CyberPower ATT36A12V3S
(Leave Behind Manual)
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1 PRODUCT INTRODUCTION

1.1 General Description

The ONT-BBPSU (Optical Network Terminal Uninterruptable Battery Backup Power Supply Unit) is designed to be mounted inside a customer premises and provides power to the ONT. The Optical Network Terminal (ONT) is an equipment box typically installed on the outside of your home, where the fiber network terminates and the inside wiring for your home originates. The BBPSU supports wireline voice communications services by converting 120/230Vac to 12Vdc. AT&T supplies the initial backup battery for the BBPSU to the first resident of the premises where AT&T services are installed. All subsequent backup batteries are the responsibility of the customer at the premises. When equipped with a new, fully charged battery, the BBPSU provides four to eight hours of backup battery power. Actual results will vary, depending, among other things, on battery age, usage patterns, and environmental conditions. To conserve battery backup power for emergency calls, you should not use Internet services during a power outage.

1.2 Components

The ATT3612V3S unit consists of a dedicated 120/230Vac to 12Vdc power supply with Backup Battery and dedicated support cables.

The ATT3612V3S unit houses a dedicated battery charger to maintain a 12Vdc, 7.2Ah sealed lead-acid battery, battery monitoring and alarm circuitry. It contains four indicator LEDs to provide operational status at a glance, status audible alarms, and one customer-operation button to silence the audible alarm for 24 hours.

Figure 1: CyberPower Power Supply and ONT System Configuration
2 IMPORTANT SAFETY NOTES

- ONLY qualified installation and repair personnel should service this power supply.
- SAVE THESE INSTRUCTIONS - This manual contains important instructions for the ATT3612V3S units that should be followed during installation and maintenance.
- Verify the supplied AC line voltage prior to installation using an AC voltage meter.
- Verify branch circuit breaker or fuse on the service feed is correct for the equipment being installed.
- Batteries may produce hazardous currents and may present a burn hazard if damaged or shorted.
- The following precautions should be observed when working on the unit:
  
  1. Remove watches, rings, or other metal objects.
  2. Wear protective clothing and eye protection when working with batteries and installing this equipment.
  3. Always carry a water supply to wash eyes and/or skin if exposed to battery electrolyte.
  4. Use tools with insulated handles.
  5. Examine the packing container for damage. Notify the carrier immediately if damage is present.
  6. Do not disassemble the unit.
  7. Do not operate near water or excessive humidity.
  8. Keep liquid and foreign objects from getting inside the unit.
  9. Do not operate close to gas or fire.
  10. Do not operate unit near leaking liquid or if any liquid residue is present.
  11. Immediately unplug Power Supply from AC if you see liquid leaking.

2.1 Electrical Warnings

- Servicing this equipment may require working with protective covers removed and utility power connected. Use extreme caution during these procedures.
- Check that the power cord(s), plug(s), and outlets are in good condition.
- No user serviceable components other then the battery are present in the ATT3612V3S unit.

2.2 Battery Warnings

- Battery Warranty is top-charge date plus thirty-six months. Replacement battery should be Model # PX12072F2-HG. Replacement battery can be ordered by contacting GS Battery at 1-800-228-7078 or www.gsbattery.com.
- Danger of explosion if battery is incorrectly connected or replaced.
- Worn-out or damaged batteries are considered environmentally unsafe. Always recycle used batteries or dispose of the batteries in accordance with all federal, state and local regulations.
- Any gel or liquid emissions from the sealed lead-acid (SLA) battery contain sulfuric acid, which is harmful to the skin and eyes. Emissions are electrically conductive and corrosive.
- Batteries may produce explosive gases. Keep all open flames and sparks away from batteries.
- Batteries contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Battery post terminals and related accessories contain lead and lead compounds. Wash hands after handling (California Proposition 65).
- Wear protective clothing and eye protection whenever installing, maintaining, servicing, or replacing batteries.
- If any battery emission contacts the skin, immediately and thoroughly wash with water. Follow approved chemical exposure procedures.
- Neutralize any spilled battery emission with the special solution contained in an approved spill kit or with a solution of one pound Bicarbonate of soda to one gallon of water. Report chemical spills and seek medical attention if necessary.
- Never use un-insulated tools or other conductive materials when installing, maintaining, servicing or replacing batteries.
- A battery showing signs of cracking, leaking, or swelling should be replaced immediately with a battery of identical type and rating.

