Industrial LED Comm Test Renewable Broadcast

720 to 1000W Conduction Cooled Power Supplies

Features	Benefits
• Smaller size than CPFE1000F	• Easier integration into industrial systems
• Base plate cooled, no fan required	• Quiet operation, long field life
• Protective coating option	• Enables use in harsh environments
• I^2C Interface	• Allows remote monitoring

Specification

Model		CPFE1000FI
AC Input	VAC	90 to 265VAC, 47-63Hz
Input Current (1)	A	13.6 / 6.6 (Model dependant)
Inrush Current (115 / 230VAC)	A	20 / 40 peak
Power Factor	-	Meets EN61000-3-2
Efficiency (typical) (2)	%	79 to 86% (Model dependant)
Output Voltage Setpoint Accuracy	-	±2% at 50% load
Line Regulation	mV	12V: 48mV, 28V: 56mV, 48V: 96mV
Load Regulation	mV	12V: 48mV, 28V: 56mV, 48V: 96mV
Ripple and Noise (20MHz BW) (3)	-	1% (2% below 0°C)
Over Current Protection	%	105 - 140% (Automatic recovery)
Over Voltage Protection	-	125 - 145% (Automatic recovery)
Parallel Operation	-	Yes (Single wire)
Power On Signal (ENA)	-	Open collector (10mA sink current). Low (on) when output is present
Auxiliary Supply	-	10 - 14V, 20mA
Remote On/Off (Opto isolated)	-	High = On
Temperature Coefficient	°C	<0.02%/°C
Overtemperature	°C	Shuts down between 90 - 115°C (Auto recovery)
Hold Up Time (230VAC)	ms	25ms
Leakage Current (at 230VAC, 50Hz)	uA	< 1.5mA
Remote Sense	-	Yes, compensates up to 500mV cable drop
I²C Interface	-	Provides manufacturing location, date, serial number, part number, unit revision, output voltage & current read back, base plate temperature, remote on/off, IOG, DC good and over temperature warning
Operating Temperature	°C	-40 to +70°C ambient, (See reverse side for derating) (85°C baseplate, maximum)
Storage Temperature	°C	-40 to +100°C
Humidity	-	Operating: 20 - 90%RH, Non operating 10 - 95%RH (Pcb assembly protective coated)
Cooling	-	Conduction cooled
Withstand Voltage	-	Input to Output 4242VDC, Input to Ground 2121VDC, Output to ground 500VDC
Vibration (non operating)	-	MIL-STD-810F, Method 514.4, Proc 1, Category 1, 9
Shock	-	MIL-STD-810F, Method 516.5, Proc. I, IV, VI
Safety Agency Approvals	-	UL60950-1, CSA 22.2 No 60950-1, EN60950-1 (Ed 2), CE Mark
Line Dip	-	Complies with SEMI F47 (200VAC line only)
Conducted & Radiated EMI	-	Conducted: EN55022/EN55011 Class B, Radiated: Class A
Immunity	-	IEC61000-4-2 (Contact Level 2, Air discharge Lvl 3), -3 (Lvl 3), -4(Lvl 3), -5 (Lvl 4), -6 (Lvl 3), -8 (Lvl 4), -11 (Class 3), -12 (Lvl 3), -14 (Class 3)
Weight (Typ)	g	1220g (without cover)
Size (L x W x H)	mm	254 x 112 x 44mm
Warranty	yrs	2

Notes: **(1)** 100/200VAC. **(2)** 100% loading required.
(3) Warm up period of 30 mins below -30°C for ripple. Jeita RC-9131C Method, see instruction manual for test method.

