# OPS3x5-350 OPEN FRAME POWER SUPPLIES - SELEC



## Features :

- 5 x 3 x 1.16 Inches Form factor
- 350 Watts with Forced Air Cooling & 200 Watts Convection Cooling
- No Load Power < 0.5W
- -40°C to +70°C Operating Temperature
- 12V/0.5A Fan Output, Thermal Shut-Down feature
- Efficiencies up to 93 %
- Remote Inhibit available
- Designed to meet IEC/ UL 62368-1 and IEC/ EN 60601-1

MODEL		OPS3x5-350-12	OPS3x5-350-15	OPS3x5-350-24	OPS3x5-350-48	
	NOMINAL DC VOLTAGE	12V	15V	24V	48V	
	RATED CURRENT (CONVECTION)	16.67A	13.33A	8.33A	4.17A	
	RATED CURRENT (FORCED AIR)	29.17A	23.33A	14.58A	7.29A	
	RATED POWER (CONVECTION)	200W	200W	200W	200W	
	RATED POWER (FORCED AIR)	350W	350W	350W	350W	
	RIPPLE & NOISE (max)	<1% of Vout	<1% of Vout	<1% of Vout	<1% of Vout	
	VOLTAGE ADJ. RANGE	12 to 14 V	15 to 17.5 V	24 to 28 V	48 to 56 V	
OUTPUT	VOLTAGE TOLERANCE	± 1 %				
	LINE REGULATION	<1% of Vout				
	LOAD REGULATION	±1%				
	TURN ON TIME	<2 sec; at full load				
	HOLD UP TIME	>20 mSec at Vomin & >10 mSec at Vomax @ 115/230 VAC, Full Load				
	RISE TIME	<100 ms				
	FAN OUTPUT	A 12V, 0.5A output is available on a 2 pin connector header				
	VOLTAGE RANGE	90 - 264V AC (127 - 370V DC), <b>Note</b> : Can work up to 305 V AC				
	FREQUENCY RANGE	50/60 Hz				
	EFFICIENCY @ 230V AC	Up to 91 %	Up to 91 %	Up to 93 %	Up to 93 %	
	AC CURRENT	3.6A @ 115V AC; 1.8A @ 230V AC				
INPUT	POWER FACTOR	> 0.95 at Full Load over entire input AC voltage range				
	INRUSH CURRENT	<60 Amps; Measured at 264V AC, 25°C Ambient, Cold start				
	LEAKAGE CURRENT	< 300 uA; 264Vac input				
	TOUCH CURRENT	< 100 uA; 264Vac input				
	NO LOAD POWER CONSUMPTION	< 0.5W				
	OVERLOAD	110% to 140% of rated output current; Hiccup type; Autorecovery				
	OVERVOLTAGE	17V DC ±1V DC	20V DC ±1V DC	31.5V DC ±1V DC	61V DC ±2V DC	
PROTECTION	OVERVOLIAGE	Latched type; Input AC power to be recycled to recover the power supply				
	OUTPUT SHORT CIRCUIT	Hiccup mode when output is shorted; Autorecovery type.				
	OVER TEMPERATURE	Power supply shuts down when the temperature of PCB below main transformer reaches typically 120°C; Turns on only after the temperature falls below 90°C typically and AC power is recycled thereafter.				
SIGNALS	REMOTE INHIBIT	Not Available				
ENVIRONMENT	OPERATING TEMP	-40°C to +70°C; De-rate linearly above 50°C from 100% load at 50°C to 50% load at 70°C. Note : Only start up guaranteed at -40°C with spec deterioration.				
	STORAGE TEMP	-40°C to +85°C				
	COOLING	Natural convection cooled or Forced Air cooled as per power requirements.				
	HUMIDITY	5 to 95% RH, Non condensing				
	ALTITUDE	2000m				
	VIBRATION	Component : 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes				

## SPECIFICATIONS:

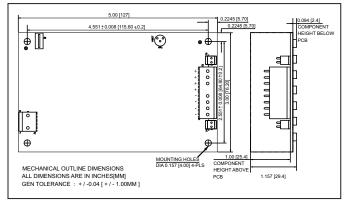
## OPS3x5-350 OPEN FRAME POWER SUPPLIES - SELEC

MODEL		OPS3x5-350-12	OPS3x5-350-15	OPS3x5-350-24	OPS3x5-350-48
	SAFETY STANDARDS	Designed to meet IEC/ UL 62368-1 and IEC/ EN 60601-1.			
	CLASS II OPTION (NO EARTH)	Available			
SAFETY & EMC	DIELECTRIC WITHSTAND VOLTAGE	I/P to Earth : 1500V AC, I/P to O/P : 4000V AC, O/P to Earth : 1500V AC			
	CONDUCTED EMISSION	CISPR22; Class B			
	RADIATED EMISSION	CISPR22; Class A			
	DIMENSION	Overall : 5" x 3" x 1.16" (LxWxH) ; Height above PCB : 1"			
MECHANICAL	WEIGHT	<300 gms			
	MOUNTING	Open Frame			

## **Connectors details**

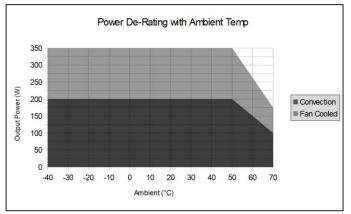
Ref Des	Description	Туре	Pin number	Function
J1	Input AC connector	Molex: 26-60-4030;	1	AC Neutral
		Mates with 09-50-3031;	2	Not connected
		Pin : 08-50-0106	3	AC Live
J2	Output DC connector (option 1)	Molex: 26-60-4080;	1,2,3	V1 positive
		Mates with 09-50-3081;	1,2,3	
		Pin : 08-50-0106	4,5,6	V1 negative
	Output DC connector (option 2)	Screw Terminal with M4 screw.	1	V1 positive
			2	V1 negative
J3	Domoto Inhihit	AMP : 640456-2	1	Ext V positive
	Remote minibit	Remote Inhibit Mates with 640440-2 2	2	Ext V negative
J4	Fan connector	AMP : 640456-2	1	V2 positive
		Mates with 640440-2	2	V2 negative
J5	Earth	Molex : 19705-4301		Earth
		Mates with 19003-0001		Latui

### Mechanical dimensions



**Note** : This open frame power supply should preferably be mounted horizontally on 4 metal stand-offs having diameter not more than 6mm and height not less than 5mm

## **De-rating curve**



## **Ordering information**

Product Code Description		Certification
OPS3x5-350-12-A-1-CU	Open Frame Power Supply with 5 x 3 x 1.16" Form factor, 12V, 25A, 300 Watts with Forced Air Cooling & 12V, 16.67A, 200 Watts Convection Cooling	CUL US In Process
OPS3x5-350-15-A-1-CU	Open Frame Power Supply with 5 x 3 x 1.16" Form factor, 15V, 23.33A, 350 Watts with Forced Air Cooling & 15V, 13.33A, 200 Watts Convection Cooling	c UL US In Process
OPS3x5-350-24-A-1-CU	Open Frame Power Supply with 5 x 3 x 1.16" Form factor, 24V, 14.58A, 350 Watts with Forced Air Cooling & 24V, 8.33A, 200 Watts Convection Cooling	CUL US In Process
OPS3x5-350-48-A-1-CU	Open Frame Power Supply with 5 x 3 x 1.16" Form factor, 48V, 7.29A, 350 Watts with Forced Air Cooling & 48V, 4.17A, 200 Watts Convection Cooling	c UL us In Process