



# NEW WATER-COOLED POWER SUPPLY with **dryACTIVE™** TECHNOLOGY

The high-performance water-cooled LCX-12000 Power Supply brings processes to the next level, delivering accurate, low ripple DC power in a sealed water-cooled design.

**dryACTIVE™** Technology ensures proactive prevention of condensation inside the power supply. A seamless, stainless steel pipe system provides leak-free water-cooling for optimal reliability.

Inside high-efficiency, silicon carbide (SiC) components and synchronous rectification (SR) reduce process energy consumption, while the modular 19-inch external footprint allows for scalable power levels up to 120,000W.

Paired with the new M1 Controller featuring digital controls, a bright LCD screen, advanced data logging, and Ethernet/IP connectivity capability, the LCX-12000 delivers superior performance and premium power.



## FEATURES

### LCX-12000 Power Supply

#### Improve your process - Accurate and low DC ripple

- Exact delivery of power throughout working range
- Engineered for low ripple output, delivers smooth, clean DC
- ETL certification guarantees safety and quality

#### Water-cooled system - **dryACTIVE™** Technology

- Proactive condensation prevention
- Seamless stainless steel cooling pipe - Leak-free design

#### Green-Design

- Less waste-heat and energy consumption
- Water-on-demand combined with external valve

#### Value-added design featuring FPGA technology

- FPGA controlled system reduces downtime for maximum performance and reliability
- Designed for harsh environments, IP55, Nema 12
- Light-weight, under 60 lbs for 1000 amp 12kW system
- Flexible/scalable 19 inch rack design

## APPLICATIONS

- Electroplating
- Wire Plating
- Anodizing
- Electro-Winning

# LCX-12000 Power Supply

## SPECIFICATIONS

Max Rated Power	12,000W					
Output Rating	Model No:	OUTPUT RATING				
		Max Rated Voltage	Max Rated Current	Max Rated Power		
	LCX12-1000	12V	1000A	12,000W		
	LCX24-500	24V	500A	12,000W		
	LCX48-250	48V	250A	12,000W		
	LCX00-200	60V	200A	12,000W		
LCX100-120	100V	120A	12,000W			
Safe Operating Load Range	0 - 100% of unit voltage and current rating					
Output Voltage Regulation	Max. $\pm$ 0.5% of setting for 20-100% of unit rating Max. $\pm$ 0.5% of unit rating for 3-20% of unit rating					
Output Current Regulation	Max. $\pm$ 0.5% of setting for 10-100% of unit rating Max. $\pm$ 0.5% of unit rating for 3-10% of unit rating					
Ripple, RMS Noise	Less than 0.5% RMS of unit rating (0-5kHz)					
Efficiency	91%-96% efficiency at rated output and depending on output voltage rating					
Input Power	380-480VAC $\pm$ 10%, 3-phase, 50/60Hz					
Power Factor	0.95 at rated output					
Maximum input Current Rating	Model No:	MAXIMUM INPUT CURRENT RATING (Arms per phase) AT NOMINAL 3-PHASE LINE VOLTAGES (50/60 HZ)				
		380VAC	400VAC	415VAC	440VAC	480VAC
	LCX12-1000	21	20	20	19	17
	LCX24-500	21	20	19	18	17
	LCX48-250	21	20	19	18	17
	LCX00-200	21	20	19	18	17
LCX100-120	21	20	19	18	16	
Dimensions	4.3" H x 19" W x 25.8" D / 110mm H x 482.6mm W x 655mm D including 19" brackets and output busbars					
Weight	60 lbs / 28kg					
Enclosure	Stainless steel enclosure with aluminum base, Sealed Design, IP55					
Cooling	Water-cooled, stainless steel cooling pipe system, overtemperature protection <b>dryACTIVE™</b> Technology to prevent condensation inside the system External valve control for water-on-demand (valve optional)					
Operating Temperature	32°F - 104°F / 0°C - 40°C, indoor use only					
Storage Temperature	-4°F - 158°F / -20°C - 70°C					
Humidity	20-80% RH non-condensing					
Maximum Installation Height	2000m					
Certifications	ETL listed to UL 61010-1 and CSA, C22.2#61010-1, CE compliant					
Product Warranty	2 Years					



# M-1 Controller External Control Unit



## DELIVERS SEAMLESS CONNECTIVITY

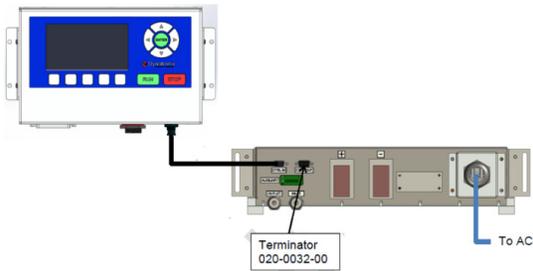
Designed for harsh environments, the M-1 digital controller features an intuitive user interface that ensures precise control of the power supply module.

