

Model: GP-HS60P-42CA2

Features

- Universal AC Input 90 ~ 305VAC.
- Constant Current Operation.
- Suitable for High Brightness LED products.
- Built-in Active PFC Function.
- Protections: OVP / OCP / SCP / OTP.
- Built-in 3 in 1 Dimming Function.
- Class II/2 Power.
- IP67 Class.
- THD < 20% at 230VAC.
- Meet Application for ErP EU_1194_2012,Stage 3.
- No Load Consumption < 0.5W.
- Set up Time < 0.5 Sec at 230VAC.

Approvals



Size

163 * 44.2 * 32.5 mm (L*W*H)



Specifications

Model No.		GP-HS60P-42CA2
Output	DC Voltage	42V
	Constant Current Region (Note4)	28 ~ 42V
	Rated Current	1.2A
	Current Tolerance	± 5%
	Rated Power	50.4W
	Ripple & Noise (Max.)	250mV
	Efficiency at 240VAC(Typ.)	87%
	Voltage Tolerance	-1% ~ +5%
	DC Dimming	DC 0-10V or Electronic Potentiometer 0-10V
	PWM Dimming	Puls:Hi=10V Low=0V, Duty: 0%~100%, Fsw 0.5-3KHz
	Resistance Dimming	0KΩ~100KΩ
	Set up time (Max.)	< 0.5 Sec / 230Vac / full load
	No Load Consumption (Max.)	< 0.5W at 230VAC
	Input	Voltage Range
Rated Voltage		100 ~ 240VAC / 277VAC (for North America Only)
Frequency Range		47 Hz ~ 63 Hz
AC Current (Max.)		0.8A at 100~240VAC/ 0.4A at 277VAC (for North American Only)
Power Factor		≥ 0.98 at 120VAC / ≥ 0.94 at 240VAC/ ≥ 0.92 at 277VAC, at full load
Inrush Current (Max.)		Cold Start 70A at 240VAC
Leakage Current		< 0.5mA / 240VAC
Protections	Over Current	95 ~ 105% rated current. Type: Auto-recovery after fault condition disappeared.
	Short Circuit	Type: Hiccup and recovers after fault condition disappeared.
	Over Voltage	46.2~54.6V Type: Latch mode (Re-power on to recover).
	Over Temperature	RT2: 105 ± 10°C Type: Latch mode (Re-power on to recover).

Environment	Operation Temp.	-30°C ~50°C (Refer derating curve)
	Operation Humidity	20% ~ 90% RH non-condensing.
	Storage Temp.	-40 ~ +60°C
	Storage Humidity	10% ~ 90% RH
	Vibration	10~500 Hz, 2G 10 min./1 cycle, period for 60 min. each along X, Y, Z axes.
Safety & EMC	Safety Standards	EN61347-1, EN61347-2-13 , Independent; IP67 Approved.
	Withstand Voltage	I/P - O/P: 3750VAC
	Isolation Resistance	I/P-O/P:100M ohms / 500VDC at 25°C
	EMI Conduction & Radiation	Compliance to EN55015,FCC part 15
	Harmonic Current	Compliance to EN61000-3-2 Class C,EN61000-3-3
	EMS Immunity	Compliance to EN61000-4-2,3,4,5,6,11; EN61547
Others	MTBF	200K hours min. MIL-HDBK-217F(25°C)
	Dimension(L x W x H)	163 x 44.2 x 32.5mm; 371g/pcs
Note	1. All specifications not specially mentioned are measured at 240VAC and 25°C ambient temperature. 2. Ripple & Noise are measured at 20MHz bandwidth by using a 12" twisted pair-wire terminated with 0.1uf & 10uf parallel capacitor. 3. Voltage Tolerance: includes line regulation, load regulation and set-up tolerance. 4. Constant current operation region is the suitable operation region for LED related applications, but please reconfirms special electrical requirements for some specific system design. 5. Please refer to derating curve.	

