

# Model: GP-HS10P-24CA1 (3-in-1 Dimming)

#### **Features**

- Universal AC Input 90~264VAC.
- Constant Current Design.
- For High Brightness Light-Emitting Diode Products.
- Fully Isolated Plastic Case.
- Built-in 3-in-1 Dimming Design.
- Operation from -20°C ~60°C Full Load.
- Protections: OTP / SCP.
- Class II Power Design Without Earth Pin.
- IP67 Class.
- Output Loading

### **Approvals**

**CEF©**IP67



### <u>Size</u>

110 \* 35 \* 25 mm (L\*W\*H)



### **Specifications**

Model No.		GP-HS10P-24CA1						
	DC Voltage	24V						
	Rated Current Range	350mA						
	Rated Max. Power	8.4W						
	Efficiency	80%						
Output	DC Voltage Range	14 ~ 24V						
Output	Current Tolerance	±5%						
	DC Dimming	DC 1-10V or Electronic Potentiometer 1-10V						
	PWM Dimming	Puls:Hi=10V Low=0V, Duty:0%~100%, Fsw 0.5-3KHZ						
	Resistance Dimming	10ΚΩ~100ΚΩ						
	Set up Time (Max)	<2000ms at full load						
	Voltage Range	90VAC ~ 264VAC						
	Frequency Range	47 Hz ~ 63 Hz						
	Power Factor	>0.90 at 130\/AC >0.9 at 340\/AC						
Input	Correction	$\geq$ 0.88 at 120VAC , $\geq$ 0.8 at 240VAC						
	AC Current	0.25A at 120VAC , 0.13A at 240VAC						
	Inrush Current	11A at 115VAC, 15A at 230VAC						
	Leakage Current	<0.25mA at 230VAC						
Protections	Over Temperature	Tc : 95°C ±10°C; Type : Hiccup Mode						
Protections	Short Circuit	Type : Hiccup Mode						
	Operation Temp.	-20°C ~50°C full load. (Refer to output load derating curve)						
	Operation Humidity	20% ~ 95% RH non-condensing.						
Environment	Storage Temp.	-40 ~ +80°C						
	Storage Humidity	10% ~ 95% RH						
	Vibration	10 ~ 500 Hz, 2G 10 min. / 1 cycle, period for 60 min. each along X, Y, Z axes.						
	Safety Standards	meet EN61347-1,EN61347-2-13						
	Withstand Voltage	I/P - O/P: 3.75 KVAC						
Safaty & EMC	Isolation Resistance	I/P-O/P : 100m ohms / 500VDC at 25°C.						
Safety & EMC	EMI Conduction &	most ENEE01E						
	Radiation	meet EN55015						
	EMS Immunity	meet EN61000-4-2, 3, 4, 5, 6, 8, 11						





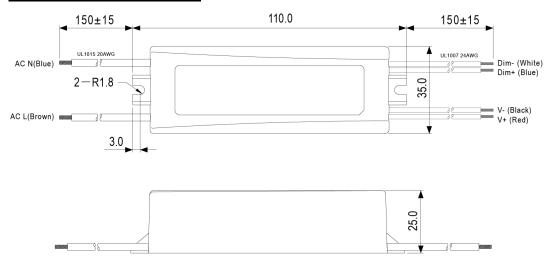




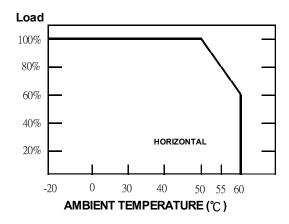


	MTBF 200K hours min.MIL-HDBK-217F(25°C)								
	Dimension(L x W x H)	110 x 35 x 25mm; 132.2g/pcs							
	1. All parameters NOT specially mentioned are measured at 240VAC input, rated load and 25°C ambient								
Others	temperature.								
	2. Ripple & noise are measured at 20MHZ bandwidth oscilloscope and with 0.1uf & 47uf parallel capacitor.								
	3. The power supply is considered a component which will be installed a final equipment. The final								
	equipment must be re-confirmed that it still meets EMC directives.								

# **Mechanical Specification**



### **Derating Curve**



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

#### 3 in 1 Dimmable Function Description

#### (1) 10-100KΩ Resistance Dimmable (Typical):

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

- % The length of extended wire for DIM+/- shall not exceed 20 meters. (Wire  $\leq$  20m)
- ightharpoonup N= The number of dimmer drivers should not exceed 15.(N  $\leq$  15)













# (2)DC: 1-10V Dimmable (Typical):

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

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

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









