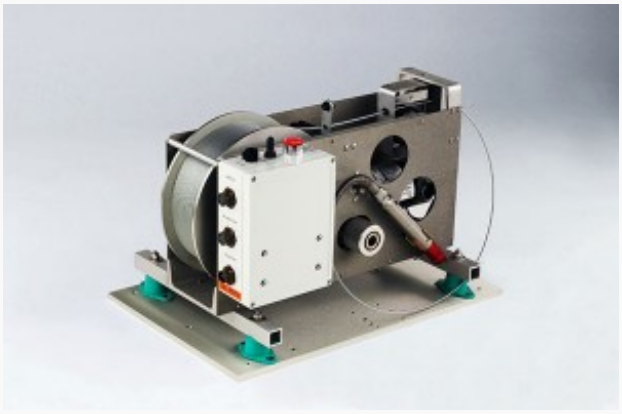
Mini Winch Series



Mini Winch

Description

The “Mini” winch is a logging hoist, capable of positioning a geophysical probe or other tools in a borehole. The system is equipped with slipring and connections through which surface instrumentation can communicate with the probe. A precision measuring wheel and rotary encoder are also included to allow the amount of cable played out to be tracked. The cable is wrapped on the drum in even layers through a manually operated, tiller arm. The motor is controlled by an 110V (or 220V depending on the model) four-quadrant motor speed controller that allows the speed to remain constant with a varying load and prevents overdriving with heavy loads. The winch is used in conjunction with the Matrix console with the proper mounting rails, and a portable PC to achieve a complete logging system.

NOTE: When using a DC inverter to power the winch, a true sine-wave inverter is required for smooth winch operation. Minimum power requirement for such an inverter is 600 watts, which should also allow operation of the logger.

There are four models in the Mini winch line:

- **4200-1000-120** is spooled with 200 meters of 3.17mm (0.125″) diamenter single conductor wireline, 120vac.
- **4200-1000-230**, 220 VAC model otherwise same as above.
- **4305-1000-120** is spooled with 305 meters of 2.54mm (0.100″) diamenter single conductor wireline, 120VAC.
- **4305-1000-120**, 220 VAC model otherwise same as above.

The two mini winches are set at the factory to operate at either 110VAC or 220VAC and cannot run at another voltage. If the winch is configured for 220 AC, there will be a red label below the POWER IN connector indicating 220 VAC. The Matrix is auto switching between 110 and 240 VAC.

At all times prevent kinking the logging cable to prevent damage to the insulated center conductor. The wireline cablehead should be inspected periodically for electrical and mechanical integrity. To prevent loss of tools, we recommend re-heading every three months or more often as conditions indicate.