The Defender range uses Automatic Voltage Regulation (AVR) to minimize the effects of fluctuations in input voltage protecting your valuable equipment from power line disturbances.

The stylish LCD display, user replaceable battery and two Australia/NZ sockets makes the Defender the complete package at this level.

The Defender USB communication port is compatible with Synology NAS products.

NetGuard™ UPS management software included.

Features
• Surge Protection, Best in its Class
• Australian/NZ outlets for UPS and Surge protection (x2)
• Buck and boost AVR for voltage stabilization
• User replaceable battery
• Silent Operation (No fans included)
• Auto restart when AC returns
• Off-mode charging
• Cold start function
• USB communication with sophisticated NetGuard® software

2 Ports with Battery Backup & Surge Protection
1 Phone/Fax Surge Protection
2 Fanless Design. Ideal for Home Theatre Systems
3 User Replaceable Battery
4 USB Communication for Monitoring & Shutdown Software Included
5
# UPSD650- Line Interactive UPS

## Specification

<table>
<thead>
<tr>
<th>Model</th>
<th>UPSD650</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>650VA / 390W</td>
</tr>
<tr>
<td>Topology</td>
<td>Line Interactive</td>
</tr>
</tbody>
</table>

### Input

- **Voltage**: 240Vac (Nominal)
- **Voltage Range**: 177-290Vac
- **Frequency Range**: 50/60Hz ±5Hz (Auto sensing)

### Output

- **Output Voltage**: 240Vac ±10%
- **Frequency**: AC mode tracks utility, Battery mode 50Hz ±1%
- **Frequency Range**: 50Hz or 60Hz ±1Hz
- **Transfer Time**: 6ms (Typical)
- **Waveform (Battery Mode)**: Simulated Sine Wave
- **Outlets**: 2x Surge Protection + UPS

### Battery

- **Battery Type & Number**: 12V* 9AH (x1)
- **Typical Recharge Time**: 6 hours recovery to 90% capacity
- **Backup Time (50% Load)**: 13min

### Protection

- **Full Protection**: Overload, discharge, thermal, short circuit and overcharge protection
- **Surge Protection**: 312 Joules / 6500Amps

### Communications & Management

- **Interface**: USB Interface
- **Software**: NetGuard® supports Windows®, Linux, Unix & MAC
- **LCD Alarm**: AC Mode, Battery Mode, Low Battery (Batt. Mode), Fault, Overload
- **Audible Alarm**: Battery Mode, Low Battery (Batt. Mode), Fault, Overload

### Physical

- **Dimensions (D x W x H)**: (328 x 100 x 145)mm
- **Net Weight**: 5.2kg

### Operating Environment

- **Temperature**: 0 - 40˚C
- **Humidity**: 0 - 90% (RH Non-condensing)
- **Noise Level**: <5dB (no fan)

### Compliance

- **Safety**: EN62040-1-1 2003. IEC60950-1 : 2001
- **EMC**: EN62040-2 2006
- **RoHS**: Directive 2011 / 65 / EU

### Model

<table>
<thead>
<tr>
<th>Model</th>
<th>Power</th>
<th>Run Time (50% Load)</th>
<th>UPS Sockets + Surge Prot.</th>
<th>Surge Protection Sockets</th>
</tr>
</thead>
<tbody>
<tr>
<td>UPSD650</td>
<td>650VA / 390W</td>
<td>6 Mins.</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>UPSD1200</td>
<td>1200VA / 720W</td>
<td>13 Mins.</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>UPSD1600</td>
<td>1600VA / 960W</td>
<td>10 Mins.</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>