

# CFM1600S

**NEW**

1600 WATT SINGLE OUTPUT  
U FRAME AC-DC MODULES  
WITH PFC



## Features

- 1.63" Low Profile
- Universal 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
- +5V Stand-by Output
- N+1 Hot Swap Redundant
- Remote Voltage Sense
- DC OK Signal (Power Good, Logic High)
- PS ON/OFF Remote Control (Inhibit PSU by Opening the pin)

## Specifications

### INPUT CHARACTERISTICS:

AC Input Voltage.....30 – 264Vac  
Frequency.....47 to 63Hz  
Inrush Current.....40A Max.  
EMI.....CISPR/FCC Class B  
Isolation.....Input to output +4,242Vdc  
Leakage Current.....3.5mA max.

### ENVIRONMENTAL CHARACTERISTICS:

Operating Temperature.....0 – 70C  
.....50–70C with 2.5%/C derating  
PSU will be in thermal protection for exceeding the rated power output or the operating temperature  
Storage Temperature.....-40 – 85C

### NOTE:

- 1: Optional functions can be added when ordering:  
AC OK Signal (PS Fail Logic High)  
Signal Communication.
- 2: Add a 0.1uF ceramic capacitor and a 47uF E.L.L. capacitor to output for Ripple & Noise measuring @20MHz BW.
- 3: Voltage accuracy is set at 63% rated load and 25C Ta.

### OUTPUT CHARACTERISTICS:

Total Rated Output Power.....1600W (90-132Vac)  
.....1600W (180-264Vac)  
Current Share.....Single wire current sharing  
Remote Voltage sense.....Compensates for wire voltage drop  
Hold-up Time.....20ms typ.  
Over Voltage Protection.....Recycle AC input to restart.  
Over Temperature Protection.....Auto Recovery  
Short Circuit Protection.....Auto Recovery

### MECHANICAL OUTLINE:

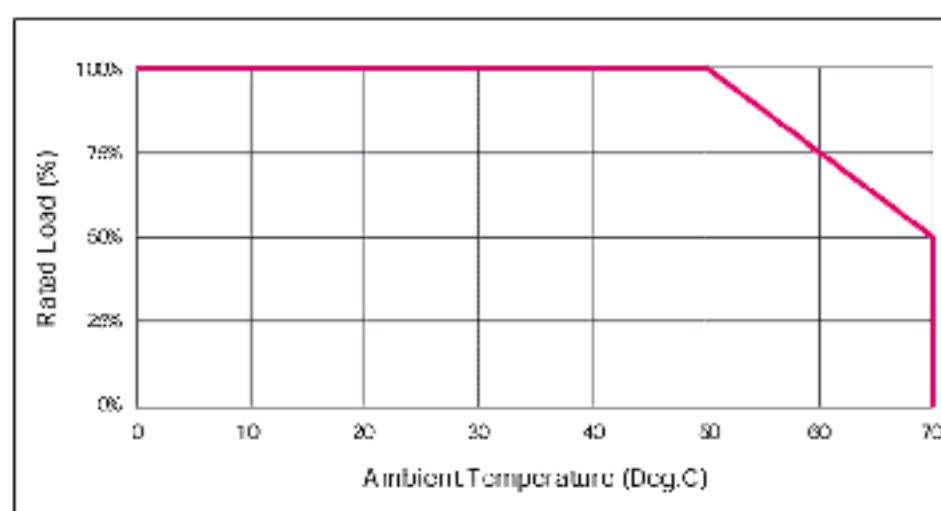
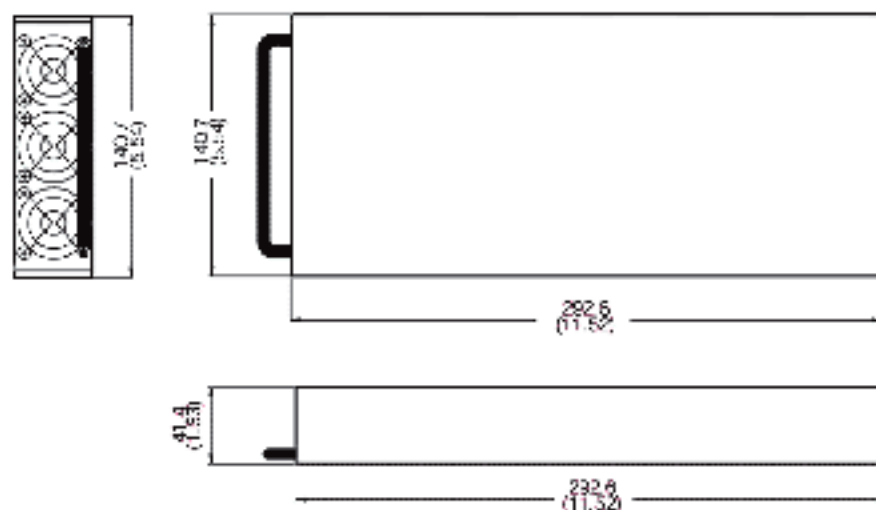
Without Optional Fan.....41.4x140.7x29.6mm  
(1.63" x 5.54" x 1.152")

- a: Line regulation is measured from High line to Low Line with rated load.
- b: Load regulation is measured at 30% & 40% rated load.
- B: Dimensional tolerance: ± 0.1mm.
- 7: Connectors:  
CMT: Pico-10 (PCH/M00A1) or equivalent.

MODEL	Output Voltage	Output Current (A) Rated@ 180-264Vac Rated@ 90-132Vac	Min.	Ripple & Noise	Voltage Accuracy	Line Reg.	Load Reg.
CFM1600S-120	+12V	133.4	0	1%	±1%	±1%	±1%
		100.0					
CFM1600S-240	+24V	66.7	0	1%	±1%	±1%	±1%
		50.0					
CFM1600S-360	+36V	44.5	0	1%	±1%	±1%	±1%
		33.4					
CFM1600S-480	+48V	33.4	0	1%	±1%	±1%	±1%
		25.0					

## Mechanical Specification

All Dimensions are in inches/mm  
Tolerances: ±0.1 (±0.25) unless otherwise noted



### FIN CONNECTION

Pin	Signal Name
1	Reserved
2	Reserved
3	Reserved
4	Reserved
5	Vout (Normal)
6	Vout Return
7	Vout Return
8	Vout Return
9	Vout Return
10	Vout Return
11	Vout Return
12	Vout Return
13	Vout
14	Vout
15	Vout
16	Vout
17	Vout
18	Vout
19	Reserved
20	Reserved
21	+5VSA Output
22	Signal Return
23	Reserved
24	-5VSA Return
25	ADD GAO
26	Reserved
27	Fan/In (Hot pin)
28	ADD GAO
29	Reserved
30	Reserved
31	AIN (GAP)
32	ADD vout (Hot pin)
33	-Vout Sense
34	-Vout Sense
35	Reserved
36	Reserved
37	FU SCL
38	Reserved
39	Inhibit
40	FU SDA
41	Current Share Signal
42	Power_Good Signal
43	
44	Reserved
45	Chassis Ground
46	AC Input Neutral
47	AC Input Line

Typical at 25C, nominal line and 75% load, unless otherwise specified.

**SMIX POWER**

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