## **Battery Heater Mats**

Extend Battery Runtime in Cold Weather



- > Durable polyester construction for long service life
- > Sealed on-mat electronics for maximum protection
- > On-mat thermal switch and thermal fuse for redundant safety
- Insulated design directs heat to the batteries and not to the enclosure for a 30% reduction in battery heating costs
- > Piggyback plug standard on 120V models

Alpha's battery heater mats are designed with safety and efficiency in mind. Alpha's battery heater mats are a low-cost way of keeping backup batteries operating at their optimal temperature, maintaining battery backup performance at >70% of nominal levels at ambient temperatures below 32°F/0°C. The heater mats' insulated bottom ensure that energy is directed to the batteries and not wasted heating the enclosure. Durable polyester outer shells protect the heating elements from damage; their redundant thermal control protection ensures against overheating; and their fused power input protects against shorts. Alpha battery heater mats are a smart addition to any backup power system.





## **Battery Heater Mats**

Consult your Alpha representative for P/N configurations

## All Mats

Line Cord Thermostat	
Turn on Temp:	5 deg C
Turn off Temp:	15 deg C
Mat Mounted Thermostat	
Over Temp Off:	50 deg C
Turn Back on:	40 deg C
Thermal Fuse Rating:	85 deg C
Optional Line Cord Thermostat	
Turn on Temp:	0 deg C
Turn off Temp:	10 deg C



The main power connector (1) on the heater mat is plugged into an AC source. In low temperature conditions the main control thermistor (2)

will allow power to flow to the heater mat coil (5). The thermistor is mounted on the power cord so that it reacts to the enclosure temperatures and not the mat surface temperature. A secondary thermistor (3) is mounted on the mat with significantly higher temperature settings than the main thermistor (2). This thermistor keeps the mat from overheating during extended run periods. A thermal fuse (4) is a final fail safe device. The power connector (1) has an AC receptacle so that additional mats can be plugged in. Its parallel wiring keeps the failure of the first mat from affecting the operation of others in the string.

Note: Battery Heater Mats are one element in providing an optimal thermal environment for your batteries. Properly installed and used in conjunction with Alpha's robust batteries and outdoor enclosures, the battery heater mats will improve battery performance and effective service life.