# Parts List and Warranty



C00169 Hand Tool

<b>REPAIR PARTS LIST FOR C00169</b>		
PART #	DESCRIPTION	
C01140	TOOL FRAME	
C01687	THRUST BEARING	
C01387	SLIDE BLOCK	
C01899	KIT, GRIPPER ASSEMBLY INCLUDES: GRIPPER, PIN, AND GRIPPER SPRING	
C05887	KIT, CUTTER BAR ASSEMBLY INCLUDES: CUTTER BAR HANDLE, VINYL GRIP, SET SCREW, AND CUTTER BAR	
C00689	KIT, TENSION HANDLE AND SCREW	

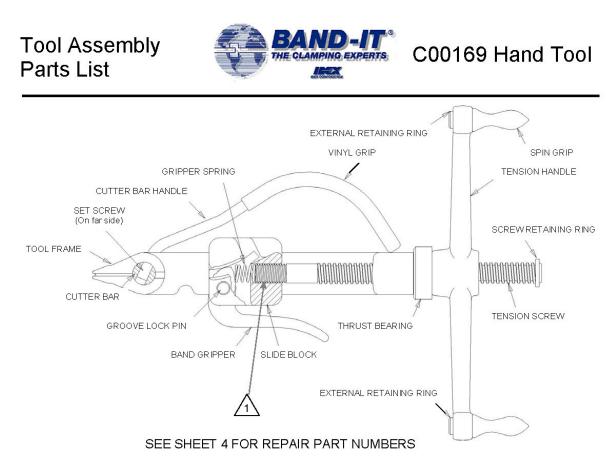
Refer to website for warranty information: http://www.band-it-idex.com/warranty.html

BAND-IT-IDEX, Inc. A Unit of IDEX Corporation 4799 Dahlia Street Denver, CO 80216-3070 USA P: 1-800-525-0758 F: 1-800-624-3925

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A To assist in removing threaded parts, apply heat (softens locking compound).

2. When connecting the tension screw to the slide block, clean threads (male and female) of foreign matter, then apply two drops of medium strength locking compound (Loctite 242 or equiv.) onto male threads and connect parts together. Apply .03 oz. of food-grade white lubricant or equiv. to tension screw thread.

3. When connecting the set screw to the cutter bar, clean threads (male and female) of foreign matter, then apply one drop of medium strength locking compound (Loctite 242 or equiv.) onto male thread and connect parts together.

4. Kit # C00689 contains the C02078 Assembly and the C03882 Tension Screw. Both parts should be changed as a set to reduce accelerated wear.

5. Kit # C01899 contains one each of a C01887 band gripper, C03186 gripper spring and C01787 pin. Replace all parts as a new set to maximize tool performance. Periodic cleaning of band gripper teeth will improve tool performance.

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# Cleaning and Accessories



### C00169 Hand Tool

#### **Gripper Cleaning Instructions:**



1. Remove gripper. Align gripper pin hole with notch in tool frame. Using a punch and hammer, punch pin out of slide block.



2. Using a wire brush, clean all foreign matter from teeth.



3. Replace pin. Gripper spring must be seated in tension screw hole. Align gripper hole with slide block hole, insert pin in hole and hammer pin in place.



1. The BAND-IT Scru-Lokt clamp, using the Scru-Lokt buckle, is applied in exactly the same way as the BAND-IT clamp except that the tool is not rolled over.



2. After tension is applied, insert set screw in Scru-Lokt buckle and tighten. To permit taking up Scru-Lokt clamp, or to re-use, a 3 inch (7.5 cm) stub should be left so that tool will be able to re-grip band later.



3. Where stub of band is left for Scru-Lokt clamp, it may be folded under as shown.

#### **Tool Accessories:**

<u>JR Adapters</u>: The JR adapters (J00169 and J05069 heavy duty) are used with the BAND-IT C00169 tool when BAND-IT JR. preformed clamps are used.

C04388 Close Quarter Tension Nut: In cramped quarters, use instead of tool tension handle.

NOTE: See general catalog or web site for instructions and ordering information.

