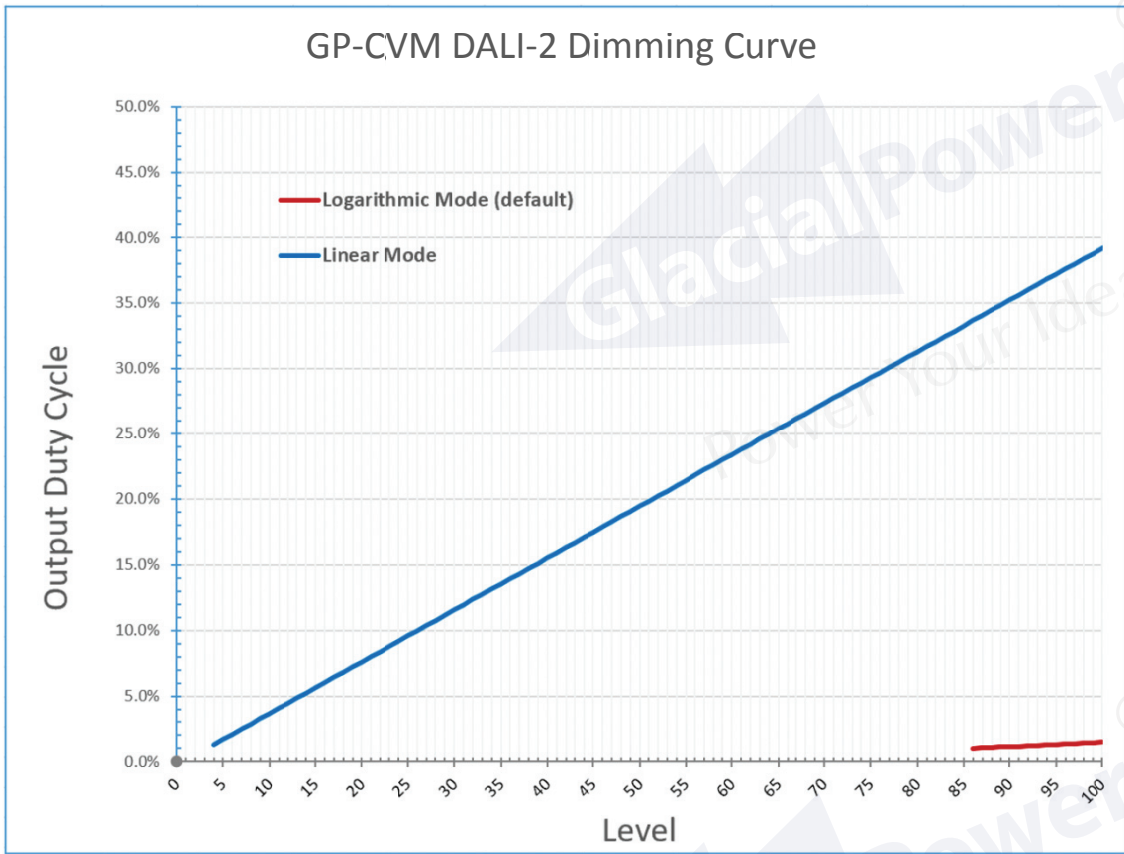
(1) Apply DALI signal between DA wires

(2) First step is fixed at 1% of output

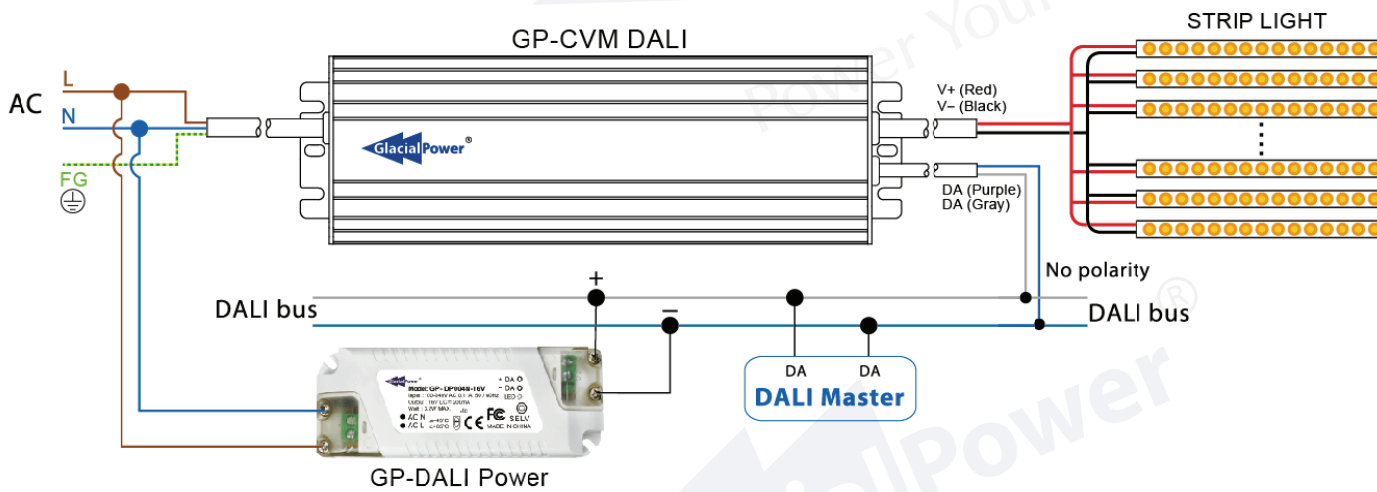
(3) Dimming Curve



