



## POWERED FOR A BETTER FINISH

The high-performance DTX-12000 Power Supply will bring your process to the next level, delivering accurate, ultra-low ripple DC power.

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 M-1 Controller featuring digital controls, a bright LCD screen, advanced data logging, and Ethernet/IP connectivity capability, the DTX-12000 delivers superior performance and premium power.



### FEATURES

#### DTX-12000 Power Supply

##### Improve your process - Ultra-low ripple and accurate

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

##### Value-added design featuring FPGA technology

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

#### M-1 Controller

##### External control unit - Delivers seamless connectivity

- Plug-and-play connect to automation control system
- Control of multiple paralleled modules
- Data logging, process programming and 200Hz options available
- Sealed design for close-to-tank installations

**Ethernet/IP Protocol** (ODVA Certified) - optional

### APPLICATIONS

- Electroplating
- Anodizing
- Electroforming
- Electro-Winning

# DTX-12000 Power Supply

## SPECIFICATIONS

Max Rated Power 12,000W

Output Rating

Model No:	OUTPUT RATING		
	Max Rated Voltage	Max Rated Current	Max Rated Power
DTX12-1000	12V	1000A	12,000W
DTX24-500	24V	500A	12,000W
DTX48-250	48V	250A	12,000W
DTX100-120	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 0.3% RMS of unit rating (0-5kHz)

Efficiency 91% and higher at rated output

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 LINE VOLTAGES (50/60 HZ)				
	380VAC	400VAC	415VAC	460VAC	480VAC
DTX12-1000	22	20	19	18	17
DTX24-500	22	20	19	17	16
DTX48-250	22	20	19	17	16
DTX100-120	22	20	19	17	16

Dimensions 5.05" H (3U) x 19" W x 26.1" D / 129mm H x 482.6mm W x 663mm D including 19" brackets and output busbars