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#### 9.3 Appendix A – "Band-It", C00169 Hand Tool Operating Instructions

#### Operating Instructions



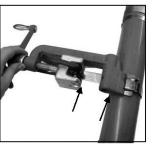
### C00169 Hand Tool



1. Band may be used from bulk roll as this completely eliminates waste of band. Slide buckle on band as shown, bringing end of band around object to be clamped and again through buckle. NOTE: The tension screw thread should be lubricated regularly.



 Continue band around object once more and again through buckle. Double banding develops a great deal more radial compression than single banding. Bend end of band under buckle.



3. Place band in opening of tool nose and gripper block. Move into slot as far as possible, to avoid buckle sliding into tool nose. Tighten band clamp by turning the tension handle clockwise while holding band gripper tight against band. NOTE: The spring load of the band gripper is not intended to secure and prevent band from slipping during tension process.

6. Pull cutting handle to cut the band.



4. Place finger on BAND-IT Band at buckle bridge while tensioning with tool handle. When you feel BAND-IT Band stop moving through buckle as you are turning handle, *maximum pressure is being exerted by the BAND-IT Band* around object being clamped. *Stop turning handle*.





5. Roll tool over buckle, backing off with tension handle throughout entire rolling operation. Failure to back off with tension handle through-out entire course of roll-over may result in breaking of band. There is no loss of tension as band released is used up in the bend.

7. Remove tool, holding stub of band down with thumb.



8. Hammer down buckle ears to hold band stub in place to complete BAND-IT clamp.

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Weight, without batteries (lb/kg)	69 / 31.3		
Weight, with batteries (lb/kg)	124 / 56.3		
Environmental			
Operating Temperature <sup>*</sup> (with heater)	-40° to 122° F (- 40°C to 50° C)		
Operating Temperature <sup>**</sup> (without heater)	14° to 122° F (-10° C to 50° C)		
Storage Temperature °F (°C)	-4° to 122° F (-20° C to 50° C)		
Humidity	0 to 95% non-condensing		
Surge Voltage Immunity			
Test Conditions	ANSI/IEEE C62.41-1991 6kV, 3kA, Category B3		
Injection – all modes/Remnant Voltage	L-N: 450V, L-G: 300V, N-G: 300V		
Mounting Configuration			
Pole Mount (wood utility pole): PM1 bracket (customer supplied through bolts and hardware)			
Pole Mount (steel or concrete): PM2 bracket (customer supplied bands)			
Pole Mount (steel pole 3" to 6"): PM3 bracket (customer supplied bands)			
Agency Compliance (Pending)			
FCC part 15 Class A			
cETLus tested to UL 1778 and UL 60950-1			
RoHS compliant, per EU Directive 2002/95/EC, Restrictions of Hazardous Substances			
NEMA 3R			

\* Duration of storage will determine the need for supplemental charge, especially at elevated temperatures.

\*\* Extended exposure to temperature >  $104 \circ F$  ( $40 \circ C$ ) may shorten battery life.

#### 9.2 TSI POWER CONTACT INFORMATION

TSi Power Corporation 1103 West Pierce Avenue Antigo, WI 54409 Tel: 800-874-3160 Fax: 715-623-2426 URL: <u>www.tsipower.com</u> e-mail: <u>sales@tsipower.com</u>

**TSi Power Corporation** 

Transfer Time Line to Backup	0 ms (zero transfer time)
Output DC Fuse Rating	7A
Battery	
Туре	Four sealed 12Vdc suspended electrolyte, valve- regulated, lead-acid, maintenance free (sold separately) NP18-12 Yuasa
Temperature (Charge/Discharge/Storage)	-15C to 50C / -20C to 60C / -20C to 50C
Battery Bus Voltage	48Vdc
Capacity	18Ah @ 20 hour rate per battery
Battery Fuse	30A
Weight (lb/kg) per battery	13.66/6.2
Dimensions (in/mm)	7.09 L x 3.00 W x 6.57 H / 180 L x 76 W x 167 H
Battery Runtime	3.25hr @ 208W; 4.5hr @ 155W
Recharge Time (after full discharge)	10hrs to 90%; 17 hrs to 100%
Battery Heater Pad Power Rating (Two required)	34 watts per heater x 2 heaters (68 watts)
LED Indicators	
Output OK DC (Float charging)	Green, Solid
Output OK DC (Charging)	Green, Slow Blink
Backup ON DC	Green, Quick Blink
Fault DC	Red, Solid
Alarm Signals on DB-9 Connector (Relay	Contact Closures)
BATTERY OK	Pin 1: NO, Pin 2: COMMON, PIN 3: NC
AC OK	Pin 4: NO, Pin 5: COMMON, PIN 6: NC
Mechanical	
Dimensions (in/mm)	16W x 8.38D x 20H / 406W x 213D x 508H

