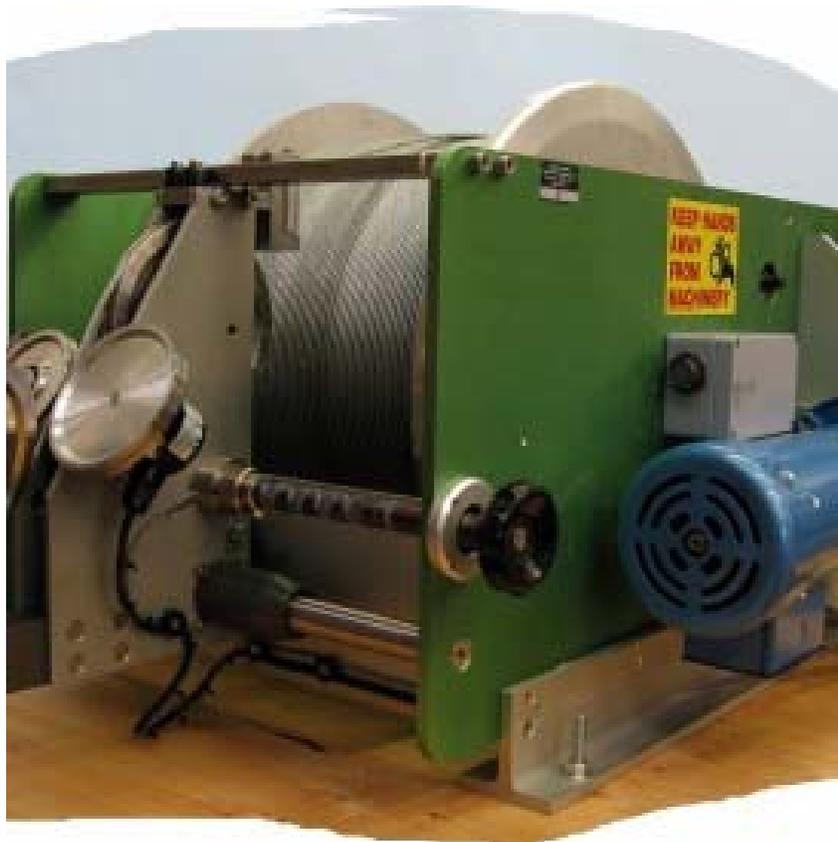


## *4WNA Series Winches / Truck-Mount Winch*

The **WNA Truck-Mounted Winch** is a rugged logging hoist capable of positioning a geophysical probe or other tool in a borehole. The winch is designed to be mounted to a truck, and can haul equipment loads **up to 600 lbs** at rates between **25 and 90 ft/min**. The WNA is optimal for boreholes between **1000 and 1800 meters** in depth and holds an estimated 1800 meters 3/16" (4.72mm) diameter wireline, or up to 1000 meters 1/4" (6.35mm) diameter geophysical wirelines or video cable.

The system is equipped with slip rings and connectors, through which surface instrumentation can communicate with the probe. A precision measuring wheel and depth encoder are also included to allow the probe depth to be monitored. The cable is automatically wrapped on the drum in even layers through the level wind mechanism. The motor is controlled by a motor speed controller, which allows the user to vary the logging speed.

The WNA Winch and Winch Control are designed for use with Matrix logging consoles and a field laptop to achieve a complete logging system. WNA winches can also be mounted on skids for remote access applications.



## Basic Specifications

- **Motor:** 1 hp, SCR type
- **Controller:** SCR controller, with 10 Amp current limit
- **Depth Encoder:** BEI Model H20 (200 pulses/turn) standard, others available.
- **Wireline Tolerance:** Supports Single Conductor, Coaxial, and Multi-Conductor Wirelines
- **Winch Size:** 45" x 20.25" x 26" (114 x 52 x 66 cm)
- **Winch Weight without Cable:** 242 lbs (110 kg)
- **Cable off-axis Tolerance:** 20° left,  
(see Figure 2 in manual) 20° right  
15° down  
90° up



Winch Controller with Matrix Logger Console and Laptop

- |                       |                        |                            |                               |
|-----------------------|------------------------|----------------------------|-------------------------------|
| • <b>Speed Range:</b> | <b>Max Speed</b>       | <b>Max Continuous Load</b> | <b>Max Instantaneous Load</b> |
| <b>Low Speed</b>      | 30 ft/min (9.14 m/min) | 600 lbs (272 kg)           | 800 lbs (363 kg)              |
| <b>High Speed</b>     | 90 ft/min (27.4 m/min) | 250 lbs (113 kg)           | 300 lbs (136 kg)              |
- **Max Cable Capacity with 1" Freeboard:** 5900 ft (1800M) 3/16" cable or 3200 ft (1000m) 1/4" cable
  - **Temperature:** -20 to 50 Deg. C
  - **Approximate Shipping Weight:**
    - 4WNA w/ 1000 m (3281 ft) of 3/16" (4.76 mm) cable: 715 lbs (324 kg)
    - 4WNA w/ 1800 m (5905 ft) of 3/16" (4.76 mm) cable: 750 lbs (340 kg)
  - **Shipping Dimensions:** 46" x 28.5" x 29.25" (117 x 72 x 74 cm)

