80 Plus Testing

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Agenda

- Energy Star Requirements
- 80 PLUS Certification Requirements 80 Plus/EPRI testing Fees
- 80 PLUS Certification Process
- 80 Plus Contact Information
Energy Star Requirements

- Energy Star For Storage requires that power supplies must meet the 80 Plus Silver efficiency requirements.
- Power Supplies must be tested to the “Generalized Test Protocol for Calculating the Energy Efficiency of Internal Ac-Dc and Dc-Dc Power Supplies Revision 6.7 located at:

# 80 PLUS Certification Requirements

<table>
<thead>
<tr>
<th>80 PLUS Certification</th>
<th>115V Internal</th>
<th>230V Internal</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of Rated Load</td>
<td>10% 20% 50% 100%</td>
<td>10% 20% 50% 100%</td>
</tr>
<tr>
<td>80 PLUS</td>
<td>--- 80% 80% / PFC .90 ---</td>
<td>--- --- --- ---</td>
</tr>
<tr>
<td>80 PLUS Bronze</td>
<td>--- 82% 85% / PFC .90 82% ---</td>
<td>81% 85% / PFC .90 81%</td>
</tr>
<tr>
<td>80 PLUS Silver</td>
<td>--- 85% 88% / PFC .90 85% ---</td>
<td>85% 89% / PFC .90 85%</td>
</tr>
<tr>
<td>80 PLUS Gold</td>
<td>--- 87% 90% / PFC .90 87% ---</td>
<td>88% 92% / PFC .90 88%</td>
</tr>
<tr>
<td>80 PLUS Platinum</td>
<td>--- 90% 92% / PFC .95 90% ---</td>
<td>90% 94% / PFC .95 91%</td>
</tr>
<tr>
<td>80 PLUS Titanium</td>
<td>--- --- --- ---</td>
<td>90% 94% / PFC .95 96% 91%</td>
</tr>
</tbody>
</table>
80 PLUS License and Certification Fees

- **One time License fee of $1,000 USD**
  - JPEG logo posting to website
  - URL to redirect customers to your website

- **230V Per model fee $2,500 USD**
  - Units must be configured with external fan leads for testing in order to remove fan power from calculation
  - 2 samples requested

- **115V Per model fee $2,000 USD**
  - No fan power leads needed
  - 2 samples requested

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TEST & CERTIFICATION PROCESS

• Submitting manufacturer completes an online application

• Manufacturer receives a confirmation email and shipping address
  with details for submitting their samples to EPRI, the program’s
  certified independent testing partner

• Test reports are available approximately three weeks after the
  manufacturer’s product samples (or) application questionnaire have
  been received by the 80 PLUS program
TEST & CERTIFICATION PROCESS (continued)

• Test reports and an invoice are sent to the submitting manufacturer according to the contact(s) provided on the application questionnaire.

• Once the submitting manufacturer completes payment for their invoice and approves the report content, Ecova verifies receipt of invoice and updates the test report to the website http://www.plugloadsolutions.com/80PlusPowerSupplies.aspx.
80 Plus Contact Information

To learn more, contact program staff or visit: plugloadssolutions.com

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