Description	TSi Part Number	Manufacturer	Mfg. Part No.
Heater PCB	PB00093-1	TSi Power	N/A
Input inductor	IT00016	Johnson Electric Coil	J13939
AC input breaker	TBD	Airpax	TBD
Battery breaker	TBD	Airpax	TBD
AC cooling fan	VF00015	Minebea	3115FS-12T-B30
12V, 18Ah battery		Yuasa	NP18-12

#### 9. **REFERENCE**

#### 9.1 Outdoor DC-UPs-250-6070-X Specifications

Input	
Voltage Range	95 to 140Vac
Frequency	60Hz +-5%
Normal AC Input Current (Maximum)	Typical 3A (Maximum Input Current: 8A)
AC Input Circuit Breaker	10A
Output	
Maximum Continuous Output Power	250W
Nominal Output Voltage (Output Voltage Range)	48Vdc (41 ~ 58 Vdc depending on battery charge)
Current	5.2A
Charging Current	3.75A @ max 55Vdc
Power Efficiency in AC Line Mode	>88%
Power Efficiency in Backup Mode	>99%

- Insert heating pad between batteries,
- Push batteries back in,
- The heating pad should now be secure between the batteries,
- Replace battery brackets,
- Run the wires back to the heater control PCB and mate connector with header,
- Restart the UPS.

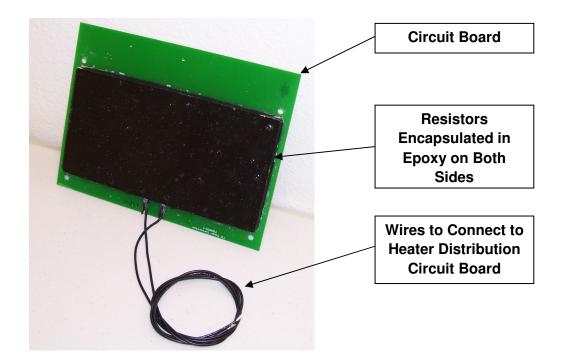


Figure 6: Optional Battery Heater Circuit Board

#### 8. REPAIRS, SERVICE & SPARE PARTS

8.1 **REPAIRS -** The Outdoor DC-UPs-250-6070-X should be repaired only by persons with knowledge of power electronics and electrical safety procedures. Others should contact TSi Power Corporation for a Return Material Authorization (RMA). The TSi service representative will determine if factory repair is necessary and issue an RMA if the unit must be repaired at TSi Power.

A replacement unit will be shipped to certain customers with service agreements. TSi retains the repaired unit to be used as a next "replacement" or "exchange" unit.

**8.2 SPARE PARTS -** The table below contains information on replaceable parts that can be ordered from TSi if necessary.

**TSi Power Corporation** 

AVERTISSEMENT: N'ouvrez pas et n'altérez pas physiquement les batteries. La solution électrolyte qui serat libérée est dangereuse pour la peau et des yeux. Elle pourrait même être toxique.

