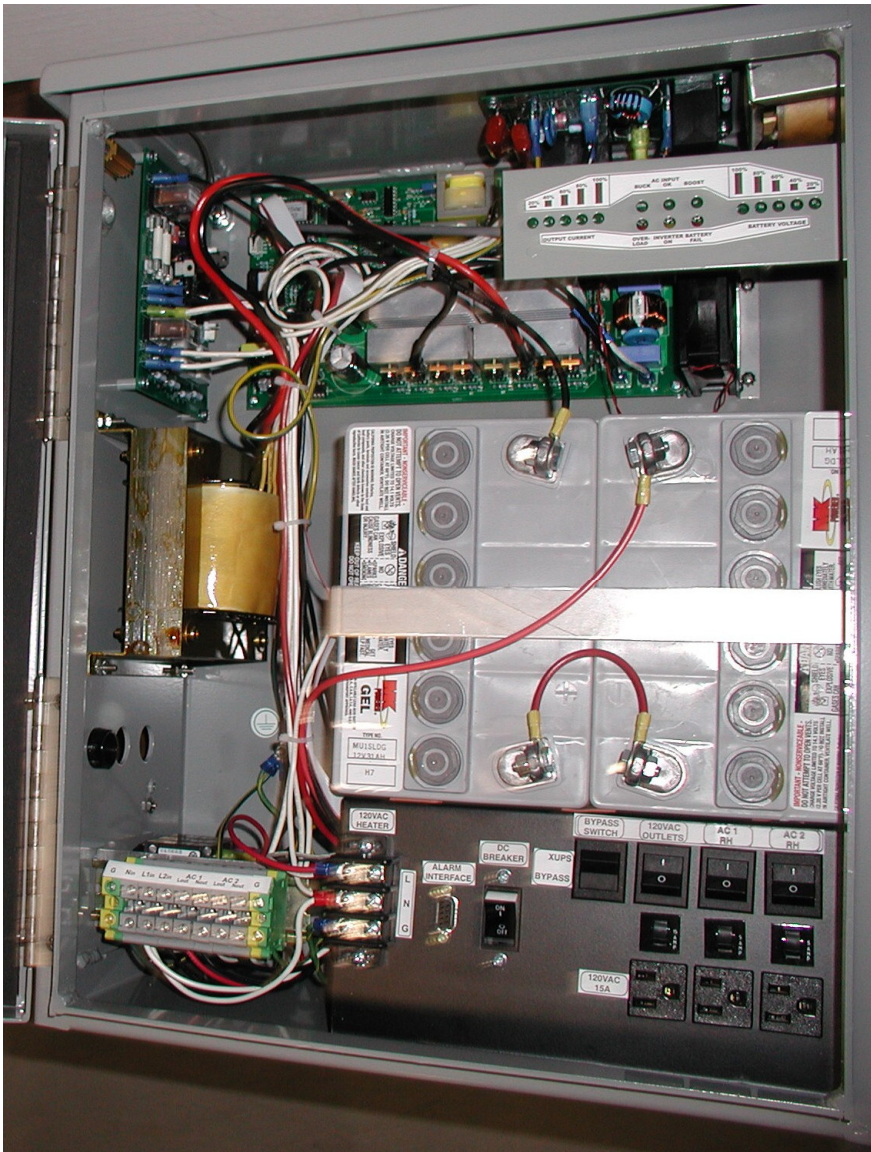


## Outdoor UPS Designed for Pole Mounting

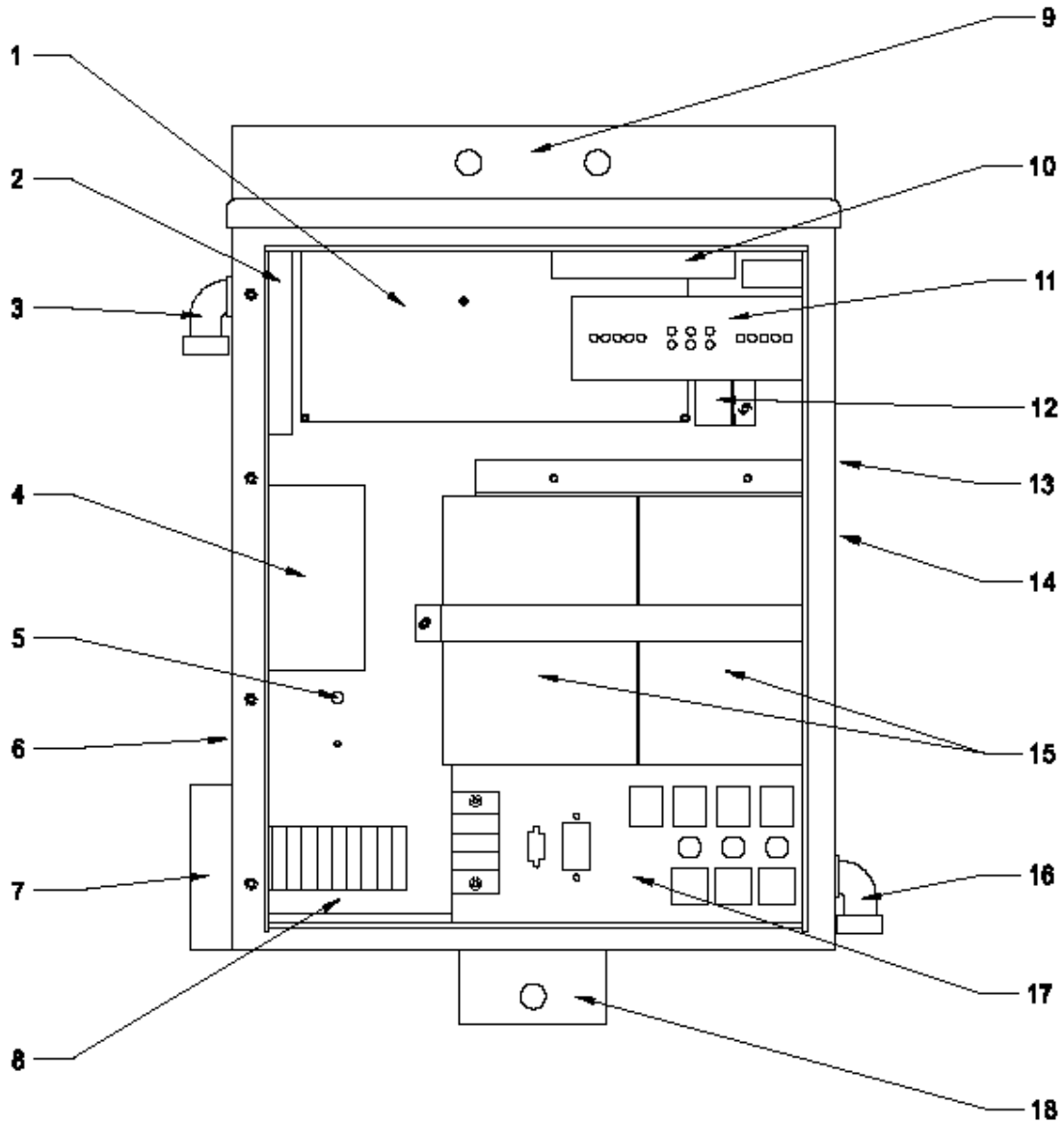
### Introduction

The XUPs-600-6369 outdoor UPS is constructed with extreme wide temperature batteries, and is housed in a weather protected IP44(NEMA-3R) enclosure designed to be mounted on a power pole and blend in with the environment. This unit offers line-interactive automatic voltage regulation, over/under-voltage protection, communications capability, maintenance bypass switch and options of battery heater (Option 1), automatic bypass switch (Option 2), industrial-strength surge protection (Option 3) and extended battery backup (EXT-6369).

Please read and understand instructions and recommendations described in this document before installing and operating this unit. Overview picture of the inside of the unit and outline drawing follow.



The below is an outline drawing of the XUPs-600-6369 unit. There are 18 call outs described below. Each call out shows the location of internal components.



1. Main XUPs circuit board
2. Automatic transfer switch board
3. Hot air exhaust
4. XUPs main transformer
5. External ground posts
6. Input/output cable entry holes
7. External On/Off switch and circuit breaker (one module)
8. AC input/output terminal blocks
9. Upper pole mounting bracket
10. Surge protection and filter board
11. Display panel with system status indicators
12. Heatsink cooling fan
13. AC to EXT heater power exit hole
14. DC to EXT power exit hole
15. Batteries
16. Cool air entry
17. Distribution and switch panel
18. Lower pole mounting bracket

### **Inspection and Unpacking**

Inspect the packaging for obvious damage during transit. The palletted package is protected by shrink wrap for water ingress protection. If no visible damage is found proceed to remove the shrink wrap. If a knife is used care should be taken not to scratch the painted surface of the metal cabinet.

Open the cabinet door and visually inspect all the parts and wires. Make sure all items are in place securely. If loose wires or parts are found, contact TSI Power Corporation immediately to report the damage. We will get back to you promptly with advice on what to do next. Do not make any electrical connections if loose wires or parts are found.

If damage is found we recommend taking pictures to be used as evidence. Damage claims should be filed with the carrier.