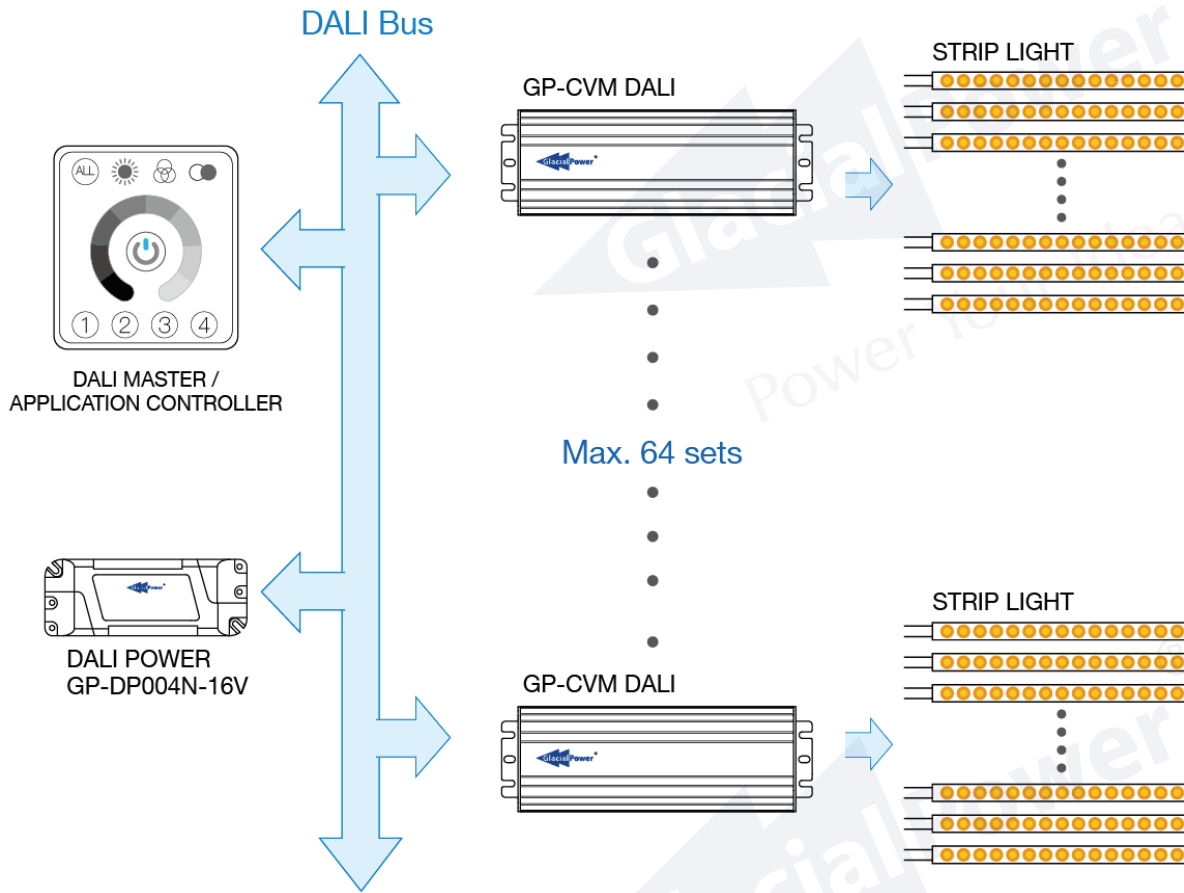
**Dimming Curve (Enlarge)**



**(4) Wiring Diagram**

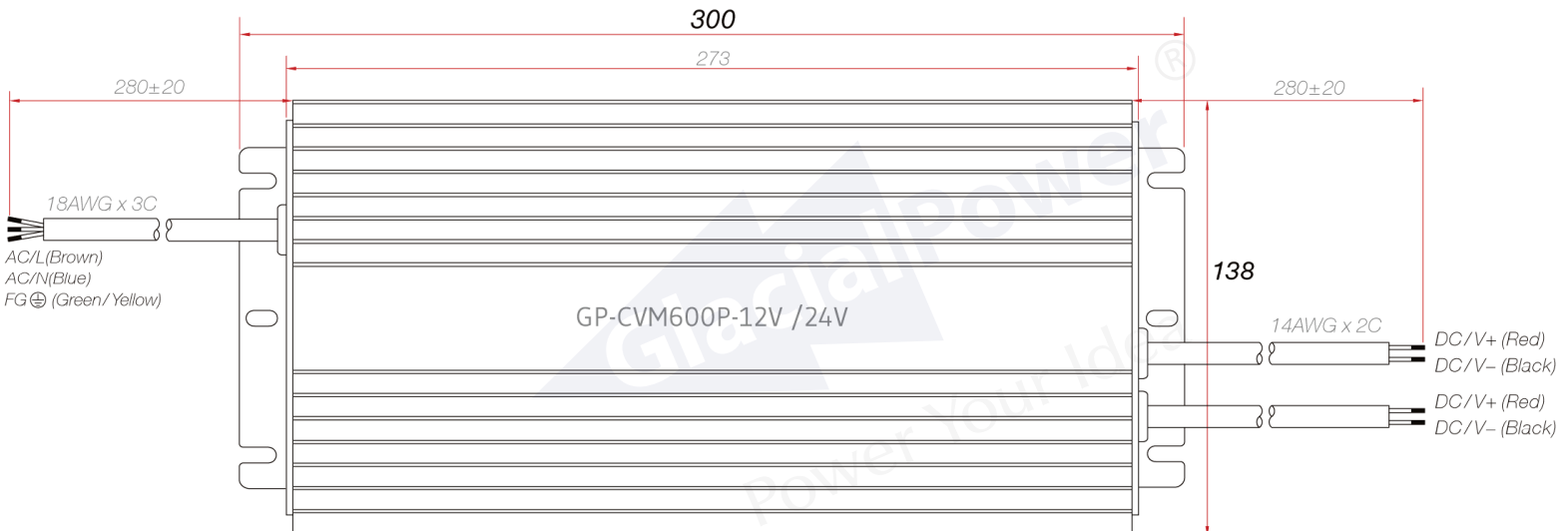


(5) Application Diagram



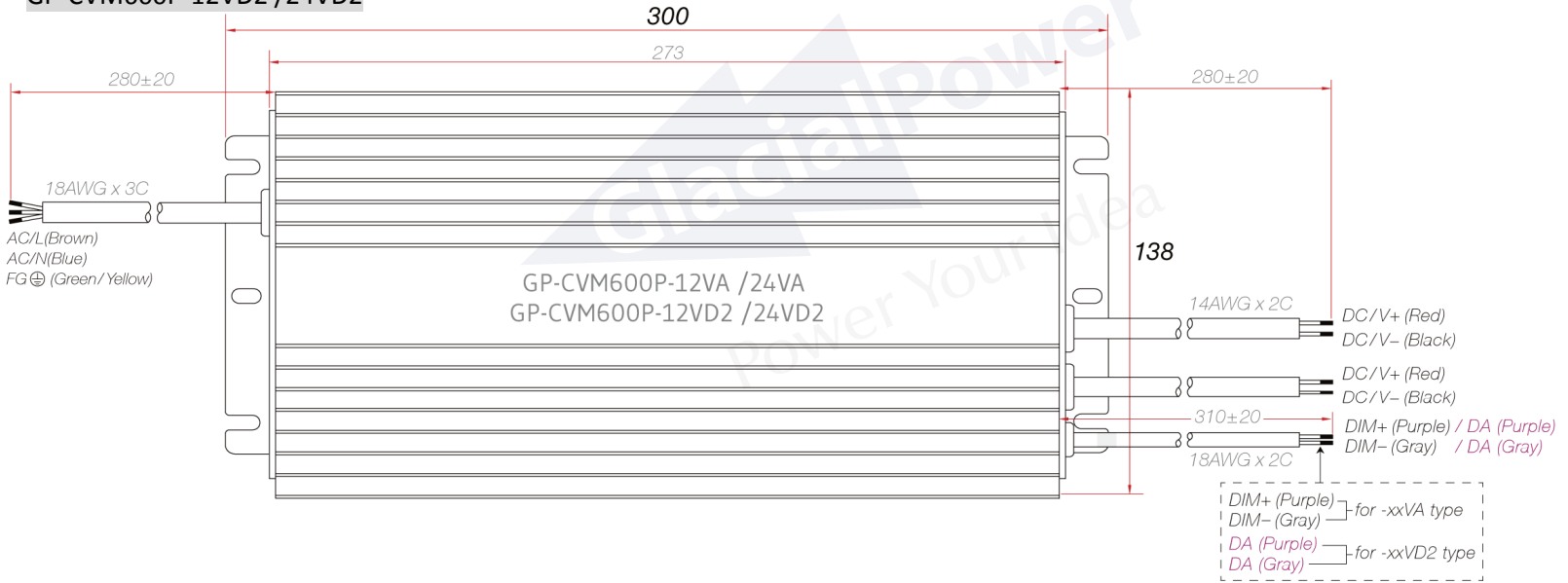
■ 產品(規格)尺寸

