



# 350W Single Output Industrial type Switching Power Supply **INES-350 series**



## ■ Features :

- For only industrial type Switching Power Supply
- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage
- 100% full load burn-in test
- 2 years warranty

## CLASS A

**WARNING:** Operation of this equipment in a residential environment could cause radio interference.

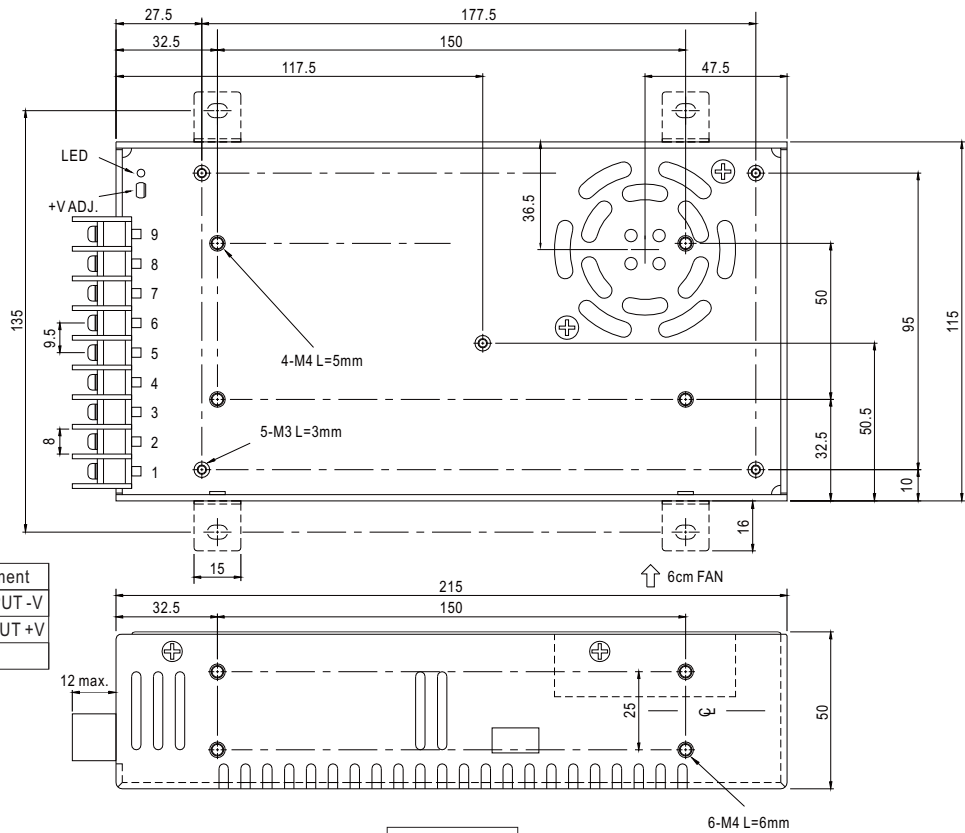
## SPECIFICATION

MODEL	INES-350-3.3	INES-350-5	INES-350-7.5	INES-350-12	INES-350-15	INES-350-24	INES-350-27	INES-350-36	INES-350-48		
OUTPUT	DC VOLTAGE	3.3V	5V	7.5V	12V	15V	24V	27V	36V	48V	
	RATED CURRENT	60A	60A	46A	29A	23.2A	14.6A	13A	9.7A	7.3A	
	CURRENT RANGE	0 ~ 60A	0 ~ 60A	0 ~ 46A	0 ~ 29A	0 ~ 23.2A	0 ~ 14.6A	0 ~ 13A	0 ~ 9.7A	0 ~ 7.3A	
	RATED POWER	198W	300W	345W	348W	348W	350.4W	351W	349.2W	350.4W	
	RIPPLE & NOISE (max.) Note.2	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	200mVp-p	240mVp-p	240mVp-p	
	VOLTAGE ADJ. RANGE	2.97 ~ 3.7V	4.5 ~ 5.6V	6 ~ 9V	10 ~ 13.5V	13.5 ~ 18V	20 ~ 26.4V	26 ~ 32V	32~40V	41 ~ 56V	
	VOLTAGE TOLERANCE Note.3	+3%,-4.5%	±3.0%	±2.0%	±1.5%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
	LOAD REGULATION	±2.5%	±2.0%	±2.0%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
	SETUP, RISE TIME	1000ms, 50ms/230VAC    1000ms,50ms/115VAC at full load									
HOLD UP TIME (Typ.)	20ms/230VAC    16ms/115VAC at full load										
INPUT	VOLTAGE RANGE Note.4	90 ~ 132VAC / 180 ~ 264VAC by switch    254 ~ 370VDC									
