

PC2000

1000-2000 WATTS DC/DC SINGLE

Features

- Overvoltage protection, (OVP).
- Alarm circuit with relay output.
- Current sharing.
- Inhibit/Power down input.
- Over voltage protection OVP.
- Output voltage adjustable on front panel.
- Operating temperature -25 to +55°C.



Specifications

INPUT

Voltage	20 - 30V (24), 41 - 60V(48), 93 - 150V (110), 187 - 300V (220)
Isolation	Input – Output: 4kVd (Input code 24, 48, 72) Input – Output: 3kVac / 4.3kVdc (Input code 110, 220) Input – Alarm: 2.5kVdc (Input – Output 24, 48, 72) Input – Alarm: 3kVac / 4.3kVdc (Input code 110, 220) Input – Case: 2.5kVdc (Input code 24, 48, 72) Input – Case: 3kVac / 4.3kVdc (Input – code 110, 220) Alarm – Case: 2.5kVdc Output – Case: 2.5kVdc Output – Alarm: 2.5kVdc

OUTPUT

Voltage	See table.
Current	See table.
Source regulation	0.1%.
Load regulation	0.5% 0.2% (with sense connected) 0-100%
Output ripple	30mV p-p (120kHz)
Voltage adjustment	95% - 110%.
Current limit protection	105%.
Overvoltage protection	115%.
Reverse voltage protection	Yes.
Over/under voltage alarm	90%-115% of nominal output.
Overheated alarm	Yes.
Remote sense	Yes.
Soft start	Yes.
Start-up time	<3s
Hold-up time	2-25ms
Efficiency	89-93%

ENVIRONMENTAL

Operating temperature	-25°C to 55°C (100% load). -25°C to +70°C (with derating), contact Powerbox for details.
Temperature coefficient	0.02%.
Storage temperature	-40°C to 85°C.

GENERAL

Cooling	See table.
Mounting brackets	Please consult Powerbox for mounting options
Optional Features	- Conformally coating, option I. For environment with high non-condensing humidity max 98% RH. - Series diode on output. Specify series diode output when the output is connected in parallel with other power supply to achieve redundancy. The output is derated 10% on 24V and 5% on 48V. - Train input, option T. Input voltage range according to train Standard EN50155 and IEC 60751.

STANDARDS

Safety	EN/IEC60950-1: 2001
C-tick	AS/NZS CISPR11 Group 1, Class A
EMI	IEC/EN61000-6-2, EN55011/EN55022 class B,
EMC	IEC/EN 61000-6-2 IEC/EN 61000-4-2 IEC/EN 61000-4-3 IEC/EN 61000-4-4 IEC/EN 61000-4-5 IEC/EN 61000-4-6 IEC/EN 61000-4-8 IEC/EN 61000-4-10

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Selection Table

MODEL NUMBER	INPUT	OUTPUT	COOLING	POWER
PC1000 24/24	20-32V	24V 42A	Convection	1000W
PC1000 24/28	20-32V	28V 36A	Convection	1000W
PC1000 24/36*	20-32V	36V 28A	Convection	1000W
PC1000 24/48	20-32V	48V 21A	Convection	1000W
PC1000 48/24	43-60V	24V 42A	Convection	1000W
PC1000 48/28	43-60V	28V 36A	Convection	1000W
PC1000 48/36*	43-60V	36V 28A	Convection	1000W
PC1000 48/48	43-60V	48V 21A	Convection	1000W
PC1000 110/24	93-150V	24V 42A	Convection	1000W
PC1000 110/28	93-150V	28V 36A	Convection	1000W
PC1000 110/36*	93-150V	36V 28A	Convection	1000W
PC1000 110/48	93-150V	48V 21A	Convection	1000W
PC1000 220/24	187-300V	24V 42A	Convection	1000W
PC1000 220/28	187-300V	28V 36A	Convection	1000W
PC1000 220/36*	187-300V	36V 28A	Convection	1000W
PC1000 220/48	187-300V	48V 21A	Convection	1000W
PC1400 48/24	43-60V	24V 58A	Fan	1400W
PC1400 48/28	43-60V	28V 58A	Fan	1400W
PC2000 48/36*	43-60V	36V 56A	Fan	2000W
PC2000 48/48	43-60V	48V 42A	Fan	2000W
PC1400 110/24	93-150V	24V 58A	Fan	1400W
PC1400 110/28	93-150V	28V 58A	Fan	1400W
PC2000 110/36*	93-150V	36V 56A	Fan	2000W
PC2000 110/48	93-150V	48V 42A	Fan	2000W
PC1400 220/24	187-300V	24V 58A	Fan	1400W
PC1400 220/28	187-300V	28V 58A	Fan	1400W
PC2000 220/36*	187-300V	36V 56A	Fan	2000W
PC2000 220/48	187-300V	48V 42A	Fan	2000W

* NRE might be charged.

T-INPUT RANGE FOR MOBILE APPLICATION		
UIN 0.1S-S2	CONTINUOUS RANGE	CODE
14.4-33.6V	16.8-30V	24T
21.6-50.4V	25.2-45V	36T
28.8-67.2V	33.6-60V	48T
43.2-110.8V	50.4-90V	72T
66-154V	77-137.5V	110T