2.3 Safety Warning Label

The AC power cord is supplied with the warning label “DO NOT UNPLUG! – Power Supply for Voice, 911 Dialing, and Battery Charging” attached to the cord.

![Figure 2: Warning Label](image-url)
3 POWER SUPPLY OVERVIEW

3.1 Overview

Figure 3: Unit Overview (Front)

1. Control Buttons (Alarm Silence)
2. LED Indicators (System Status/Battery Power/Replace Battery/Auxiliary Power Source)
3. Battery Input Power Connector
4. 7 Pin Connector
5. AC Power Cord Inlet
6. Strain Relief and Cable Tie for DC Power Cable
7. Pass-through Hole for DC Power Cable
8. Battery Release Latch
9. Battery Compartment
10. Cover
4 OPERATION

4.1 Start-Up

Make sure that the battery connector is plugged in, the battery is locked into place, and the battery door is closed. Plug the ATT3612V3S power supply into AC power. The LED of system status showing green indicates normal mode of operation. The unit is now ready to be placed into service.

4.2 Controls

![Image of Front Panel LED and Controls]

Figure 4: Front Panel LED and Controls

One user control is present in the form of one blue button on the front cover of the BBPSU. This alarm-silence button will quiet the audible alarm for 24 hours. After 24 hours the alarm will reactivate if the fault condition has not been corrected.

<table>
<thead>
<tr>
<th>Function</th>
<th>Symbol</th>
<th>Type</th>
<th>Location</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alarm Silence</td>
<td>![Alarm Silence Symbol]</td>
<td>Push</td>
<td>Front Cover</td>
<td>Press and hold the button for 3 seconds to silence the audible alarm for 24 hours</td>
</tr>
</tbody>
</table>

Table 1: Customer Button Operation

4.3 Operational LEDs

Four status LEDs are displayed on the front panel of the BBPSU. The operation of the BBPSU can be assessed using these LEDs.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Color</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alarm Silence Button</td>
<td>Blue</td>
<td>Press and hold the button for 3 seconds to silence the audible alarm for 24 hours.</td>
</tr>
<tr>
<td>System Status</td>
<td>Green</td>
<td>Indicates normal mode of operation.</td>
</tr>
<tr>
<td>Battery Power (Working)</td>
<td>Green</td>
<td>Indicates the battery is supplying the power.</td>
</tr>
<tr>
<td>Battery Power (Low)</td>
<td>Flashing Green</td>
<td>Battery Power is nearly depleted. Beeps four times every two minutes.</td>
</tr>
<tr>
<td>Replace Battery</td>
<td>Red</td>
<td>Battery replacement required alarm will beep twice every 3 minutes.</td>
</tr>
<tr>
<td>Missing Battery</td>
<td>Red</td>
<td>Indicates that the battery is disconnected or removed. No Audible Alarm.</td>
</tr>
</tbody>
</table>

Table 2: LED Indicators
4.4 Auxillary Power Connection

![Figure 5: Auxillary Power Connection](image)

Connection point for customer-supplied DC input voltage shall be 12Vdc. After depleting the on-board battery capacity, the ATT3612V3S will utilize power from a valid and present external source. The auxiliary power source supplies power to the load (ONT) in the event of AC input voltage failure and a depleted battery.

4.5 Alarms

There are audible and visual alarm signals to alert the customer to abnormal and/or service affecting conditions present in the BBPSU.

<table>
<thead>
<tr>
<th>LEDs</th>
<th>Condition</th>
<th>Status LED</th>
<th>Audible Alarm</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>System</td>
<td>Normal</td>
<td>Status LED on (Green)</td>
<td>No Audible Alarm</td>
<td>Condition normal</td>
</tr>
<tr>
<td>Battery</td>
<td>On Battery</td>
<td>Battery Power LED on (Green)</td>
<td>Beeps once when the AC input fails</td>
<td>AC is off, Battery is supplying the power</td>
</tr>
<tr>
<td>Battery</td>
<td>Low Battery</td>
<td>Battery Power LED on (Flashing Green)</td>
<td>Beeps four times every two minutes</td>
<td>When the battery is nearly depleted, the Battery LED will flash and the audible alarm will beep 4 times every two minutes.</td>
</tr>
<tr>
<td>Replace</td>
<td>Replace Battery</td>
<td>Replace Battery LED on (Red)</td>
<td>Beeps twice every three minutes</td>
<td>The unit will perform a periodic battery test automatically without disrupting operation. If the battery needs to be replaced, the Replace Battery LED will be illuminated and the audible alarm will beep twice every three minutes.</td>
</tr>
<tr>
<td>Missing</td>
<td>Missing Battery</td>
<td>Missing Battery LED on (Red)</td>
<td>No Audible Alarm</td>
<td>The Missing Battery LED will be illuminated due to a missing battery.</td>
</tr>
</tbody>
</table>