# ATTENTION: Une batterie peut présenter un risque de décharge électrique et un fort courant de court-circuit.

- **6.21** Only the NP18-12 battery (12 volt, 18AH rated sealed, valve-regulated lead-acid battery made by Yuasa) should be used. Never mix battery brands or different age batteries.
- **6.22** The following battery replacement procedure should be followed:
  - Turn off AC circuit breaker,
  - Turn off external disconnect,
  - Turn off DC circuit breaker,
  - Remove the 3 battery jumper wires first and set them aside.
  - Remove the last (+) and (-) battery wires from battery terminals
  - Remove battery brackets.
  - Pull out old batteries carefully, set them aside,
  - If heating pads are used, set them aside,
  - Install new batteries.
  - If heating pads are used, follow the instructions shown in section 7.
  - Reinstall battery brackets,
  - Connect battery jumpers and cables securely to the battery terminals.
  - Re-energize the UPS system,
  - Dispose of old batteries in accordance with battery manufacturer's instructions.

#### 7. OPTIONAL EQUIPMENT

- 7.1 OPTIONAL BATTERY HEATER CIRCUIT BOARD The optional battery heating pads are constructed from printed circuit boards with resistor networks that are encapsulated in epoxy. The AC current flows through the resistors to generate heat. By being pressed against both internal walls of the batteries, the batteries are heated. Installation procedure for the heater pads is as follows:
  - Turn the AC circuit breaker off,
  - Turn the DC circuit breaker off,
  - Remove jumper wires between batteries (and save the jumper wires),
  - Remove battery brackets,
  - Remove batteries from the cabinet,
  - Place new batteries gently into compartment, form a wedge,

- **6.11** Open contact between pins 5 and 6 signifies "AC FAILURE" condition. Relay contact closes again when utility AC power is restored.
- 6.12 Open contact between pins 2 and 3 signifies "LOW BATTERY" condition (battery voltage is less than 44Vdc).Relay contact closes again when battery bus voltage is 44 Vdc or higher.

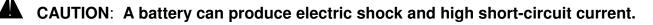
#### 6.2 **REPLACING BATTERIES**

**DANGER:** The servicing or replacement of batteries should be restricted to qualified and experienced personnel.

- Use extreme care when handling the batteries.
- When lifting the batteries wear gloves and safety glasses at all times.
- Do not wear rings, metal wrist bands or bracelets.
- Do not allow metal objects to come in contact with battery terminal.
- Use tools with insulated handles.
- Disconnect charging source prior to connecting or disconnecting battery terminals.
- Determine if battery is inadvertently grounded. If inadvertently grounded, remove source from ground. Contact with any part of a grounded battery can result in electric shock. The likelihood of such shock can be reduced if such grounds are removed during installation and maintenance.

**CAUTION:** Do not dispose of batteries in a fire. The batteries may explode.

• CAUTION: Do not open or mutilate batteries. Released electrolyte is harmful to the skin and eyes. It may be toxic.



#### **EN FRANCAIS**

AVERTISSEMENT: Ne jetez pas les batteries dans un feu. Elles pourraient exploser.

#### 5. MAINTAINING THE UPS

To make sure that the unit is functioning properly and safely, check the following periodically or at least once a year:

#### 5.1 UPS OPERATION TEST

- **5.11** Switch-off the AC input disconnect.
- 5.12 Verify that the UPS operates in **Battery Mode** (Green LED is blinking quickly).
- 5.13 Check the operation of all AC and DC fans in the UPS unit. Replace if necessary.

#### 5.2 CABINET INTEGRITY

- **5.21** Check the air intake and exhaust for dust and debris. Remove as required.
- **5.22** Check for moisture and water accumulation and remove as necessary.
- **5.23** Check to make sure locks are functioning properly and have not been vandalized. Replace if necessary.
- **5.24** Check and make sure that door seals are still tight and effective. Replace if necessary.
- **5.3 BATTERY MAINTENANCE** See Section 6 for battery replacement.
- **5.31** Check the batteries for electrolyte leakage. Clean up and replace if necessary.
- **5.32** Disconnect battery cable from battery to be checked. Measure the battery terminal voltage of all batteries. Each fully charged battery should have a terminal voltage of 13.5Vdc ±0.3V. Replace <u>All</u> batteries if the difference is larger than ±0.3V.

#### 6. TROUBLESHOOTING & COMPONENT REPLACEMENT

6.1 STATUS ALARMS – Relay contact status alarm signals are available through the DB-9 connector located in the top left corner of the electronics compartment. See the table below for the output signal assignment.

