

MCP SERIES

Floating Output High Voltage Power System

The MCP Series of high-voltage rack mount and bench-top power systems is a fully-featured chassis that enables users to reach higher levels of power, up to 15kW. The broad range of voltage and power levels make the MCP Series suitable for a broad range of industries and applications. Users will also benefit from the high performance of the system, which includes low ripple, excellent regulation, floating output, and a low stored energy.

- Floating output voltage up to 2kV
- Output power from 0 to 12W up to 15kW
- ½19" rack mount, 19" rack mount, or bench-top case
- Efficiency at 90%



Applications for the MCP Series include photomultipliers, particle accelerators, ion implantation, ion sources, ion pumps, electrostatics, test equipment and more.

- Fully programmable by 10-turn potentiometer
- Voltage and current monitors on all models
- Multiple computer interfaces available

PARAMETER	CONDITIONS	MODELS																UNITS				
INPUT		12W to 1200W										2000W to 15kW										
Voltage Range	Full Power	Single phase 115 or 230										Three phase 400 (360-440)						VAC				
Frequency	All Modes	47 to 63																Hz				
Current	Max Load, Max Eout	TBD																A				
OUTPUT (125V-200V)		125V										200V										
Voltage Range	Nominal Input	0 to 125										0 to 200						VDC				
Power	Nominal Input, Max Eout	30	120	300	600	1200	2400	5000	10000	15000	30	120	300	600	1200	2400	5000	10000	15000	W		
Current	lout Entire Output Voltage Range	0.25	1	2.5	5	10	20	40	80	120	0.15	0.6	1.5	3	6	15	25	50	75	A		
OUTPUT (350V-650V)		350V										650V										
Voltage Range	Nominal Input	0 to 350										0 to 650						VDC				
Power	Nominal Input, Max Eout	30	120	300	600	1200	2400	5000	10000	15000	12	30	120	300	600	1200	2400	4500	10000	15000	W	
Current	lout Entire Output Voltage Range	0.1	0.4	1	2	4	8	14	28	42	0.02	0.05	0.2	0.5	1	2	4	7	15	22.5	A	
OUTPUT (1250V-2000V)		1250V										2000V										
Voltage Range	Nominal Input	0 to 1250										0 to 2000						VDC				
Power	Nominal Input, Max Eout	12	30	120	300	600	1200	2400	5000	10000	15000	12	30	120	300	600	1200	2000	5000	10000	14000	W
Current	lout Entire Output Voltage Range	0.01	0.025	0.1	0.25	0.5	1	2	4	8	12	0.006	0.015	0.06	0.15	0.3	0.6	1	2.5	5	7	A
OUTPUT		ALL TYPES																				
Isolation	Input to Output	12V to 350V: ±500; 650V to 2kV: ±2000																VDC				
Ripple	Full Load, Max Eout	12W to 300W: 50ppm + 50; 600W to 15kW: 200ppm +200																mV p-p				
Programming Accuracy	0.1% to 100% Output Voltage	0.001%																-				
Dynamic Load Regulation	½ to Full Load, Max Eout	100																PPM				
Line Regulation	Nom. Input, Max Eout, Full Power	10																PPM				
Static Load Regulation	No Load to Full Load, Max Eout	100																PPM				
Stability	30 Min. warmup, per 8 hr/ per day	100																PPM				
PROGRAMMING & CONTROLS		ALL TYPES																				
Output Control & Monitoring		Front panel and/or optional Analog 0 to +10 standard & isolated / Digital 12 bit: RS-232, RS-422, Ethernet, USB, LAN																-				
ENVIRONMENTAL		ALL TYPES																				
Operating	Full Load, Max Eout, Case Temp.	0 to +40																°C				
Storage	Non-Operating, Case Temp.	-20 to +60																°C				
Humidity	All Conditions, Standard Package	80% @ 30C; 50% @ 40C																-				
Shock	Mil-Std-810, Method 516.5, Proc. IV	< 20																G's				
Vibration	Mil-Std-810, Method 514.5, Fig.514.5C-3	TBD																-				

Specifications subject to change without notice.



