

CHEROKEE INTERNATIONAL

CAP1000 – Modular Power Supply

1000 Watt Power Supply

Low Cost - Highly Flexible

- 1000W Power Factor Corrected
- Single & Multiple Outputs
- 1-6 Isolated (Floating) High Current Outputs
- Remote Sense Capability on all Outputs
- No Minimum Load Requirements
- Meets VDE/FCC Class "B" EMI
- Full Protection Features
- Full Safety Certifications
- 5V Standby Output



Features

- PFC Compliant to EN61000-3-2
- Input transient protection per EN61000-4
- Margining on V1 & V2
- Current sharing on all outputs
- Economical
- Up to six outputs from one supply

Benefits

- Supports global use of power supply
- Designed to operate in harsh environmental conditions
- Ability to compensate for system voltage drops
- Scalability for increased power requirements
- Lowered system costs
- Offers maximum flexibility of various output voltages

Key Market Segments & Applications

- Factory Automation
- Industrial Applications
- Computer Peripheral Applications
- Test Equipment

Specifications

CAP1000 Series

Input Voltage Range	90-264VAC; 47-63Hz.
Inrush Current (Cold Start)	50A maximum.
Input Current	15A max. (at 90VAC).
Efficiency	78% at 120V and 82% at 230V typical (measured at full load).
Internally Fuse	15A (3AB internal fuse).
Output Power	1000W
Output Configuration	See table on back page.
Voltage Adjustment Range	± 5% Vout on all outputs.
Total Regulation (Line & Load)	± 0.5% or 20mV (whichever is greater).
Output Ripple & Noise	± 1% or 50mV typical at 20MHz bandwidth.
Transient Response	Peak deviation of < ± 3% or 100mV typical with a 25% step load change at 3A/μs slew rate. Recovery in 300μs.
Hold Up Time	20ms at full load on all outputs.
Current Share	Single wire connection within 5% on all outputs.
Remote ON/OFF	TTL High or Open enables unit ON. TTL Low or short shuts unit OFF. Open collector.
Total Power Overload Limit	Set at 1300W typical by sensing the primary input current.
Over Voltage Protection	Trip point set at 115% - 130% of V1 or V2. To reset, cycle input power.
Current Limit	110% - 140% of max lout. Output recovers when the fault is removed.
Thermal Shutdown	Unit shuts off when ambient temperature exceeds 70°C. Output recovers when fault is removed.
EMI	CISPR22 and FCC Part 15 Level "B" (Conducted)
Input Power Fail Signal	TTL High for normal operation. Signal will change to Low 3ms before loss of output regulation. Open collector.
DC Good	TTL High for normal operation. Signal will change to Low when Vo is less than 90-95% of Vout nominal. Open collector.
Shock & Vibration	Per MIL STD-810E
Safety Certifications	UL 1950, CSA 22.2 No. 950 & 234, TUV (EN60950), CE Mark & CB Report
Operating Temperature	Full load from 0 to 50°C. Derates linearly from 50°C to 70°C at 2.5% per °C.
Cooling	Full power (1000W) with 50CFM required. A built-in fan & cover is available as an option.
Dimensions	11.0" x 5.00" x 3.95" (279.4mm x 127mm x 100.3mm) for standard model.