Alarm Signals on DB-9 Connector (Relay Contact Closures)		
BATTERY OK	Pin 1: NO, Pin 2: COMMON, PIN 3: NC	
AC OK	Pin 4: NO, Pin 5: COMMON, PIN 6: NC	

**4.17** In terminating the wires as outlined in 4.15 & 4.16 above, use a slotted screwdriver to tighten the terminal screws until the wires are secure. Do not apply excessive torque to make sure that the terminal screws are not damaged. Once screws have been tightened, gently pull on the wires to make sure that they are securely connected.

# WARNING: TO PREVENT DAMAGE MAKE SURE TO CHECK THAT THE INPUT & OUTPUT WIRES ARE NOT REVERSED

- **4.2 ENERGIZING THE XUPS** The following steps outline the procedures for putting the UPS into operation:
- **4.21** Turn on the AC, 15A, 120V service by putting the disconnect switch to the **ON** position.
- **4.22** Switch on the battery circuit breaker.
- **4.23** Switch on the master power On/Off switch inside the UPS to the **ON** position.
- **4.24** Verify that all LEDs on the status display panel are illuminated one by one. This may take approximately five (5) seconds.
- **4.25** Verify that the following LEDs are illuminated:

#### LED Indicators

Output OK DC (Float charging)	Green, Solid
Output OK DC (Charging)	Green, Slow Blink
Backup ON DC	Green, Quick Blink
DC output is FAULTY (Fault Condition)	Red, Solid

#### THE SYSTEM IS NOW READY FOR OPERATION.

**3.46** As a final step before powering up the unit, make sure that the air inlet and exhaust ports are free of obstruction to prevent overheating.

#### 4. POWER-UP

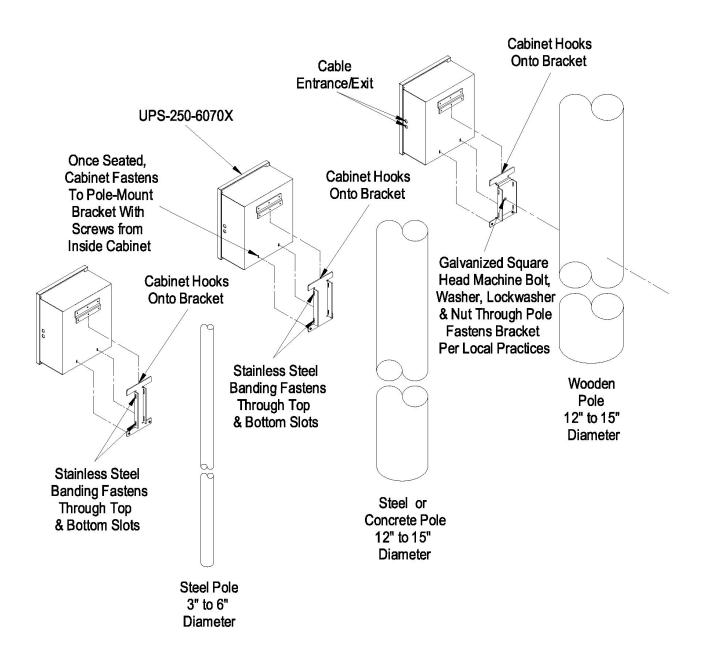
#### 4.1 AC INPUT CONNECTIONS

**4.11** Make sure that an 120 vac, 15A service with a disconnect switch is provided near the UPS and make sure that it is switched **OFF.** 

Note: AC input wires must be protected by a primary surge protector which will provide protection for the UPS against nearby lightning strikes. Maximum remnant surge voltage must be 6kV or less and remnant surge current must be 3kA or less (based on ANSI/IEEE C62.41-1991 6kV, 3kA, Category B3 waveform).