GP-CVM600P-12V/24V



■ 產品(規格)尺寸

GP-CVM600P-12VA /24VA  
GP-CVM600P-12VD2 /24VD2



GP-CVM600P-12V/24V



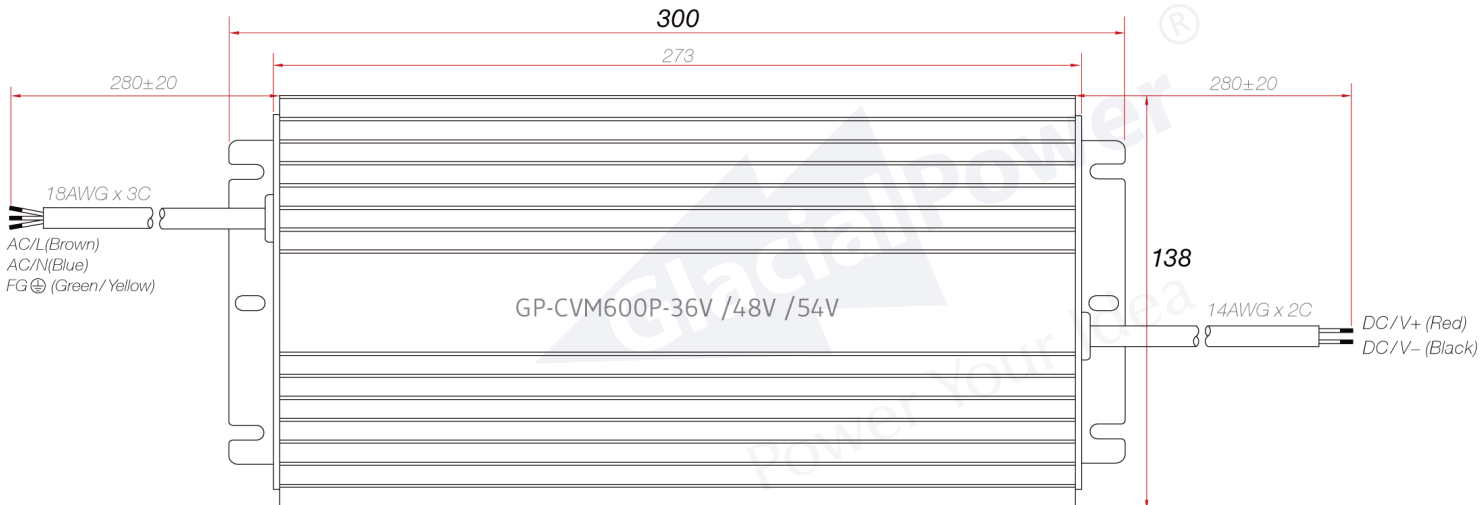
GP-CVM600P-12VA/24VA



GP-CVM600P-12VD2/24VD2

■ 產品(規格)尺寸