Weight 59lbs / 27kg

Enclosure Powder coated aluminum

Cooling Forced Air cooling

Sealing True Sealing with two 100% sealed air ducts

Operating Temperature 32°F - 104°F / 0°C - 40°C, indoor use only

Storage Temperature -4°F - 158°F / 20°C - 70°C

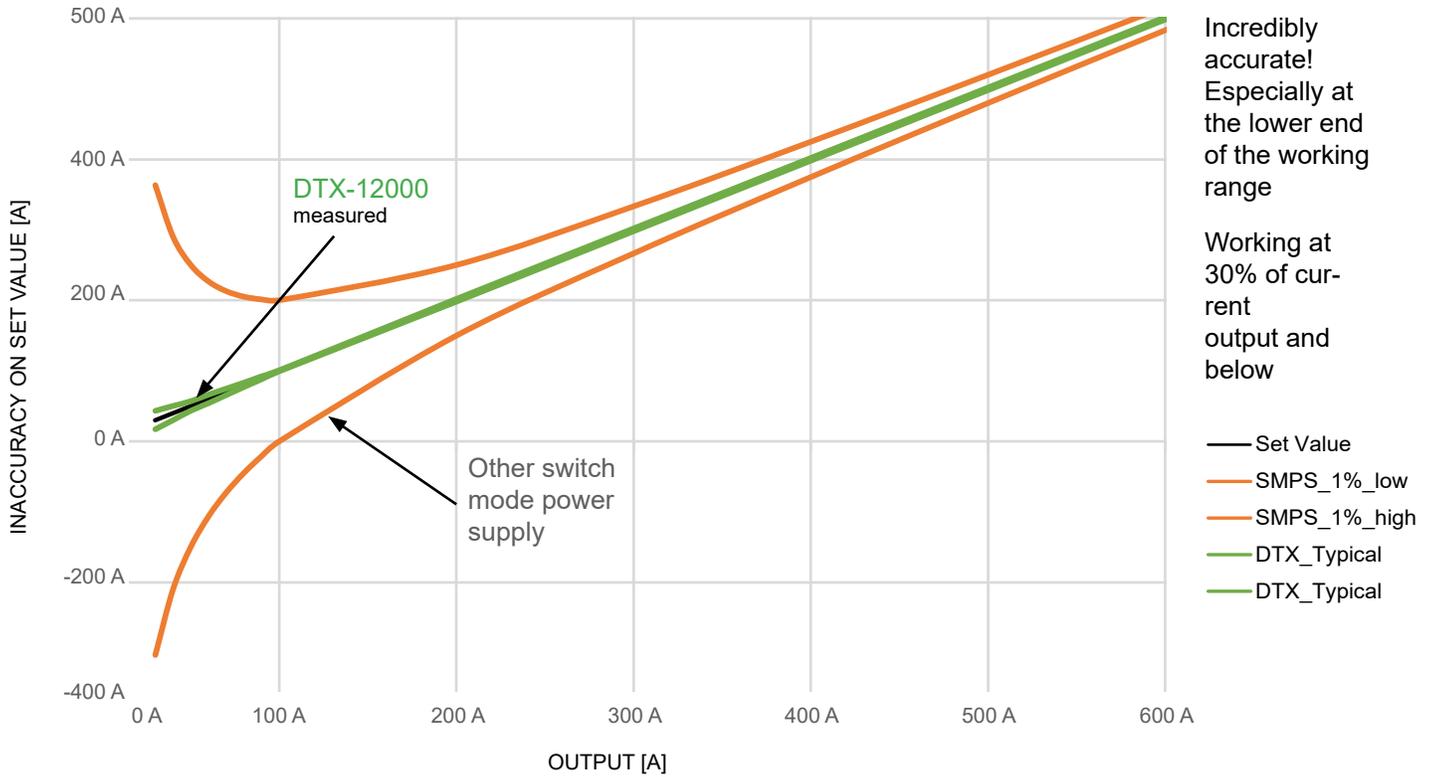
Humidity 20-80%RH non-condensing

Maximum Installation Height 2000m

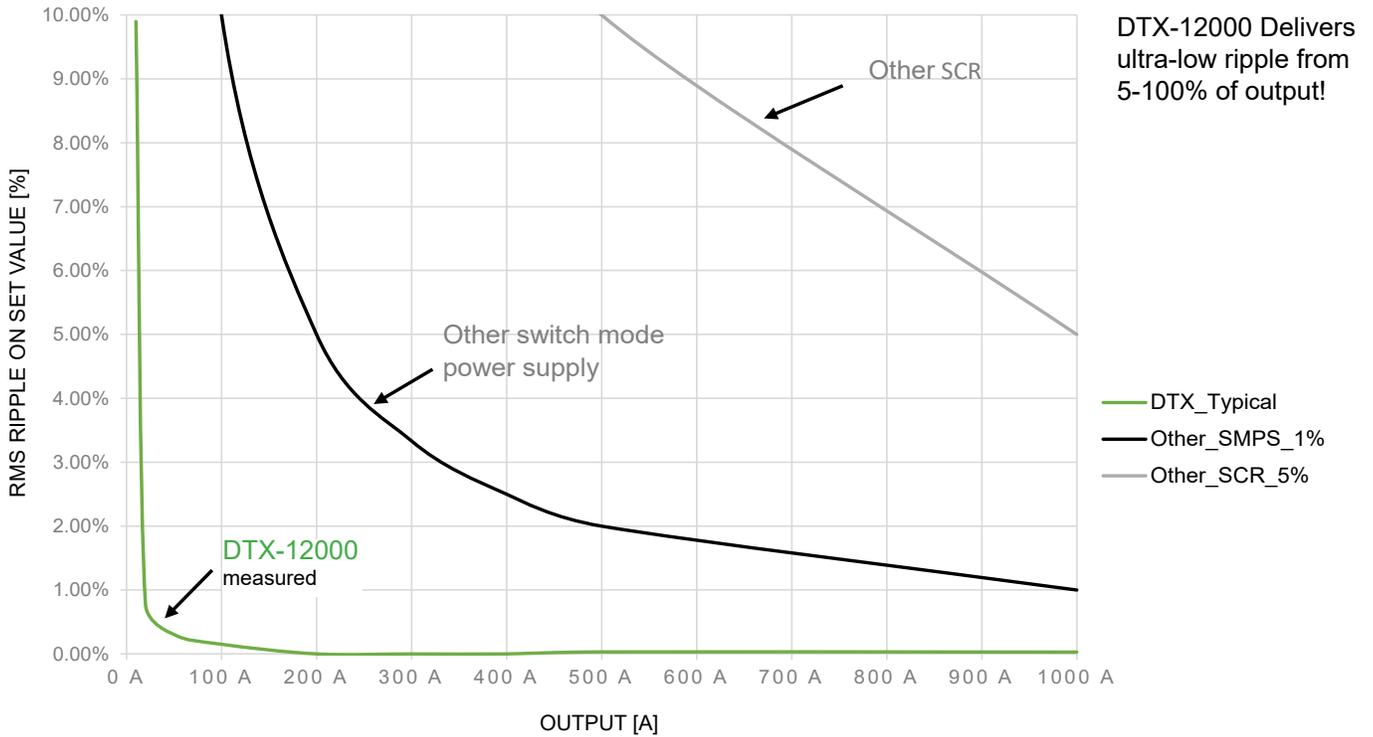
Certifications ETL listed to UL 61010-1 and CSA, C22.2#61010-1, CE certified