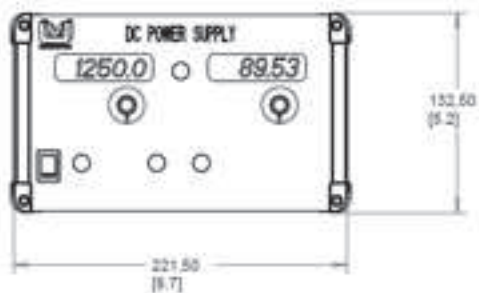
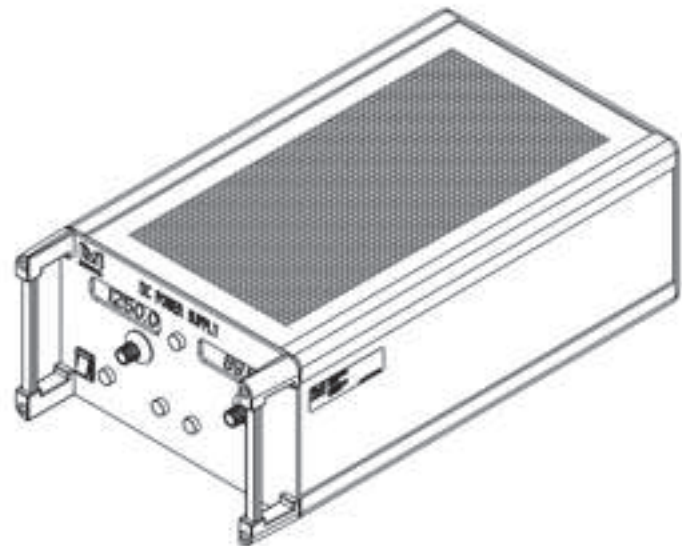
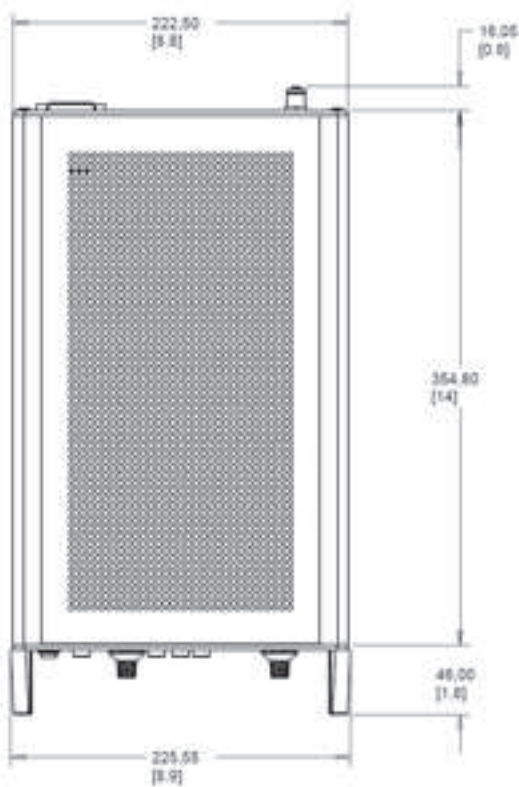
Making High Voltage Easier!®

Higher Service, Higher Performance, Higher Reliability

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CONSTRUCTION

TBD

SIZE

Dimensions:

0 to 300W models:

½19" [222mm] W x 3U [133mm] H x 13.78" [350mm] depth

600W models:

19" [443mm] W x 3U [133mm] x 13.78" [350mm] depth

1200W models:

19" [443mm] W x 3U [133mm] x 17.72" [450mm] depth

2000W and 2400W models:

19" [443mm] W x 3U [133mm] x 21.65" [550mm] depth

4500W and 5000W models:

19" [443mm] W x 6U [266mm] x 25.59" [650mm] depth

10kW models:

19" [443mm] W x 9U [399mm] x 25.59" [650mm] depth

14kW and 15kW models:

19" [443mm] W x 12U [532mm] x 25.59" [650mm] depth

Weight:

12W & 30W models: 8.82lbs [4kg]

120W models: 11.02lbs [5kg]

300W models: 13.23lbs [6kg]

600W models: 19.84lbs [9kg]

1200W and 2000W models: 26.46lbs [12kg]

2400W models: 50.71lbs [23kg]

4500W and 5000W models: 88.18lbs [40kg]

10kW models: 165.35lbs [75kg]

14kW and 15kW models: 242.51lbs [110kg]

TOLERANCE

TBD

NOTES

For outline drawings of the MCP Series chassis, please contact the factory.

ORDERING INFORMATION

Output	0 to 125V Output	125
	0 to 200V Output	200
	0 to 350V Output	350
	0 to 650V Output	650
	0 to 1250V Output	1250
	0 to 2000V Output	2000
Model	Series Name	MCP
Input	115V (12W to 1200W models only)	115
	230V (12W to 1200W models only)	230
	400V 3 Phase(2000W to 15kW models only)	400
Polarity	Floating Output	-FL
Power	0 to 12W Output (650V to 2kV models only)	12
	0 to 30W Output	30
	0 to 120W Output	120
	0 to 300W Output	300
	0 to 600W Output	600
	0 to 1.2kW Output	1.2kW
	0 to 2kW Output (2kV models only)	2kW
	0 to 2.4kW Output (Not available on 2kV models)	2.4kW
	0 to 4.5kW Output (650V models only)	4.5kW
	0 to 5kW Output (Not available on 650V models)	5kW
	0 to 10kW Output	10kW
	0 to 14kW Output (2kV models only)	14kW
Options	0 to 15kW Output (Not available on 2kV models)	15kW
	Rear panel RS232 interface	-RS232
	Rear panel RS422 interface	-RS422
	Rear panel Ethernet interface	-ETH
	Rear panel USB interface	-USB
	Rear panel LAN interface	-LAN
	Fine adjust potentiometer	-FA
	Analog interface 0 to 10VDC control & monitors	-I10
	Floating analog interface 0 to 10VDC control & monitors	-I10I
	Lower ripple	-F
	Higher stability	-10PPM
	Low stored energy	-LSE
	Power limit	-CP

High resolution meters available. Contact the factory for more information.

Example: 125MCP115-FL2.4kW-USB

Output ——— Model ——— Polarity ——— Input ——— Power ——— Option ———

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*The MCP Series is not available in all territories. Please contact an UltraVolt Applications Engineer for details concerning sales in your area.



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