Model Selector

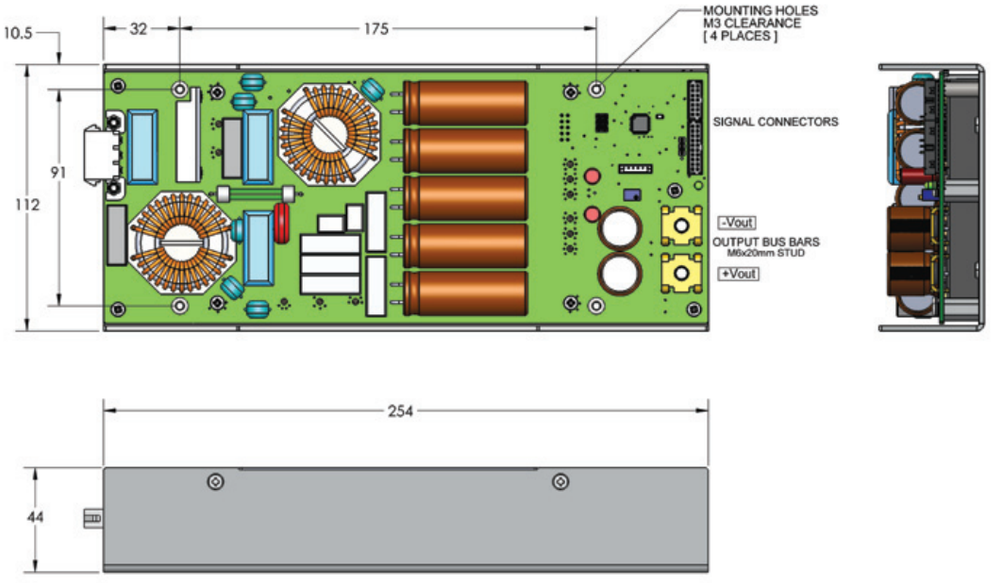
Model	Output Voltage (V)	Adjust Range (V)	Maximum Current	Efficiency (%) (110/220VAC)
CPFE1000FI-12	12	9.6 - 14.4	60	79 / 81
CPFE1000FI-28	28	22.4 - 33.6	36	83 / 86
CPFE1000FI-48	48	38.4 - 57.6	21	83 / 86

Derating Ambient Temperature (4)

Model	Input Voltage	Output Power (W) 45°C	50°C	60°C	70°C
CPFE1000FI-12	85VAC to 170VAC	720	720	720	720
	170VAC to 265VAC	720	720	720	720
CPFE1000FI-28	85VAC to 170VAC	1008	980	952	896
	170VAC to 265VAC	1008	1008	1008	1008
CPFE1000FI-48	85VAC to 170VAC	1008	1008	1008	1008
	170VAC to 265VAC	1008	1008	1008	1008

(4) See instruction manual for alternative mounting positions

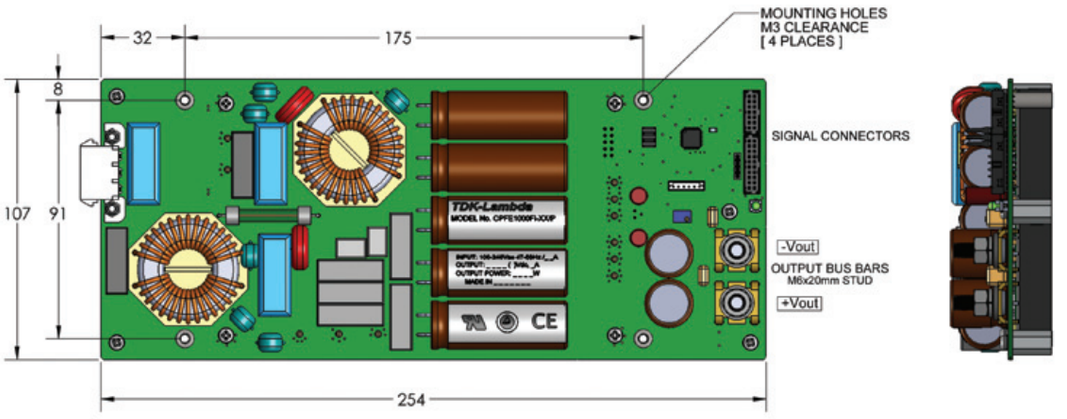
Outline Drawing CPFE1000FI Series



Options

Suffix	Description
/C	Cover
/P	No U channel
/H	PCB coating

Outline Drawing CPFE1000FI/P Series



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