GP-CVM600P-36V /48V /54V

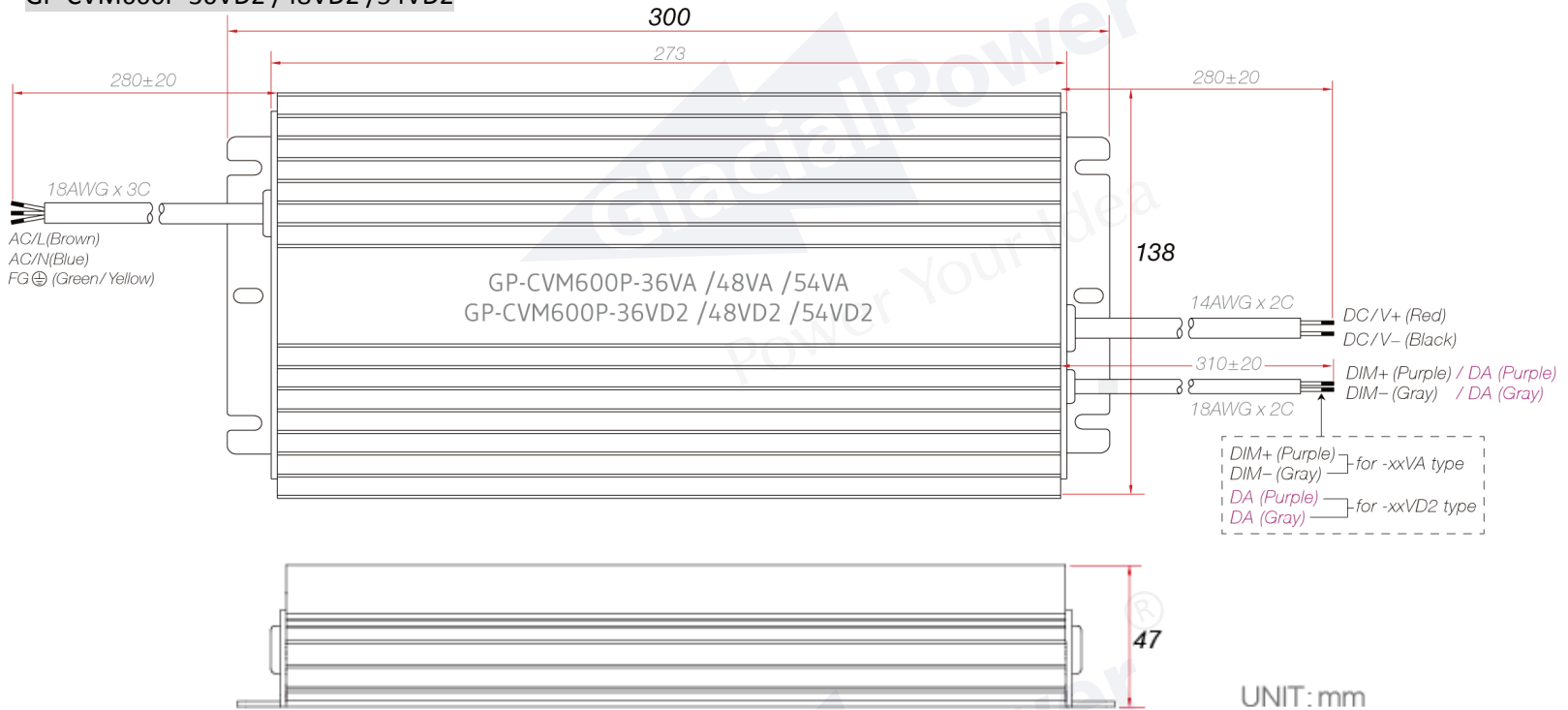




### ■ 產品(規格)尺寸

GP-CVM600P-36VA /48VA /54VA

GP-CVM600P-36VD2 /48VD2 /54VD2



GP-CVM600P-36V/ 48V/ 54V



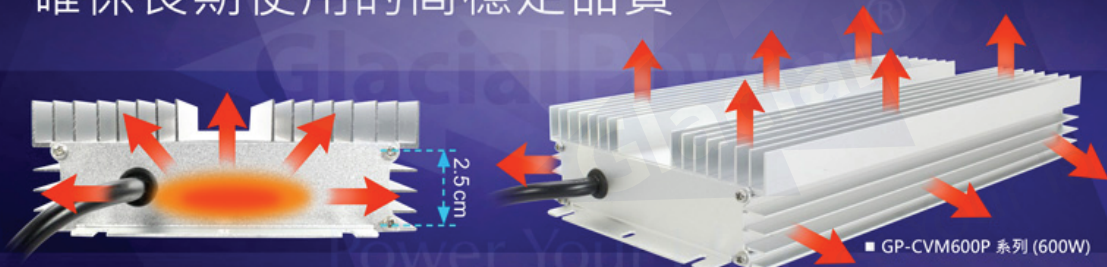
GP-CVM600P-36VA/ 48VA/ 54VA



GP-CVM600P-36VD2/ 48VD2/ 54VD2

### ■ 散熱設計

GP-CVM LED 驅動電源，高散熱設計的原理  
確保長期使用的高穩定品質



極低高度設計 –  
快速將內部的熱傳導到  
外部四周的鋁殼進行散熱

大面積散熱設計 –  
將鋁殼的熱快速釋放到  
外圍的空氣中