

BUPS-25/80

A Back-up Power System for Peninsula Engineering Solutions Repeaters

Benefits

- ❖ Fifteen to thirty hours of back-up power for Peninsula Engineering Solutions RF-11000 Microwave RF Repeaters
- ❖ Three to thirteen hours of back-up power for Repeater Technologies OA800, OA850C, and OA1900C Network Repeaters
- ❖ Compact size enables easier zoning in residential and commercial areas

Features

- ❖ Compatible with RepeaterNet™— Operations, Administration and Maintenance (OA&M) Software
- ❖ Equipped with two 100 Amp-hour maintenance free batteries
- ❖ One-year warranty
- ❖ Weatherproof and rustproof NEMA 3R compliant all-aluminum cabinet
- ❖ Wall mount & pole mount cabinet configurations
- ❖ +24Vdc at 25 Amperes output
- ❖ 115/230Vac 50-60Hz at 9/4.5 Amperes input
- ❖ Internal thermally controlled, long-life whisper-quiet fan
- ❖ Easy installation – less than 30 minutes

Applications

The BUPS (Back-up Power System) supplies back-up power for Microwave and Network Repeaters that provide service in remote locations that are not readily serviceable and high traffic or sensitive locations in which service must be available at all times. Typical applications include rural highways, hospitals, rooftops, tunnels, airports, and convention centers.

Description

The BUPS is a standalone unit that provides up to 80 Ampere-hours of 24Vdc back-up power for Microwave RF and Over-the-Air Network Repeaters, including the RF-11000, OA800Se NR, OA800C NR, OA850C NR, and OA1900C NR repeater. Actual back-up time provided by the BUPS depends upon the model of repeater being used.

The BUPS can be hardwired using a dedicated circuit breaker to any 115 or 230Vac 50 to 60Hz power source. The nominal 24Vdc regulated output is hardwired to an RF or OA Network Repeater.



The BUPS-25/80

(Note: For back-up power operation, Network Repeaters must be factory ordered as +24Vdc operational models.)

The BUPS is housed in a NEMA-3R rated, all-weather, white cabinet with a similar form factor as its companion Network Repeater. The BUPS can be mounted above, below, or along side an RF or OA repeater.

The BUPS internal alarm system interfaces directly with OA&M software – the RepeaterNet™ Network Management System. The BUPS alarm interface is connectorized for easy integration with RepeaterNet™ Craft, and the alarm system monitors these key functions:

- ❖ Charger Failure
- ❖ AC Failure
- ❖ Low Battery Voltage
- ❖ High Battery Voltage
- ❖ Door Open
- ❖ Summary

Two 100 AH, sealed, maintenance free batteries are included with the BUPS. These lead-acid batteries conform to the IATA Provision A-67 for hazardous material, permitting the BUPS-25/80 to be shipped by either air or surface.

BUPS-25/80

Cabinet

Heavy gauge copper free aluminum weatherproof and ventilated NEMA 3R Cabinet. Protected to IP32.

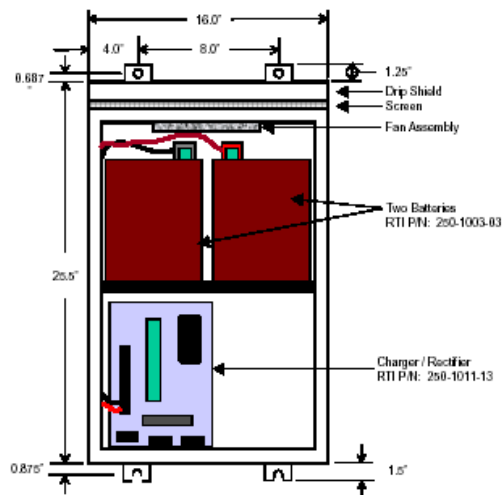
Finish

White Polyurethane powder paint reflects heat and minimizes dirt buildup.

Door

Hinged, with holder to keep the cabinet open during installation or service. Captive fasteners do not require tools to operate. Padlock hasp provided.

BUPS-25/80



Overall Dimensions: 28.25 H x 16" W x 15.187" D
 Product w/o batteries: 95 lb.
 (Includes Charger wt: 23 lb.)
 Batteries (each): 72 lb.
 Total Mounted Weight 240 lb.
 Total Shipping Weight
 (2 containers strapped together): 300 lbs
 Container #1 - Cabinet & Charger - 150 lb
 Container #2 - Two Batteries - 145 lb.

Repeater to BUPS Cabling: 6 ft. of Liquidtight Armored Flexible Conduit and connectors are provided for Power and Alarm Interface.

Ventilation

Bottom plane ventilation for charger and battery. Shielded ventilation at the top protects openings.

Vermin Protection

Nonferrous insect screening on all ventilation openings.

Battery

Valve regulated lead-acid batteries are installed on-site; necessary jumpers and BUPS to repeater connection cables, connectors and flex conduit are provided.

Batteries are safe for air transportation per IATA Provision A-67.

Charger/Rectifier

Input Power Requirement

115/230Vac \pm 10%, 50/60Hz \pm 5%, 1.1kVA typical.

Output Voltage and Current

24Vdc nominal at 25 Amperes

Output Voltage Regulation

\pm 1% of the correct temperature compensated value from no load to full load when input is within specified tolerances.

Current Limiting and Overload Protection

Soft start ensures smooth startup.

Electronic current limiting. Charger input AC, output DC, and load circuit breakers are standard.

Temperature Compensation

-0.2% per $^{\circ}$ C

Output Ripple

3mV rms maximum ripple with batteries.

Alarms and Indicators

LEDs and Form C Contacts: AC Fail, Charger Fail, Low Battery Voltage, High Battery Voltage, Summary Alarm, and Door Alarm.

Ambient temperature

Operating Temperature Range: -20° to $+50^{\circ}$ C

Humidity 5% to 95% non-condensing

Ordering Part Number

BUPS-25/80: P/N 250-1011-07

Rev 1

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