### SPECIFICATIONS

Dimensions	5.33" H x 9.53" W x 3.47" D / 135.4mm H x 242mm W x 88.1mm D
Weight	1 lb / 0.5kg
Enclosure	Powder coated aluminum

### BASIC FEATURES

- Plug-and-play connect to automation system
- Control of multiple paralleled modules
- Sealed design for close-to-tank installations
- 4.3" full color display
- Multi-button menu driven
- Ampere time cycle control
- Real-time cycle control
- Regulation Modes: Constant current, Constant voltage, Cross-over regulation
- Sealed powder-coated aluminum enclosure
- VESA compatible 7.87" x 7.87" / 100 x 100mm
- Powered via control cable
- No additional AC required



### OPTIONS

#### Advanced Process Control

- Complex sequence programming featuring several steps and step segments each
- Storage of sequences with individual alpha/numeric name
- Creation of ramp, pulse, saw tooth, trickle or other profiles
- Current or voltage monitoring
- 200Hz pulsing capability

#### Analog 0-10V 4-20mA Interface

- For external control or monitoring
- Select between 3-channel or 4-channel mode

#### Ethernet/IP Interface

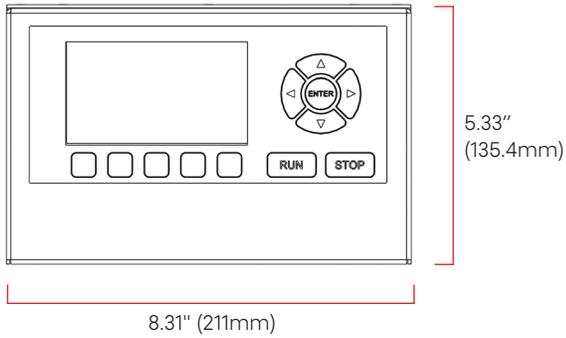
- Ethernet/IP interface
- ODVA certified for easy setup by customer
- For external control or monitoring

#### Data Logging including FTP Server connectivity

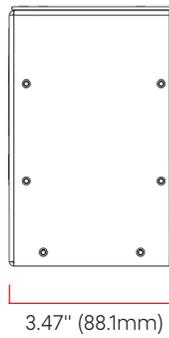
- Data Logging
- FTP Server capabilities via Ethernet connection using RJ45 connector

## M-1: DIMENSIONS and MOUNTING/INSTALLATION OPTIONS

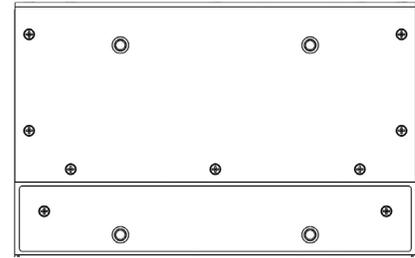
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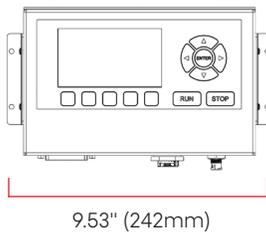


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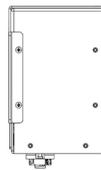


### WALL MOUNT

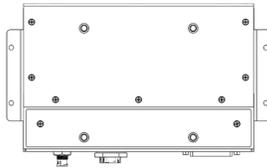
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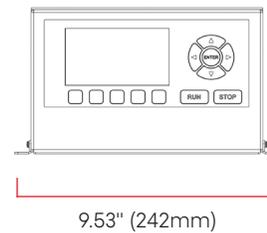


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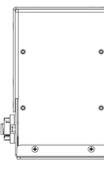


### TABLETOP MOUNT

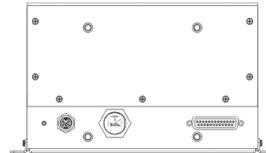
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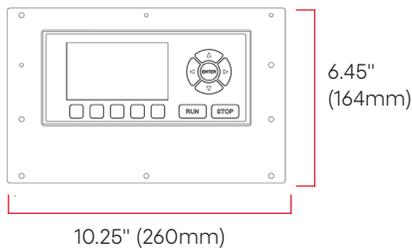


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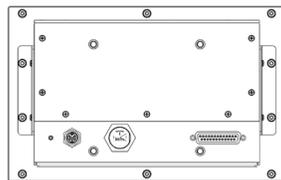


### FLUSH MOUNT

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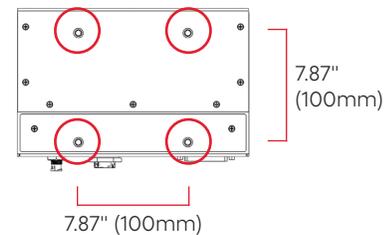


SIDE



### VESA MOUNT COMPATIBLE

BACK



- For every version standard
- Required holes:  
7.87" x 7.87", (100 x 100mm)
- VESA support not included