FTPC100V-ZIGBEE series

100W LED Switching Power Supply (CV) with ZIGBEE protocol

■**Features:**

• Constant voltage design

• Protections: Short circuit / Overload / Over temperature

• Cooling by free air convection

• Compliance to worldwide regulations for lighting

• Suitable to Zigbee Home Automation 1.2 Protocol

◎ *ELECTRICAL SPECIFICATION*

MODEL	FTPC100V24-ZIGBEE
OUTPUT	
Rated Voltage	24V
Rated Current	4.17A
Current Range	0 ÷ 4.17A
Maximum current for one output [6]	3A
Number of outputs	4
Rated Power	100W
No Output Voltage (max.)	25.2V
Line Reglation	± 1%
Load Reglation	± 1%
Voltage Tolerance [3]	± 3%
Ripple & Noise (max.) [2]	250mV$_{P-P}$
Setup, Rise Time [4]	500ms, 100ms / 230VAC at full load
Hold up Time (typ.)	10ms / 230VAC at full load
INPUT	
Voltage Range	180 ÷ 264VAC
Frequency Range	50 ÷ 60Hz
Power Factor (typ.)	PF > 0.9 / 230VAC at full load
Efficiency (typ.)	93%
AC current (typ.)	<0.70A / 230VAC
Inrush current (max.)	<75A / 230VAC(25°C)
No Load Power Consumption (max.)	< 0.21W
PROTECTIONS	
Over Current	Range: 110 ÷ 140%
	Type: hiccup mode. Recovers automatically after fault condition is removed.
Short Circuit	Type: hiccup mode. Recovers automatically after fault condition is removed.
Over Voltage	36V
	Type: shut down output voltage. Re-power on to recovery.
Over Temperature	Range: 110°C ± 10°C
	Type: shut down output voltage. Re-power on to recovery.

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WORKING ENVIRONMENT

Working Temperature	-20°C ÷ +45°C
Working Humidity	45 ÷ 85% RH non-condensing
Storage Temperature and Humidity	-30°C ÷ +70°C, 10 ÷ 95% RH non-condensing

SAFETY AND EMC REGULATIONS

Safety Standards	Compliance to EN61347-1, EN61347-2-13, EN62493
ZIGBEE	Compliance to IEEE802.15.4
EMC Emission	Compliance to EN55015
EMC Immunity	Compliance to EN61547
Harmonic Current	Compliance to EN61000-3-3; EN61000-3-2 class C

OTHERS

Dimensions	219.5 x 56.4 x 16.8mm (L x W x H)
Weight and Packing	0.25kg; 50pcs./box; box dimensions: 31 x 22.5 x 22.5cm
EAN Code	5 902135 133842

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1μF i 47μF parallel capacitor.
3. Tolerance includes set up tolerance, line regulation and load regulation.
4. Setup and rise time is measured from 0 to 90% rated output voltage.
5.Power supply is considered as component not indented to apply by end-user. Power supply meets safety and EMC standards however the final equipment with power supply must be re-quality to comply with EMC Directives.
6. The total current on all outputs must not exceed the maximum output current of the PSU

Dimming Operation

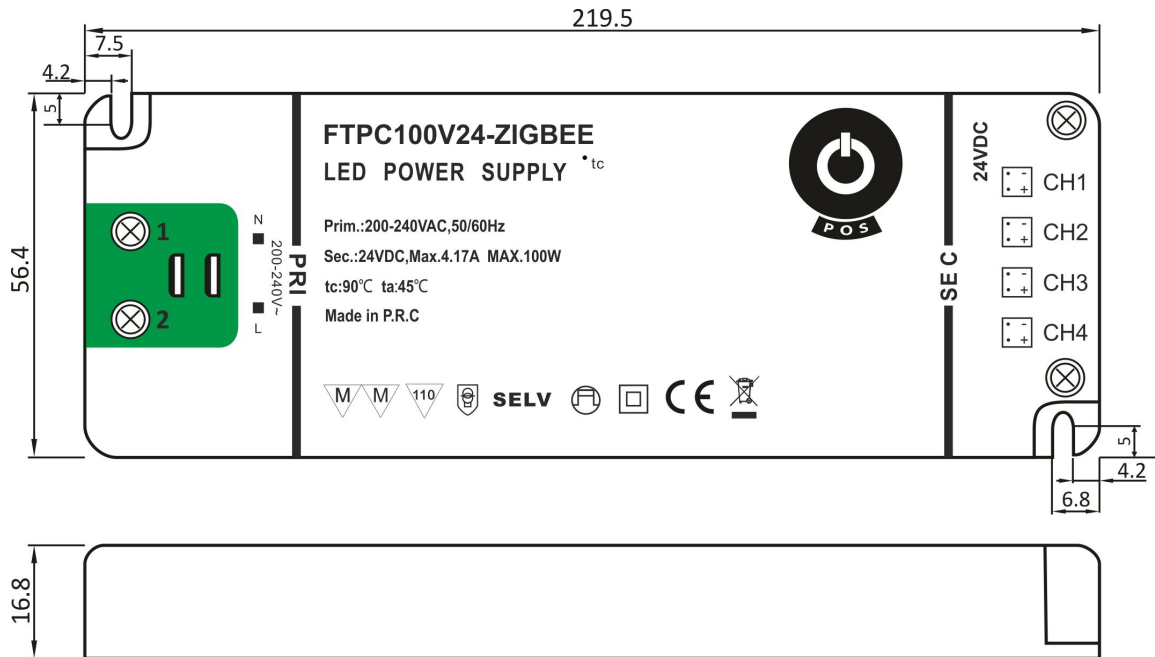|		
Zigbee protocol	Zigbee Home automation 1.2	Type: Zigbee,ZigbeePRO,ZigbeeRF4CE,6LoWPAN
Function	ON/OFF	ON:0% to memory status brightness gradient
	Brightness adjustment	1%-100% brightness adjustment
	Memory of the status	After joining the network,power on and restore the status before outage again
	OTA function	Suitable to Zigbee protocol OTA standard
Factory Settings	Turn on,100% brightness	Default unnetworked status,serching the gateway when power on
Non network Stat2	power on but unnetworked, the indicate bulb is flashing	3 times ,one second on light(100% brightness),one second turn off
Join the network indication	Breathing light	100% brightness to 10% gradually, to 100% again,repeated 3 times,keeping 100% brightness finally.
Exit the network indication	Bulb flashing showing exit the network succesfully	3times,one second brightness (100%brightness),one second off
Restore the factory settings	Repeat the status for bulb power on and off	Power on and off 5 times,repeat 5 times,when successful, the bulb begin the indication of exit network
	reset Factory new instruction	The gateway sends Factory new instruction and exit network instruction,when successful,the bulb indicates to exit network
When OFF status, the bulb power on and bright, restore the last memorial brightness		

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◎ MECHANICAL SPECIFICATION

PIN ASSIGNMENT	
No.	**Assignment**
1	Input: AC/N
2	Input: AC/L