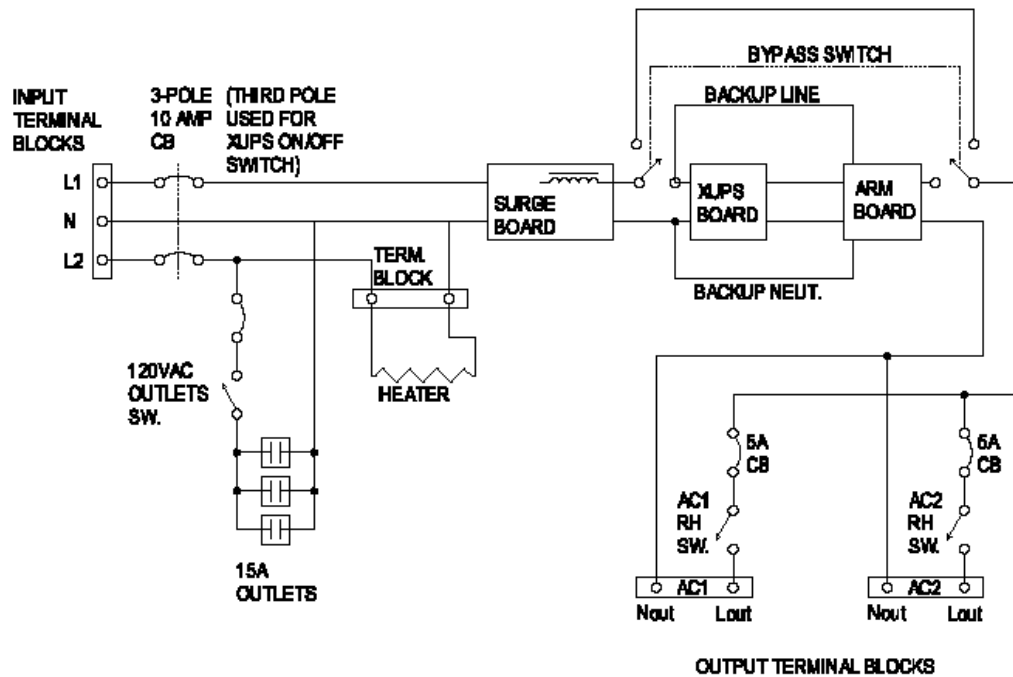
### **Making AC wire connections and testing the unit**

Please refer to the XUPs-600-6369 wiring diagram on the next page to identify actual designations and connections. The system can be used with either 120/240V split phase or regular 120V single phase. Please note that capacity will be reduced when using 120V only. It is strongly recommended that 120/240V service is used wherever possible.

1. The unit can receive power from two different sources:
  - a. 240/120V, 60Hz split phase;
  - b. 120V, 60Hz single phase.
2. Source a. requires L1 and L2 plus neutral and ground.
3. Source b. requires L1 plus neutral and ground.
4. Power entry and exit is from the left side of enclosure through holes designed for either 1/2" conduit connectors or through liquid tight cable glands.
5. Use AWG #12 for all conductors.
6. Conductor colors as follows: L1 – black, L2- red, N – white, G – solid green.

7. Make sure all wires are long enough to reach the applicable terminals.
8. Strip approximately 3/8" (10mm) insulation from each wire.
9. AC input terminals are marked: L1in, L2in, Nin and G.
10. **If 120V input is used it is necessary to connect a jumper between L1in and L2in.**
11. Connect black wire to L1in and red wire to L2in, white wire to N1in and green wire to G on left side. If 120V is used there is no conductor connected to L2in, other than jumper from L1in.
12. Two 120V single phase outputs are provided. Connect RH1 to AC1 and RH2 to AC2 terminals. Follow the same wire stripping procedure as above.
13. Inspect and verify that all connections are made correctly.

XUPS-600-6369 WIRING DIAGRAM



7/24/08

### System Energization and Test

1. Switch on the DC supply by pressing on the DC switch/circuit breaker in the Distribution and Switch Panel (number 17).
2. Switch on the AC supply by pressing on the external on/off switch/circuit breaker (number 7).
3. Watch the Display Panel with system status indicators (number 11). The system will go through a start-up sequence.
4. After about 5 seconds, green "AC INPUT" LED status indicator should remain ON.
5. If "AC INPUT BUCK" LED remains ON, it means AC input voltage is too high and UPS is "bucking" or reducing the UPS output voltage by about 10%.
6. If "AC INPUT BOOST" LED remains ON, it means AC input voltage is too low and UPS is "boosting" or increasing the UPS output voltage by about 10%.
7. Five LED indicators on the left side shows amount of output current (from 20 to 100%). It is recommended that the UPS should be loaded to 80% or less (since there is danger of overload shutdown if UPS is loaded to 100% of its capacity).
8. Five LED indicators on the right side shows the battery voltage level. When batteries are fully charged, all 5 LED's are on. When batteries are discharged, only one LED (20%) will be ON.
9. At the bottom, three alarm LED's are provided. "Overload" LED turns on when too much load is connected to the UPS (system must be turned off, load must be reduced, then system must be turned back in order to clear the Overload Alarm LED).
10. INVERTER ON (yellow LED) keeps blinking when UPS is running on battery (during AC power failure). AC must be restored before INVERTER ON indicator turns off.
11. BATTERY FAIL indicator LED turns on if battery is defective. Battery must be replaced with a new battery in order to clear this alarm condition.
12. To provide output power to RH1 and RH2 press the corresponding switches on Distribution and Switch panel (number 17).
13. If AC outlets are needed simply press the 120VAC outlet switch.

### Important Safety Instructions

When performing maintenance work the external on/off switch breaker must be switched off. The DC switch/circuit breaker must also be in the off position. Never ship the unit with DC switch/circuit breaker in the on position. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN LEAD TO SERIOUS INJURY OR DEATH FROM ELECTROCUTION.

### Technical Support & Repair Service

Contact:

TSI Power Corporation at 800-874-3160 or send an e-mail.