



PowerQuick Powered Ascender

SPECIFICATIONS

The PowerQuick Powered Ascender is a powered, yet lightweight personal lifting device that scales vertical surfaces quickly, safely and inexpensively using standard climbing equipment.

PQ 500-1

- **Operational Features**

- Compatible with standard climbing gear (Must be used in accordance with manufacturers instructions meet applicable requirements and regulations)
- Use with 1/2-in (12.7mm) static (low stretch) kernmantle rope (recommend New England, Blue Water, PMI and PowerQuick brand ropes) (Note: Care and maintenance of rope required per manufacturer's instructions.) For other brands of rope test with sample prior to using.
- Weight: 28 pounds (13 kg)
- Dimensions: 14 x 14 x 18 (35 x 35 x 45 centimeters)
- Lifting capacity: 500 pounds/227 kg; gross load 550 lbs (250kg) includes PQ 500 and battery pack.
- Designed for use by one person, for work positioning and/or moving tools and materials
- Easily carries 2 people for rescue applications
- Lifting speed: 0.7 ft/second (.22m/sec)
- Powered descent speed: up to 1 ft (.9meter)/sec (varies with weight)
- Can be operated using remote or manual control
- Wireless Remote range up to 200 ft (61 meters) The range may be affected by local interference from cell towers or other electrical signals.
- Wired remote option available for use in high-interference areas
- Can be operated with gloves and protective clothing

- **Safety Features**

- Tested to a safety factor of 5 for structural and a factor of 2 operationally
- Temperature sensor shuts unit down in event of hot motor.
- Interlock switch on cover ensures that unit will not operate if rope handler cover is not properly closed.
- Remote control overrides local control
- Rope cannot be removed from ascender when it is under a load.
- Auto-braking in hands-off position provides for both locked-off and emergency or panic lockoff. No force need be applied for panic lockoff.
- Emergency Stop Button: cuts power to unit
- Load limiter: Prevents lifting of load in excess of 700 lbs (409 kg).
- Auto-braking in hands-off position provides for emergency stop.
- Static Load/Stationary holding capacity: 1,100 lbs (500kg)
- Dynamic load capacity: 2,500 lbs (1,136 kg)
- Forward reverse power control
- Palm Interlock must be engaged to start unit
- Low voltage sensor detects low battery voltage and shuts unit down. PQ 500 level is 26 VDC,

- No pinch points
- No sharp edges, points, etc., capable of puncturing or cutting the skin
- Accessible surface temperature do not exceed 65° C
- Rotating parts protection
- No shock hazard

- **Use restrictions**



- Not to be used after shock load of in excess of 1,200 lbs (544kg).
- Not to be used after drop greater than 4 ft (1.2meters) onto hard surface
(Must undergo inspection and recertification after these events)

- **Environmental conditions**

- Operating Temperature Range: 32° F to 113°F (0° C to +45° C).
- Moisture: May be used in wet weather. However; do not immerse this product in water, for example, a lake, swimming pool or water puddle. May result in serious personal injury.
- No negative affect from corrosive environments, e.g. salt water or spray. Should be cleaned after use in these environments
- Dust, sand, dirt, mud etc: .The ascender can be used in oily, or dirty conditions without affecting the performance. However; for rope safety, keep ascender clean of heavy debris. Inspect and clean rope prior to each use and periodically during use.

- **Power Supply**

- NiMH Rechargeable Battery: 36vdc, 30 amp, 360 amp-minutes discharge to 25 vdc.
- Climbing Time: 500 to 600 feet (152-182m) per charge.
- Battery Pack Weight: 14 lbs.
- Designed to withstand 4-ft (1.2meters) drop on hard surface.
- Battery life: approximately 800 charge/discharge cycles (temperatures extremes can affect battery life)
- Battery is protected with an internal fuse that will disable the battery in event of a short circuit. The normal battery uses a blade type 40 amp fuse.
- The battery cable is 6 foot long with a threaded connector on either end. The cable connectors are such that it is impossible to connect the cable backwards.

- **Charger**

- Use to charge PowerQuick NiMH battery packs only
- Input: 115/230VAC 60/50 Hz 1.8/1.0A
- Output 36VDC/2.6A Continuous

Personal Safety



- Do not operate if under the age of 18. Do not operate unless YOU HAVE BEEN TRAINED by a certified trainer. Dangerous in the hands of untrained users.
- For information on PowerQuick, Inc. approved trainers contact your distributor.
- Stay alert, watch what you are doing and use common sense when operating the Power Quick Ascender. Do not use while tired or under the influence of drugs, alcohol, or medications. A moment of inattention while operating may result in serious personal injury.

- Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.
- Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one model may become hazardous when used on another. See your distributor for the approved Accessories List
- Carefully read the maintenance and certification instructions. Check for misalignment, loosening or binding of moving parts, breakage of parts, and any other condition that may effect the operation. If damaged, have the ascender serviced before using. Many accidents are caused by poorly maintained equipment.
- Do not immerse this product in water, for example, a lake, swimming pool or water puddle. May result in serious personal injury.
- Do not connect or disconnect battery cable from either the PQ 500 or battery in a potentially explosive environment.
- Limit climb or descend to 200 foot intervals. Allow 15 to 30 seconds for unit to cool during long climbs or descents.
- Operation with excessive loads and low battery voltage may cause clutches to overheat and smoke. It is the operator's responsibility to insure that the PQ 500 is not overloaded.
- Keep ascender clean of debris. Inspect and clean rope prior to each use and periodically during use. This is particularly important when the ascender is used in dirty environments.