

Rapid-X Water-Cooled Modular Power Supply

# Cost-effective, quality power that's easy to expand and repair

Our Rapid-X Water-Cooled Modular Power Supply combines reliability and longevity with greater flexibility, faster delivery, and lower cost. It features a stackable modular design and high output power density.

Compact and scalable, the Rapid-X Water-Cooled Modular Power Supply combines the benefits of modular switch mode design with the repairability of 'monument' style switchmodes, allowing you to focus on applying the product to your process, not changing your process to fit our product. Available in seven cabinet sizes, it's designed to be the most versatile switch mode power supply you've ever owned.

Input and output water connections are available on both the front and back of the unit and all units include a water flow and temperature meter. An optional internal water-to-water heat exchanger is also available.

Base configuration comes standard with an Ethernet IP port and Dynapower's integral Touchscreen Controller.



# **System Advantages**

- Easy to service with access only required from the front
- Wide range of configuration options, including multi-tower configuration and multiple-in-one configuration

# **TECHNICAL SPECIFICATIONS**

### **Electrical**

AC Input	400V <sub>AC</sub> , 3P, 60Hz
	440V <sub>AC</sub> , 3P, 60Hz
	480V <sub>AC</sub> , 3P, 60Hz
Output Voltage:	6-120V <sub>DC</sub> (see matrix below)
Output Amps:	1000-24,000A <sub>DC</sub> per cabinet (see matrix below)
Ripple:	≤3% at full output
Regulation Range:	10-100% of rated output
Control Precision:	Voltage/current at +/- 1%

#### **Environmental**

Cooling:	Water Cooled
Enclosure:	IP 54
Max Ambient:	40°C

## **Communications Interface**

Ethernet IP

#### **Protection Features**

Short Circuit	In-Rush Current							
Over-Current	Electronic Peak Current Detector							
Over-Voltage	Environmental Alarm							
Under-Current	Ambient Temperature Alarm							
Under-Voltage	Module Failure Alarm							
Over-Temperature								

# **Control Options**



#### Single-Unit Touchscreen Controller:

A programmable touchscreen controller designed to give users maximum control.



#### Multi-Unit Touchscreen Controller:

Control up to 10 rectifiers from a single intuitive touchscreen interface.



## PC-Based Process Controller:

Graphical interface PC application designed for process control of 1 to 10 rectifiers.

# **CONFIGURATION OPTIONS**

**DC Output Amps** 

		Module Quantity															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	6	1500	3000	4500	6000	7500	9000	10500	12000	13500	15000	16500	18000	19500	21000	22500	24000
	10	1500	3000	4500	6000	7500	9000	10500	12000	13500	15000	16500	18000	19500	21000	22500	24000
	12	1500	3000	4500	6000	7500	9000	10500	12000	13500	15000	16500	18000	19500	21000	22500	24000
	16	1500	3000	4500	6000	7500	9000	10500	12000	13500	15000	16500	18000	19500	21000	22500	24000
	18	1300	2600	3900	5200	6500	7800	9100	10400	11700	13000	14300	15600	16900	18200	19500	20800
	20	1200	2400	3600	4800	6000	7200	8400	9600	10800	12000	13200	14400	15600	16800	18000	19200
	25	960	1920	2880	3840	4800	5760	6720	7680	8640	9600	10560	11520	12480	13440	14400	15360
	30	800	1600	2400	3200	4000	4800	5600	6400	7200	8000	8800	9600	10400	11200	12000	12800
y)	35	680	1360	2040	2720	3400	4080	4760	5440	6120	6800	7480	8160	8840	9520	10200	10880
Voits	40	600	1200	1800	2400	3000	3600	4200	4800	5400	6000	6600	7200	7800	8400	9000	9600
	45	532	1064	1596	2128	2660	3192	3724	4256	4788	5320	5852	6384	6916	7448	7980	8512
	50	480	960	1440	1920	2400	2880	3360	3840	4320	4800	5280	5760	6240	6720	7200	7680
	60	400	800	1200	1600	2000	2400	2800	3200	3600	4000	4400	4800	5200	5600	6000	6400
	70	342	684	1026	1368	1710	2052	2394	2736	3078	3420	3762	4104	4446	4788	5130	5472
	80	300	600	900	1200	1500	1800	2100	2400	2700	3000	3300	3600	3900	4200	4500	4800
	90	266	532	798	1064	1330	1596	1862	2128	2394	2660	2926	3192	3458	3724	3990	4256
	100	240	480	720	960	1200	1440	1680	1920	2160	2400	2640	2880	3120	3360	3600	3840
	110	218	436	654	872	1090	1308	1526	1744	1962	2180	2398	2616	2834	3052	3270	3488
	120	200	400	600	800	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200







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