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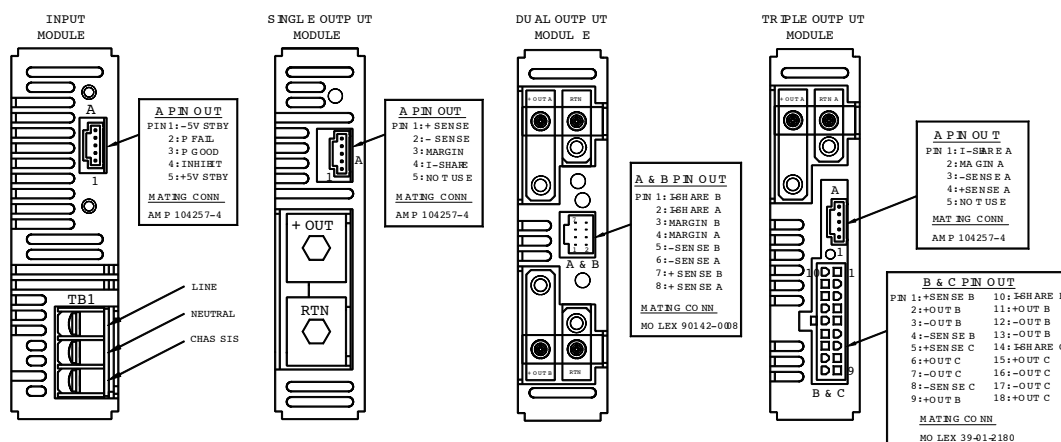
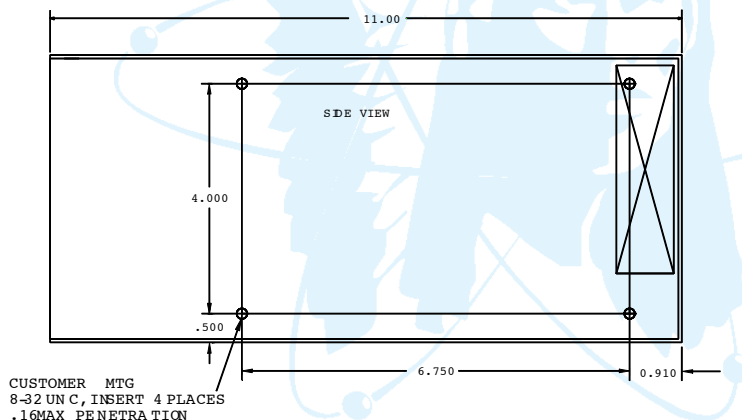
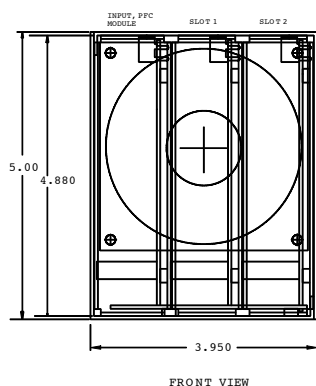
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1000 Watt Power Supply

CAP1000
Outline Drawing



CAP1000 – Output Configuration

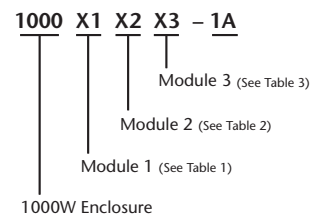
Total power of power supply is limited to 1000W

Module Code	V1	
	Volts	Amps
A1	1.8	150
B1	2.5	150
C1	3.3	150
D1	5	120
E1	6	120
F1	12	50
G1	15	40
J1	24	25
K1	28	21.5
L1	36	16.7
M1	48	12.5
N1	54	11

Module Code	V1		V2	
	Volts	Amps	Volts	Amps
A2	2.5	60	12	25
B2	2.5	60	24	12.5
C2	3.3	60	5	60
D2	3.3	60	12	25
E2	3.3	60	24	12.5
F2	5	60	5	60
G2	5	60	12	25
H2	5	60	15	20
J2	5	60	24	12.5
K2	12	25	12	25
L2	12	25	24	12.5
M2	15	20	15	20
N2	24	12.5	24	12.5

Module Code	V1		V2		V3	
	Volts	Amps	Volts	Amps	Volts	Amps
A3	3.3	80	5	10	12	10
B3	3.3	80	5	10	24	5
C3	3.3	80	12	10	12	10
D3	3.3	80	15	8	15	8
E3	5	80	12	10	12	10
H3	5	80	15	8	15	8
J3	12	33	12	10	12	10

Model Selection Guide



**Example: CAP1000 C1E3-1A
1000W Module;**

V1 = 3.3V@150A,
V2 = 5V@80A,
V3 = 12V@10A,
V4 = 12V@10A

Cherokee reserves the right to make changes to the product described without notice. No liability is assumed as a result of its use nor for any infringement on the rights of others.

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