Product Warranty 2 Years

## DTX-12000: OUTPUT ACCURACY

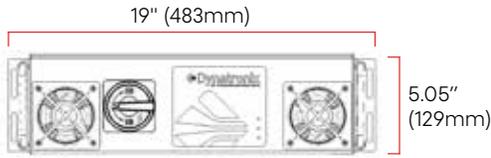


## DTX-12000: RIPPLE CHART

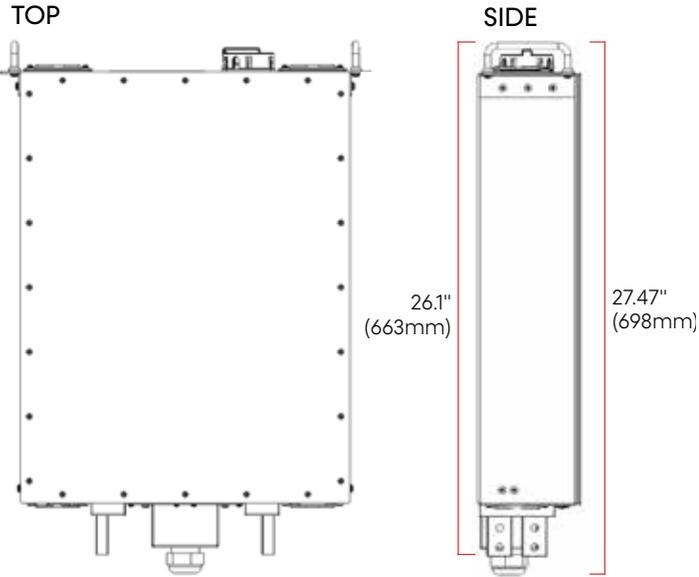


## DTX-12000: DIMENSIONS/CONNECTIONS

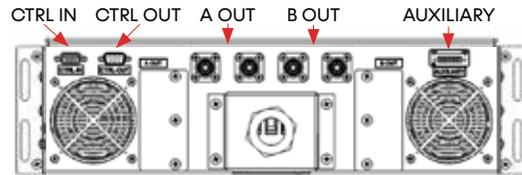
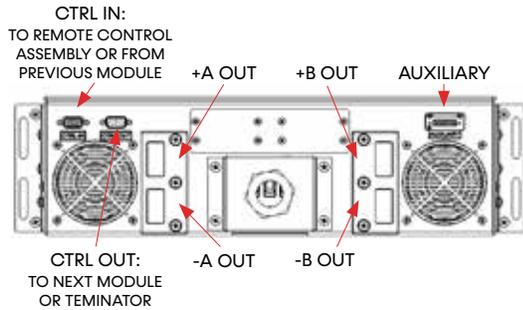
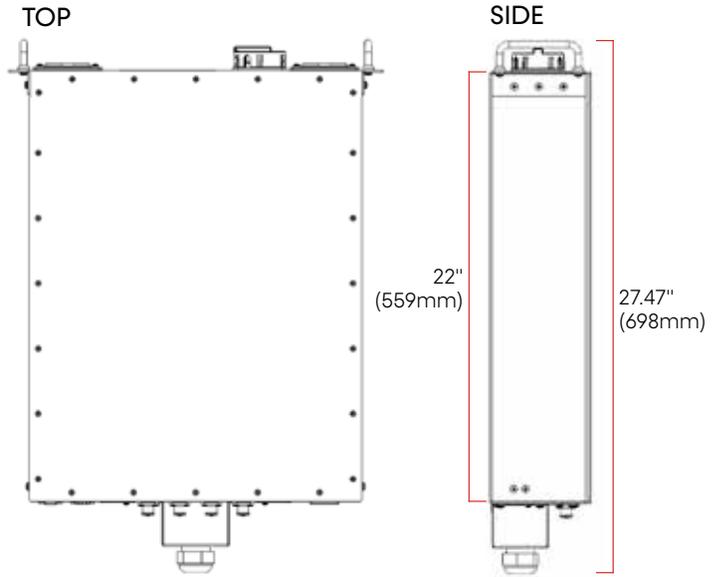
### FRONT