- **4.12** Use 14 AWG or larger wire with a 105 °C insulation system for all AC input wires.
- **4.13** Allow for sufficient wire length to reach the wiring terminals and leave enough slack to reduce the stress in the wires.
- **4.14** Strip approximately 3/8" (9.52mm) insulation from the end of each of the six (6) incoming AC wires and terminate them in the wiring terminals in the lower left side of the electronics compartment.
- **4.15** Terminate the Incoming wires on the AC INPUT terminals marked as follows:
  - LI is for phase conductor (black)
  - **NI** is for neutral conductor (white)
  - **G** is for safety earth ground (yellow/green)
- **4.16** Terminate the outgoing DC wires on the DC OUTPUT terminals marked as follows:
  - + is for positive conductor (+48V)
  - - is for negative conductor (+48V return)
  - **G** is for safety ground

cabinet is positioned to where the cable can easily enter the cabinet from the right side. See Figure 5. If bringing in cable through a conduit up the pole, make sure that the trade size of the conduit is no larger than  $\frac{1}{2}$ ". Larger conduit connectors will not fit.



**Figure 5: Pole-Mount Options** 

#### 3.3 UNPACKING & INSPECTION

- **3.31** The units are shipped in wooden crates, each containing two or four units. The crates are placed on a pallet, back-to-back, with protective material between them.
- **3.32** Carefully open the crates, making sure not to damage the units, and remove the protective wrap and packing material.
- **3.33** Before the units are removed from the crates, inspect them for physical damage.
- **3.34** If no damage is found, remove the units from the crates, open the doors and again inspect for damage. If damage is found in either steps 3.33 or 3.34, do not accept the shipment and file a claim with the carrier. Contact TSi for assistance if necessary.

# CAUTION: The units contain charged batteries capable of causing fire and injury if shorted across terminals. Be very careful not to short terminals accidentally when unpacking.

#### 3.4 INSTALLING THE UPS

**3.41** After the unit has been unpacked and inspected, it can be installed on a pole using either PM1, pole-mounting bracket for through-bolt mounting on wooden poles with diameter of approx. 12 inches or more; PM2, mounting with steel bands on concrete or steel poles with diameters greater than 6"; or PM3, mounting with steel bands on steel poles with diameters of 3" to 6" in diameter...See Figure 5.

# CAUTION: Make sure that appropriate lifting equipment and sufficient numbers of correctly sized steel bands are used and that company safety practices are followed.

- **3.42** It is recommended that this unit be Installed as a Walk-Up unit making sure that the center of the brackets are at an eye-level height for optimum accessibility and ease of installation.
- **3.43** Once the pole-mounting method has been established, mount the brackets following banding instructions as outlined in Appendix A, or in the case of through-bolt mounting on wooden poles, in accordance with local practices.
- **3.44** Position the mounting bracket on the pole so that the rear bracket on the cabinet cabinet rests on the pole-mount bracket.
- **3.45** Once seated, secure the cabinet to the bracket with 2, 1/4-20 hex bolts and lockwashers from inside and through the rear of the cabinet. Make sure that the

charging voltage for a wide temperature range of  $14^{\circ}$  to  $122^{\circ}F$  (-10° to +50°C) or [-40 to  $122^{\circ}F$  (-40 to +50°C) with optional battery heaters].

#### 3. INSTALLATION

IMPORTANT: ONLY QUALIFIED PERSONNEL SHOULD PERFORM THE INSTALLATION OF THIS PRODUCT.

**3.1 SITE SELECTION & PREPARATION** – Although the customer will be selecting not only a site, but also installing the mounting bracket on the power pole, there are several thoughts to keep in mind when making this installation:

- This product is intended for installation in "RESTRICTED ACCESS LOCATIONS ONLY".
- The cabinet should be mounted on the power pole in such a manner so that the doors don't open onto a road or a driveway.
- Make sure that door clearances around the unit provide for unobstructed access.
- Provide a 15A, 120V service with a disconnect switch in the near vicinity of the UPS unit.

#### 3.2 REQUIRED TOOLS

- A 216-type tool to open the compartment doors
- A standard telco socket wrench set and standard mechanic telco tools
- Appropriate lifting equipment to lift and seat the unit onto the mounting bracket on the power pole. <u>Note</u>: The weight of the UPS is 124 lbs (56 kg)
- If attachment to a pole via banding is used A banding/tensioning tool (see Appendix A "Band-It", C00169 Hand Tool or equivalent) is required.
- If mounting to a wooded pole via a bolt through the pole A drill and wood boring bit, ½" square head machine bolt, washers and nuts. Length and type depending on pole diameter and in accordance with local practices.
- A method of lifting cabinet w/batteries onto pole-mounting bracket in accordance with local practices.
- Standard set of craftsman hand tools and <sup>3</sup>/<sub>4</sub>" deep socket set w/ratchet.