Table 3: Alarms
5 MAINTENANCE

5.1 Maintenance Mode

Maintenance mode determines remaining useful battery life. If the remaining battery life is determined to be below an acceptable level and unable to support proper operation, the Replace Battery LED will be illuminated.

- The ATT3612V3S enters the maintenance mode approximately once every 45 days.
- In the event that ATT3612V3S is in the maintenance mode and an AC failure occurs, maintenance mode will cease and the ATT3612V3S will supply the power to the load.

5.2 Customer Battery Replacement

**Figure 6**

![Diagram of ATT3612V3S]

- **Step 1:**
  a. Open the battery cover.
  b. Open door 90 degrees and remove by pulling away from enclosure.

**Figure 7**

- **Step 2:**
  a. Release the battery latch.
  b. Slide battery off of the shelf.
  c. Disconnect the battery harness with the two-position locking connector.
Battery Type
The battery is a standard sealed lead acid battery rated at 12Vdc / 7.2Ah. When required, the battery may be replaced with an approved 12Vdc / 7.2Ah battery.

--- Step 3: ---
a. Remove the harness from the old battery and place on the new battery with the red and black Faston terminals, observing correct polarity, then reconnect the two-position locking connector.
b. Slide the battery back into the compartment and make sure it latches.
c. Replace door and close.

Batteries are considered HAZARDOUS WASTE and must be disposed of properly. Most retailers that sell batteries collect used batteries for recycling.
### SPECIFICATIONS

<table>
<thead>
<tr>
<th>Model</th>
<th>ATT3612V3S</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Input</strong></td>
<td></td>
</tr>
<tr>
<td>Voltage Range</td>
<td>100Vac – 240Vac (Universal Input)</td>
</tr>
<tr>
<td>Frequency Range</td>
<td>50-60Hz</td>
</tr>
<tr>
<td>Input Power Cord</td>
<td>NEMA 5-15 / 3-Prong Power Cord, Earth Grounded</td>
</tr>
<tr>
<td><strong>Output</strong></td>
<td></td>
</tr>
<tr>
<td>On Battery Output Voltage</td>
<td>12Vdc</td>
</tr>
<tr>
<td>Continuous Power Capability</td>
<td>36W</td>
</tr>
<tr>
<td>Efficiency (at 75% Max Load)</td>
<td>&gt;75%</td>
</tr>
<tr>
<td><strong>Battery</strong></td>
<td></td>
</tr>
<tr>
<td>Battery Type</td>
<td>Sealed, Maintenance Free Lead-Acid Battery</td>
</tr>
<tr>
<td>Numbers of Battery</td>
<td>12Vdc / 7.2AH x 1</td>
</tr>
<tr>
<td>Typical Recharge Time</td>
<td>&lt;24 hours</td>
</tr>
<tr>
<td>Replaceable</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Surge Protection and Filtering</strong></td>
<td></td>
</tr>
<tr>
<td>Lightning / Surge Protection</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Management</strong></td>
<td></td>
</tr>
<tr>
<td>Auto-Charge</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Physical</strong></td>
<td></td>
</tr>
<tr>
<td>Maximum Dimensions (LxWxD) (in)</td>
<td>9.37 x 7.48 x 3.39</td>
</tr>
<tr>
<td>Weight (lb)</td>
<td>1.79</td>
</tr>
<tr>
<td><strong>Environment</strong></td>
<td></td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-20°C – +55°C (-4°F - 131°F) with excursions to 65°C</td>
</tr>
<tr>
<td>Operating Humidity</td>
<td>0 – 95% noncondensing within enclosure</td>
</tr>
<tr>
<td>Max Operating Elevation</td>
<td>10,000ft (3,000m)</td>
</tr>
<tr>
<td>Max Storage Elevation</td>
<td>50,000ft (15,000m)</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-20°C – +55°C (-4°F - 131°F)</td>
</tr>
</tbody>
</table>

*Table 4: Specifications*