MDX 500 FEATURES

**PHYSICAL**

**Size**
- Single: 88.63 mm (H) x 215.9 mm (W) x 406.4 mm (D)
- 3.5" (H) x 8.5" (W) x 16" (D)
- Dual: 88.63 mm (H) x 482.6 mm (W) x 406.4 mm (D)
- 3.5" (H) x 19" (W) x 16" (D)

**Weight**
- Single: 5.57 kg (12.25 lb)
- Dual: 11.14 kg (25 lb)

**Power Output Cable**
- RG-8U coaxial cable
- Discrete cables, optional

**Power Output Connector**
- UHF style
- "N" type, optional
- SHV style, optional

**DIMENSIONS**

**Output Stop & Start**
Turn output on and off.

**Regulation Switches**
Select the power regulation mode.

**Display**
Select the displayed parameter.

**Status LEDs**
Indicate present system status.

**Digital Motor**
Displays, selects output power, voltage, or current.

**Level**
Adjusts the output response.

**DISCOVER THE POWER OF**

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www.advanced-energy.com

MDX low-power 500 W
used for continuous hard use in small-scale vacuum environments.
## FEATURES

- **Input DC**: 24 to 48 Vdc at 500 W
- **Input Current**: 10 A at 120 Vac at 500 W
- **Input Voltage**: 180 to 265 Vac (50 to 60 Hz), 1 phase
- **Output Power**: 0 to 500 W at 0 to 10 V, 500 W (maximum of 500 W)
- **Output Voltage/CURRENT**: 0 to 600 V at 0 to 1 A, 500 W (maximum of 500 W)
- **Regulation**: 0 to 500 W
- **Output Display Accuracy**: 0.1, 1.0, or 10 second, selectable at the rear panel

## FUNCTIONAL SPECIFICATIONS

### General

The MDX 500 has a digital meter that displays the actual output in Watts, Volts, or Amps, or the Setpoint level in the selected mode of regulation.

### Control

- **Output Stop & Start switches**: turn output on and off.
- **Regulation selects**: the method of output regulation: the Level mode adjusts the output setpoint and displays values through the display parameters.
- **Status Indicators**: are occurred. Setpoint has been reached; Interlock conditions have been satisfied; Plasma is present; either overload or control over output or control over both is under remote control.

### Remote Operation (Analog/Digital)

The 25-pin analog/digital I/O port provides lines for controlling output on/off, regulation mode, setpoint, and three interlocks. It is also possible to monitor the setpoint and actual output levels, and to determine whether output is on or off if the unit is in remote or the analog signals can be either 0 to 5 V or 0 to 10 V.

### Built-in Protection

- The MDX 500 has complete internal protection for all overload conditions.
- Three separate pins on the User port and a front panel indicator are provided for safety-related inputs such as vacuum, water, and auxiliary (user-specified) interlocks.

### Compliance Certifications

- Several CE-compliant MDX 500 models are available. These models meet the requirements of EN60131-2 (emissions), EN50022 (immunity), and EN61010 (safety). They also meet the requirements of the German safety standard, DIN VDE0160.

### Availability and Serviceability

- Advanced Energy Industries, Inc., has used great care in selecting components and designing the MDX family of power supplies, making them among the most reliable and quality-oriented systems available. All parts and labor carry our standard one-year warranty.
- Contact our service departments for any questions regarding service or repair. This warranty does not cover damage due to shipping or misuse.

### ELECTRICAL

<table>
<thead>
<tr>
<th>SPECIFICATION</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Voltage</td>
<td>90 to 115 Vac (50 to 60 Hz), 1 phase</td>
</tr>
<tr>
<td>Input Current</td>
<td>38 to 265 Vac (50 to 60 Hz), 1 phase</td>
</tr>
<tr>
<td>Output Power</td>
<td>0 to 500 W at 0 to 10 V, 500 W (maximum of 500 W)</td>
</tr>
<tr>
<td>Output Voltage/CURRENT</td>
<td>0 to 600 V at 0 to 1 A, 500 W (maximum of 500 W)</td>
</tr>
<tr>
<td>Regulator</td>
<td>0 to 500 W</td>
</tr>
<tr>
<td>Output Display Accuracy</td>
<td>0.1, 1.0, or 10 second, selectable at the rear panel</td>
</tr>
<tr>
<td>Factory set to 0 to 10 V</td>
<td></td>
</tr>
</tbody>
</table>

### ENVIRONMENTAL

<table>
<thead>
<tr>
<th>SPECIFICATION</th>
<th>ENVIRONMENTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambient Operating Temperature</td>
<td>Operating: minimum 0°C (32°F), maximum 40°C (104° F)</td>
</tr>
<tr>
<td>Contact Temperature</td>
<td>Contact: minimum -25°C (-13°F), maximum 55°C (131° F)</td>
</tr>
<tr>
<td>Humidity</td>
<td>0% to 95% relative humidity</td>
</tr>
<tr>
<td>Atmospheric Pressure</td>
<td>700 to 1060 millibar (20 to 31 inches)</td>
</tr>
</tbody>
</table>

The MDX series of vacuum DC power supplies is available in various models, including the MDX 500 W, Advanced Energy Technology, Inc (AE), and AE Industries, Inc (AEI). For more information, please contact the manufacturer for the latest updates and specifications.