

ESFG-1600 Series

1600 Watt Single Output AC-DC MODULES with PFC

Features

- 1.63" Low Profile
- Universal Single-phase Input: 90 ~ 264Vac
- Active PFC Meets EN61000-3-2
- Conductive EMI Meets CISPR/FCC Class B
- High Efficiency at 89% Typical
- Fan Speed Control Signal
- Standby Voltage -5VDC @ 500mA
- Over Temperature, Over load, and Over Voltage Protection
- N+1 PSU Hot Swap Redundant
- Remote Voltage Sense
- PS ON/OFF Remote Control (Inhibit PSU by Opening the pin)
- Power supply status indicators
- I2C protocol alarms, status, & control
- Connector CN1 : Positronic PCIH47M400A1 or equivalent



SPECIFICATIONS

• Input Characteristics		• Output Characteristics	
AC Input Voltage	90 ~ 264Vac	Total Rated Output Power	1200W (@90-132Vac) 1600W (@180-264Vac)
Frequency	47 to 63Hz	Voltage and Current	See table
Inrush Current	40A Max.	Ripple and Noise	See table
EMI	CISPR/FCC Class B	Voltage Accuracy	See table
Isolation	Input to output = 4242Vdc	Line regulation	See table
Leakage Current	3.5mA max.	Load regulation	See table
• Environmental Characteristics		Current share	single wire current sharing
Operating Temperature	0 ~ 70°C	Adjustment Range on Vout	+10%, -5%



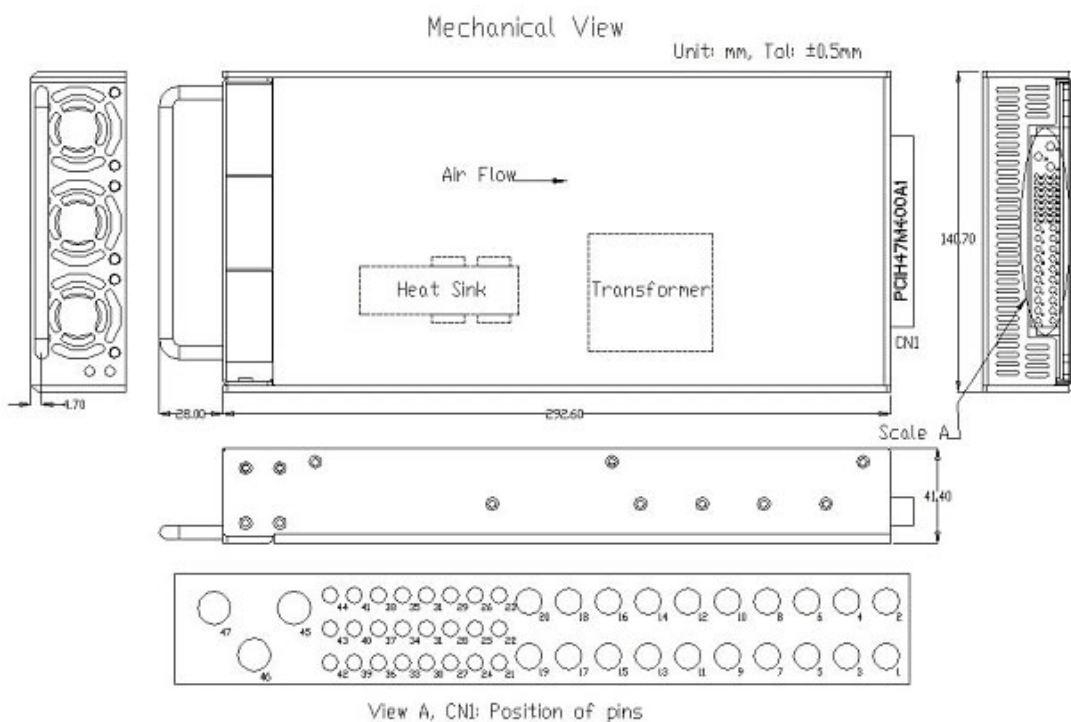
	50~70℃ with 2.5%/℃ derating PSU will be in thermal protection for exceeding the rated power output or the operating temperature	Remote Voltage sense Hole-up Time	compensates for wire voltage drop 20ms typ.
Storage Temperature	-40 ~ 85℃	Over Voltage Protection	Recycle AC input to restart
• Mechanical Outline		Over Temperature Protection	Auto Recovery
41.4mmx140.7mmx292.6mm (1.63"*5.54"*11.52")		Short Circuit Protection	Auto Recovery

TABLE

Model	Output Voltage	Output Current (A)			Ripple & Noise	Voltage Accuracy	Line Reg.	Load Reg.
		Rated@180-264Vac	Rated@90-132Vac	Min.				
ESFG-1600-12	+12V	133.4	100.0	0	1%	±1%	±1%	±1%
ESFG-1600-24	+24V	66.7	50.0	0	1%	±1%	±1%	±1%
ESFG-1600-36	+36V	44.5	33.4	0	1%	±1%	±1%	±1%
ESFG-1600-48	+48V	33.4	25.0	0	1%	±1%	±1%	±1%

Typical @25℃, 230Vac and 60% rated load, unless otherwise specified.

Mechanical Outline





Pin Connection

Pin No.	Assignment	Pin No.	Assignment
1	Reserved	25	ADD GA0
2	Reserved	26	Reserved
3	Reserved	27	Enable (short pin)
4	Reserved	28	ADD GA1
5	Vout Return	29	Reserved
6	Vout Return	30	Reserved
7	Vout Return	31	ADD GA2
8	Vout Return	32	ADJ: Vout Trim Pin
9	Vout Return	33	+Vout Sense
10	Vout Return	34	-Vout Sense
11	Vout Return	35	Reserved
12	Vout Return	36	Reserved
13	Vout	37	FRU SCL
14	Vout	38	Reserved
15	Vout	39	Inhibit
16	Vout	40	FRU SDA
17	Vout	41	Current Share Signal
18	Vout	42	Power_Good Signal
19	Reserved	43	
20	Reserved	44	Reserved
21	+5VSB Output	45	Chassis Ground
22	Signal Return	46	AC Input Neutral
23	Reserved	47	AC Input Line
24	+5VSB Return		



Derating Curve