3 in 1 Dimming Control (DC/ PWM/ Resistance)

3 in 1 Dimmable Function Description

(1) 0-100KΩ Resistance Dimmable (Typical):

Resistor	Single-driver	Short	10K	20K	30K	40K	50K	60K	70K	80K	90K	100K
	Multi-driver	Short/N	10K/N	20K/N	30K/N	40K/N	50K/N	60K/N	70K/N	80K/N	90K/N	100K/N
Iout (%)		0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	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 Iout 0%

(2)DC: 0-10V Dimmable (Typical):

DIM(Voltage)	0V	1V	2V	3V	4V	5V	6V	7V	8V	9V	10V
Iout (%)	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

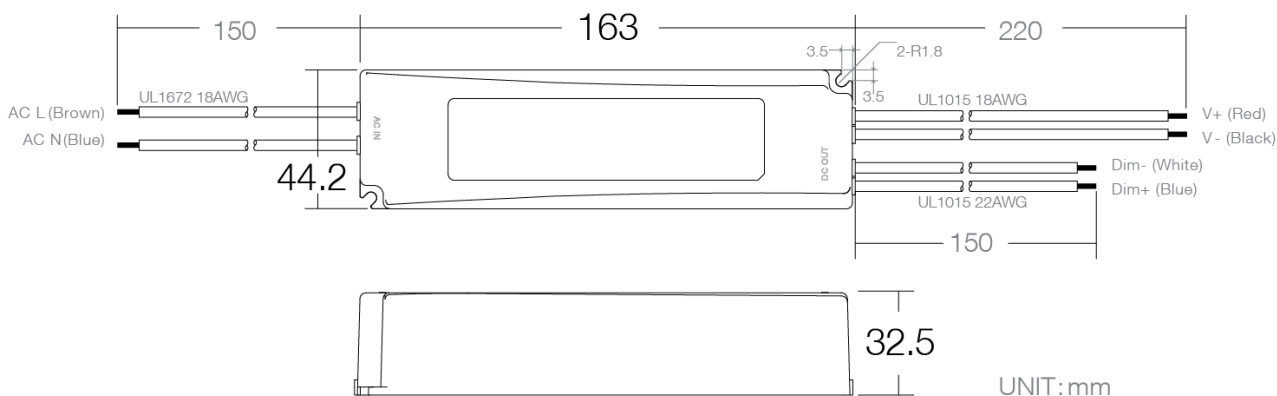
- ※ DIM+/- <0.7V Iout 0%

(3)10V / PWM Dimmable (Typical):

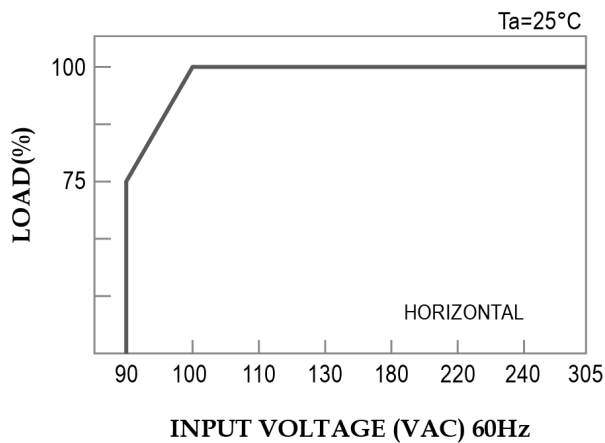
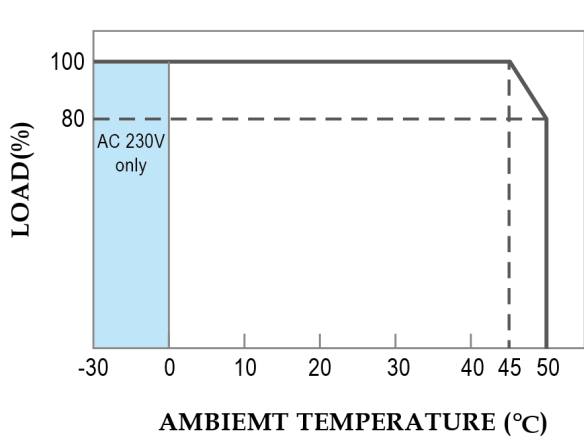
DIM(10V/PWM Duty)	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Iout (%)	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

- ※ DIM+/- <7% Iout 0%

Mechanical Specification



Derating Curve



3 in 1 Dimming Control