#### 2. MAJOR COMPONENT/CIRCUIT DESCRIPTIONS

- 2.1 AC SURGE PROTECTION CIRCUIT The Outdoor DC-UPs-250-6070X is protected against spurious AC surge currents by a proprietary circuit which uses a 40mm MOV in combination with two, 3-element, gas tubes. This surge protection circuit assures that the UPS functions continuously by protecting the connected equipment from dangerous and harmful surges, spikes, transients and noises which may be on the mains AC line. The surge protection circuit meets test conditions specified by ANSI/IEEE C62.41-1991 6kV, 3kA, Category B (combination waveform).
- **2.2 INPUT FILTER INDUCTOR** This 1mh, steel core filter inductor is off board and is placed after the surge protection circuit. It filters out normal mode noise between the line and neutral branches of the incoming AC.



Figure 4: Input Filter Inductor

- 2.3 MAIN CHARGE CONTROLLER CIRCUIT BOARD The proprietary main circuit board uses a rugged design with a microprocessor-controlled battery charger controller along with a temperature compensated battery charger circuit. The design reduces the number of solid-state devices and has been conformally coated for use in severe outdoor environments.
- **2.4 BATTERY TEMPERATURE SENSOR MODULE** This temperature sensor module is placed on (or near) the batteries and sends accurate battery temperature readings continuously to the microprocessor on the main charger controller circuit board.
- 2.5 AC TO DC CONVERTER (RECTIFER) MODULE AC to DC converter output voltage is controlled by a microprocessor in order to provide optimized battery

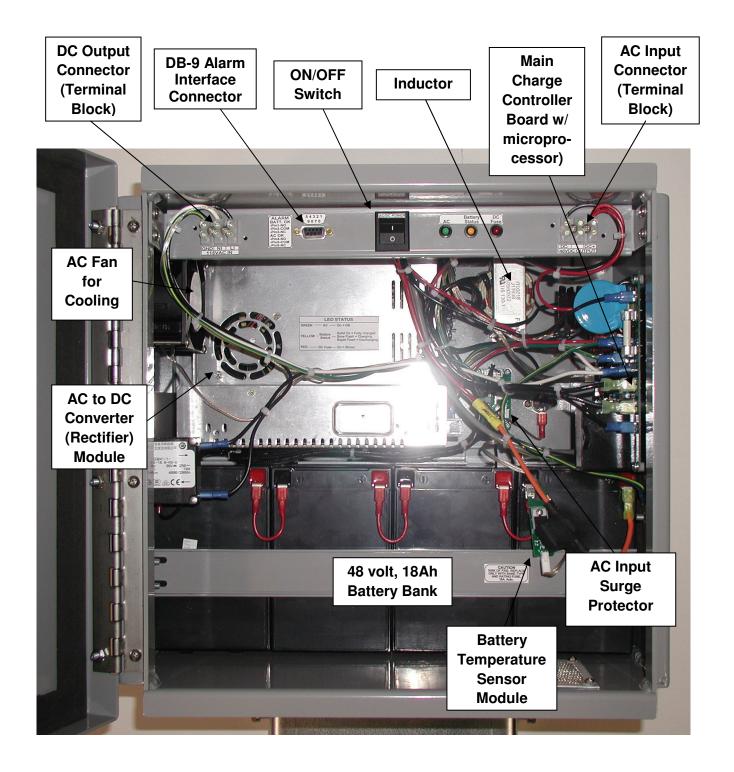


Figure 3: Cabinet with Front Door Open

#### 1.4 OVERALL DIMENSIONS – The UPS-250-6070-X cabinet is 20" (50.8cm) H x 16" (40.6cm) W x 8.79" (22.3cm) D and weighs

