Before you turn on your security system, you have to turn your power up and *FingerTec* recommends the CE-certified PW12V Switch Mode Power Supply, the most essential and reliable item to power up your security system. This power supply helps to secure your premises and ensure your access control system is always on safe and/or power on mode.

PW12V's switching power supply has a universal power input range (from AC110 to 240) to ensure suitability for all power sources around the world. Switching between AC current to a more stable DC power is also hassle-free. To achieve zero down time and power failure, PW12V comes with a second power output port that charges your 12VDC rechargeable backup battery while the battery powers up the access control system during an emergency.

With its lightweight, compact size and extra short circuit & overload protection feature, PW12V is perfectly ideal to power up *FingerTec H3i*, *s-Kadex* and *Ingressus controllers*.

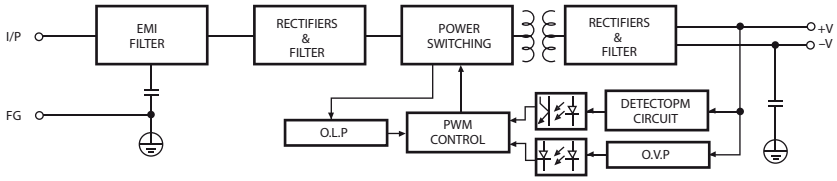
BENEFITS

- Universal power input for global compatibility
- Integration protection to prolong life span
- Sufficient power output to charge 12VDC rechargeable backup battery
- Highly efficient power conversion and low operation temperature
- 100% full load burn-in test to prove its reliability
- Lightweight, compact size for easy installations
- Maintain switching frequency at 45kHz
- CE-certified to ensure quality and safety of use

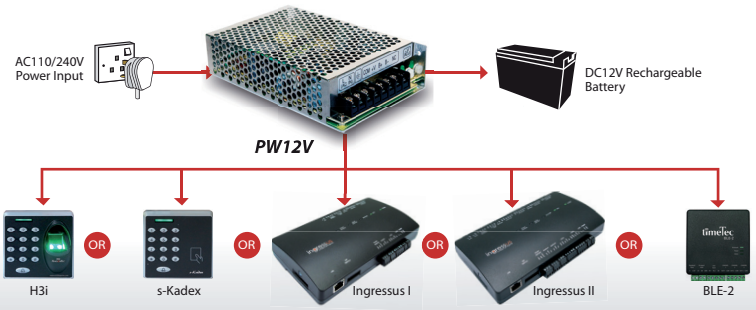
1 YEAR LIMITED WARRANTY
15 Months for Resellers

LAYOUT PLAN

Circuit Diagram: The circuit design of PW12V



PW12V with Power Source and Load



SPECIFICATIONS

OUTPUT	**OUTPUT NUMBER**	**OUTPUT TO FINGERTEC DEVICES**	**OUTPUT TO RECHARGEABLE BATTERY**
	DC VOLTAGE	13.8V	13.4V
	RATED CURRENT	3.5A	0.23A
	CURRENT RANGE	0 ~ 4A	N/A
	RIPPLE & NOISE (max.) Note.2	100mVp-p	N/A
	VOLTAGE ADJ. RANGE	CH1: 12 ~ 14.5V	
	VOLTAGE TOLERANCE Note.3	+/- 1.0%	N/A
	LINE REGULATION	+/- 0.5%	N/A
	LOAD REGULATION	+/- 0.5%	N/A
	SETUP, RISE TIME	800ms, 50ms/230VAC 1600ms, 50ms/115VAC at full load	
	HOLD UP TIME (Typ.)	80ms/230VAC 16ms/115VAC at full load	
INPUT	VOLTAGE RANGE	88 ~ 264VAC	124 ~ 370VDC
	FREQUENCY RANGE	47 ~ 63Hz	
	EFFICIENCY (Typ.)	71%	
	AC CURRENT (Typ.)	1.6A/115VAC	1A/230VAC
	INRUSH CURRENT (Typ.)	COLD START 20A/115VAC	40A/230VAC
	LEAKAGE CURRENT	<1mA / 240VAC	
PROTECTION	OVERLOAD	105 ~ 150% rated output power	
		Protection type : AC Charging Mode : Hiccup mode, recovers automatically after faulty condition is removed UPS Mode : Protected by internal fuse	
	OVER VOLTAGE	CH1:15.87 ~ 18.63V	
		Protection type : Hiccup mode, recovers automatically after faulty condition is removed	
	LOW BATTERY	9.5 ~ 11V	
FUNCTION	DC ALARM SIGNAL (OPTIONAL)	AC fail CN1 PIN2	
		Battery low under charge voltage 82.5% 2% CN1 PIN1	
		Normal 0.8V max. Abnormal 5V 0.5V	
ENVIRONMENT	WORKING TEMP.	-10 ~ +60C (Refer to "Derating Curve")	
	WORKING HUMIDITY	20 ~ 90% RH non-condensing	
	STORAGE TEMP., HUMIDITY	-20 ~ +85C , 10 ~ 95% RH	
	TEMP. COEFFICIENT	+/- 0.03%/C (0~50) on CH1 output	
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes	
	SAFETY STANDARDS	UL60950-1, TUV EN60950-1 approved	
SAFETY & EMC (Note 4)	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC	
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25C / 70% RH	
	EMC EMISSION	Compliance to EN55022 (CISPR22) Class B, EN61000-3-2,-3	
OTHERS	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, light industry level, criteria A	
	MTBF	304.3K hrs min. MIL-HDBK-217F (25C)	
	DIMENSION	159*97*38mm (L*W*H)	
	PACKING	0.5Kg; 24pcs/12.6Kg/0.75CUFT	

NOTE:

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
3. Tolerance: includes set up tolerance, line regulation and load regulation.
4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to .EMI testing of component power supplies..

Authorized Reseller:

FINGERTEC
www.fingertec.com