### 12V. 24V and 48V (BUS BAR)



### 100V (PLUG IN)



## DTX-12000: MODEL NUMBER BREAKDOWN

DTX	-	12	-	1000	-	M1W	-	1	-	AS
<b>Series</b>	-	<b>Voltage</b>	-	<b>Current</b>	-	<b>Controller and mounting options</b>	-	<b>Cable length</b>	-	<b>Options</b>
DTX = DTX Series	-	12 = 12VDC (std) 24 = 24VDC 48 = 48VDC 60 = 60VDC 100 = 100VDC	-	120 to 1000 = 120ADC 10000ADC	-	M1W = Wall Mount, Bottom exit (std) M1T = Tabletop Mount, Rear exit M1F = Flush Mount, Rear exit	-	1 = 10feet / 3m (std) 2 = 25feet / 7.5m 3 = 50feet / 15m 4 = 100feet / 30m	-	Blank = No option (std) AS = Analog Signals 0-10V or 4-20mA EI = Ethernet/IP Communication AC = Advanced Process Control, Recipe, 200Hz DL = Data Logging

# M-1 Controller

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## SPECIFICATIONS

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

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## M-1: FEATURES/OPTIONS

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### BASIC FEATURES

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

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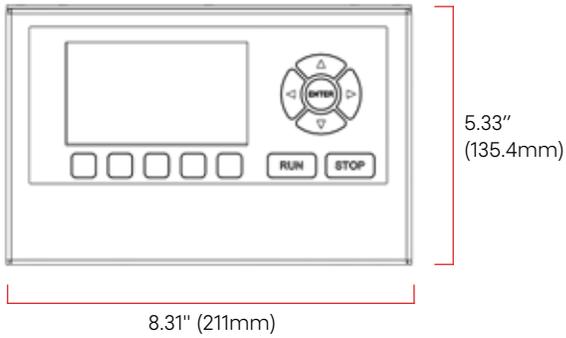
### OPTIONS

Recipe Feature
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

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

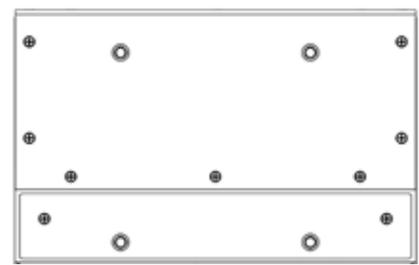
FRONT



SIDE

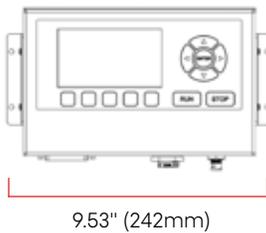


BACK



### WALL MOUNT

FRONT



SIDE

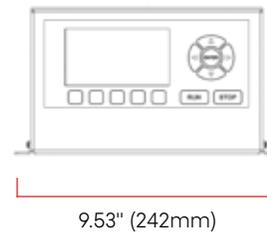


BACK



### TABLETOP MOUNT

FRONT



SIDE

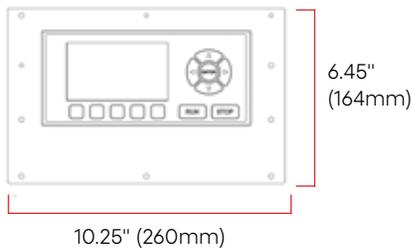


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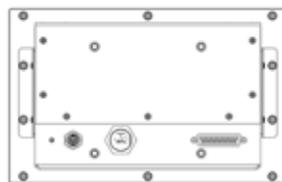


### FLUSH MOUNT

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BACK

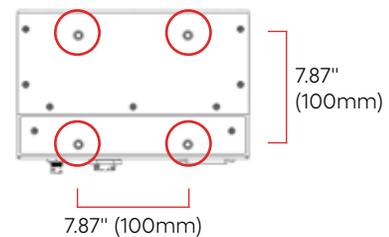


SIDE



### VESA MOUNT COMPATIBLE

BACK



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