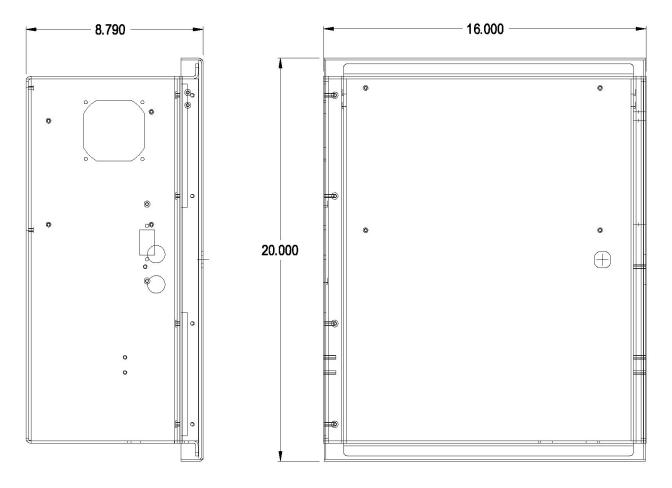


Figure 2: Outdoor UPS-250-6070-X Dimensions

- **1.5 CONSTRUCTION** The Outdoor DC-UPs-250-6070-X cabinet is constructed of 5052-H32 Aluminum and finished with a polyester powder coat that is designed to meet Telcordia specifications for protection against corrosion, water intrusion beyond NEMA 3R, UV radiation and impact resistance.
- **1.6 DOOR & LOCK** The cabinet door is retained by two stainless steel hinges and secured by a telco tool actuated, quarter–turn lock. This lock provides for proper compression gasket sealing and prevents unauthorized entry.

#### 1.2 SAFETY ALERTS

#### SAFETY SIGNAL WORD DEFINITIONS

This document contains safety alert pictorial Symbols and Words that point out areas and procedures that require special attention with regards to safety. These Symbols and Words are defined in ANSI Z535.4-1998, Product Safety Signs and Labels.

## **A** DANGER:

DANGER indicates an imminently hazardous situation which, if not

avoided, will result in death or serious injury.



WARNING indicates a potentially hazardous situation which, if not avoided, will result in death or serious injury.



CAUTION indicates an imminently hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

The safety alert pictorial symbol **A** appears in this document to make users aware of important operating and safety concerns.

#### 1.3 GENERAL CABINET FEATURES/COMPONENTS

- NEMA 3R metal enclosure with a front access door,
- Screened air exhaust vents at top and bottom of the cabinet,
- Four 12V, 18Ah sealed lead acid (VRLA) batteries forming a 48V, 18AH battery bus,
- AC input surge protection circuit board,
- AC fan for cooling,
- AC input/output wiring terminals mounted for ease of termination,
- AC to DC rectifier module,
- Main circuit board with microcontroller controlled temperature compensated charger,
- AC input circuit breaker and system on/off switch,
- AC output (push to reset) circuit breaker,
- Battery bus circuit breaker,
- DB-9 status signal (alarm interface),
- optional battery heater pads and battery heater controller with thermostat

#### 1. GENERAL

#### 1.1 **PRODUCT APPLICATION**

The Outdoor DC-UPs-250-6070-X is designed specifically for powering wireless communication and security equipment. The product is intended for installation on a power pole by means of various bracket options depending on the pole to which it is mounted. The enclosure is NEMA 3R rated with extra door sealing gaskets to protect the internal components against direct ingress of water and dust. The internal electronic circuit boards are protected by a layer of conformal coating.



Figure 1: The Outdoor DC-UPs-250-6070-X Cabinet

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#### TRADEMARK

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#### LIMITED WARRANTY

TSI Power Corporation warrants this product to be free from defects in materials and workmanship for two (2) years from the date of purchase from TSi or its authorized representatives. TSi will repair (or at its option, replace) any defective component(s) during this warranty period.

To make a request or claim for service under this limited warranty, the original purchaser must return the product, in the original shipping container or equivalent, to TSi or its authorized agent, accompanied by a written receipt showing the date of purchase and both the model name and serial number of the product.

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## **Description, Installation & Maintenance Manual**

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