	FREQUENCY RANGE	47 ~ 63Hz									
	EFFICIENCY (Typ.)	74%	78%	80%	83%	84%	87%	88%	87.5%	87.5%	
	AC CURRENT (Typ.)	7A/115VAC		4A/230VAC							
	INRUSH CURRENT (Typ.)	40A/115VAC		60A/230VAC							
	LEAKAGE CURRENT	<3.5mA / 240VAC									
PROTECTION	OVER LOAD	105 ~ 135% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed									
	OVER VOLTAGE	3.8 ~ 4.6V	5.75 ~ 7.5V	9.4 ~ 11.25V	13.8 ~ 16.2V	18 ~ 21V	27.6 ~ 32.4V	33.7 ~ 39.2V	41.4~46.8V	57.6 ~ 67.2V	
	OVER TEMPERATURE	90°C ±5°C (3.3~7.5V); 85°C ±5°C (12~15V); 80°C ±5°C (24V); 75°C ±5°C (27~48V) (TSW1) Detect on case Protection type : Shut down O/P voltage, recovers automatically after temperature goes down									
FUNCTION	FAN ON/OFF CONTROL(Typ.)	RTH2 ≥ 50°C FAN ON, ≤ 45°C FAN OFF (3.3 ~ 7.5V) RTH2 ≥ 55°C FAN ON, ≤ 50°C FAN OFF (12 ~ 48V)									
	WORKING TEMP.	-20 ~ +60°C (Refer to output load derating curve)									
ENVIRONMENT	WORKING HUMIDITY	20 ~ 90% RH non-condensing									
	STORAGE TEMP., HUMIDITY	-20 ~ +85°C, 10 ~ 95% RH									
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)									
	VIBRATION	10 ~ 500Hz, 3G 10min./1cycle, 60min. each along X, Y, Z axes									



**Mechanical Specification**

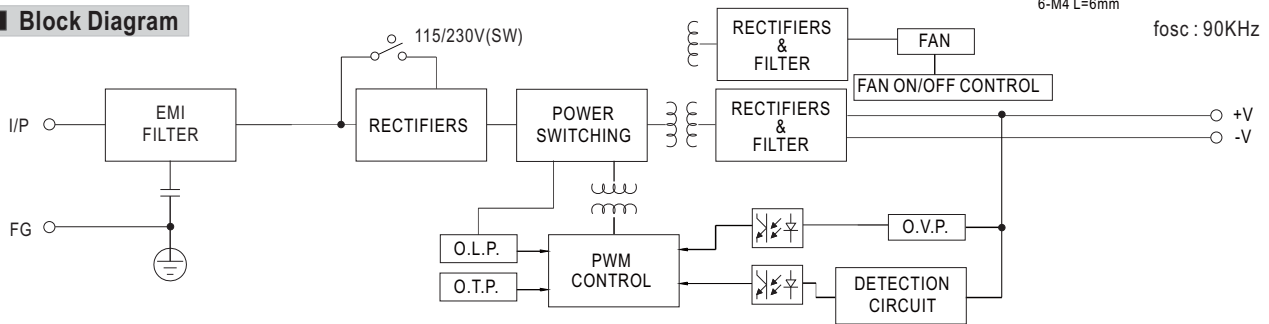
Case No. 912C Unit:mm



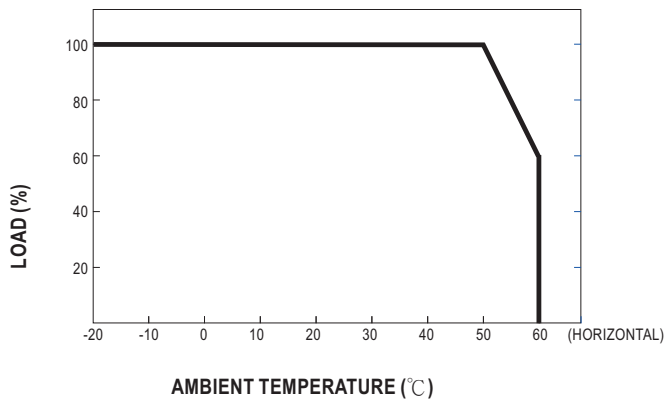
Terminal Pin No. assignment :

Pin No.	Assignment	Pin No.	Assignment
1	AC/L	4~6	DC OUTPUT -V
2	AC/N	7~9	DC OUTPUT +V
3	FG $\perp$		

**Block Diagram**



**Derating Curve**



**Static Characteristics**

