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TROGLOTECH BATTERY POWERED CRAWLER SYSTEMS, ACCESSORIES AND UPGRADES

Welcome to the Troglotech battery-operated Crawler System. The system is so versatile that with a single Crawler Body, the system can be configured for use in 4 ″ （100mm） to 24 ″ （600mm） bores. System options:

Standard System with 4,6 and 8 inch wheel sets and Pan & Tilt Camera
Large System as above with wheel extensions and pneumatic wheels
Auto-Drum as above with Automatic Cable Drum

Both system configurations are supplied with the T840 /T850 Cable-Drum:
（300M of high-strength cable, Display Unit with SD-Card DVR, Keyboard, Cable-Counter, Power Cell and Auto-layering device, Mains Charger）

300M cable as standard
Versatile 4 ″ - 24 ″ operation
Auto/Manual Drum options
No mains supply needed
No generator needed
Reversing Camera
Pan & Tilt Camera
WiFi Connectivity
Direct-to-customer reporting
Steerable
Full Days Operation
Recording to SD-Card
Text Writer
Daylight LCD Display
Cable Layering
Accurate Distance Counter
Lightweight （16Kg）
Wincan Compatible
Proven Reliability
Waterproof（IP67 / IP68）
Inclinometer
Anti-turn-over system
Fully Portable
Zero Emissions

Pan & Tilt Head

Standard Battery x 2

Tractor Body

4 " Wheel set

6 " Wheel set

8 " Wheel set

DC Charger

AC Charger

Pressure Pump

Wheel Removal Tool

Carry Case

Lifting Device

LARGE PAN & TILT CRAWLER

Pan & Tilt Head

Standard Battery x 2

Tractor Body

4 " Wheel set

6 " Wheel set

8 " Wheel set

DC Charger

AC Charger

Pressure Pump

Wheel Removal Tool

Carry Case

Lifting Device

Large Battery Pack

Large Lighthead

4 x Large Pneumatic Wheels

4 x Small Pneumatic Wheels

2 x Wheel Extensions

The only external difference between the manual and auto drums is the addition of the control lever as seen above. But hidden in the centre of the hub is a three-phase brushless motor and Troglotech-designed Cycloid gearbox providing enough power to retrieve 300m of cable and the crawler at 0.5M/S

Supplied with two high-capacity Lion batteries and a 12V charger it will keep you working around the clock. The drum is fully automatic, the operator just needs to change the handle position from LOCK to AUTO and use the crawler as usual, the drum will dispense and retrieve cable in perfect sync with the crawler no matter how far the crawler is away and which wheels are fitted.

The auto-drum has no external cable-counter or tension-arm, those functions are internal meaning that the drum is compact, easy to transport and safe. Employing 300M of the same 4mm cable as the manual drum the system can be easily carried into restricted areas for immediate use

CRAWLER UNIT SPECIFICATIONS

2 Way connector (video)

Large battery pack
100W/hr

Extension
retainer

Auto locking
wheel screws

Large wheel
extension assembly

112mm solid wheels or 150mm pneumatic
wheels for 300mm or 375mm pipes

56mm Wheels (for 100mm)
78mm Wheels (for 150mm)

Large Lighthead

Auto locking
wheel screws

Small battery pack
50W/hr

812 Camera

Sonde

Rear view camera and lights

Swiveling connector

T815 CRAWLER Specifications

Mechanical
- Overall Length 238mm (310mm with T812 Camera)
- Body Width 60mm
- Width over small wheels 82mm
- Height 71mm (Small battery pack)
- Material 300 series stainless steel and Brass CZ121
- Connectors Custom spring loaded with pressure valves
- Weight 5.7kg to 15kg (configuration dependent)
- Linear speed 0.5m/s (150mm configuration)
- Linear pull 10kg (100mm configuration)

Electrical
- Voltage 14.8v
- Battery capacity 51Wh (small battery) 102Wh (Large battery)
- Mission time (small battery) > 4 hrs (cameras/lights) 2 to 3 hrs operating
- Mission time (large battery) > 6 hrs (cameras/lights) 3 to 4 hrs operating
- Charge time 1.5 hrs (Small) 3 hrs (Large)
- Output CVBS
- Lighting 1200 lumens (2 x high power LED (T812))
- Additional lighting 1800 lumens (4 x high power LED)
- Rear lighting 1200 lumens (2 x high power LED)

Sensor (Rear view camera)
- Sensor "Digital Clarity" CMOS ¼"
- Definition D1 HD
- Sensitivity > 11.5 V/lux-s at 550nm
- Horizontal Resolution 540 TVL lines per picture height

Lens (Rear view camera)
- Focal Length 5.1mm
- Angle of view 57° diagonal
- Iris Control Fixed iris, auto electronic shutter
- Focus range Fixed 100mm to ∞

Integral Sonde
- Frequency 32.768KHz
- Detection depth 3m – 5m depending on material

Telemetry
- Inclination +/- 9.9 degrees 14-bit accuracy
- Roll +/- 180 degrees (internal use only)
- Pressure 0 – 25 psi (>25 psi = MAX PSI on-screen)
- Temperature For internal diagnostics only 14-bit
- Battery state 0 – 18V, 0.1V resolution
- Load 0 – 5A, 0.1A resolution
- Pan +/- 180 degrees (for on-screen mimic T812)
- Rotate +/- 180 degrees (for on-screen mimic T812)

T840 Manual Cable Drum System Specifications

Mechanical:
- Length: 540mm
- Height: 643mm
- Width: 302mm
- Weight: Full System 18.5kg

Cable:
- Connectors: Custom spring loaded with pressure valves
- Cable length: 300m
- Cable construction: 4mm dia Lightweight 2 Core twisted pair, Vectran strength member, PU Jacket
- Cable weight: 5.7kg (300m)

Environmental Specification:
- Temperature: -20C to +85C (Storage)
- 0C to +50C (Operating)
- Sealing: IP 67 (Coiler)
- IP 68 11 Bar (Crawler)
- Emissions: (EMC) EN61000-6-4:2001 (Emissions)
- EN61000-6-2:1999 (Immunity)

Construction:
- Frame: Powder Coated Steel
- Housings: Hard Anodised Aluminium
- Electrical:
- Supply Voltage: 10.8 to 14.6v DC
- Power Consumption: 12 Watts
- Power Cell: >96 Watt-hour Li Ion
- Video Standard: D1 Digital, PAL output available

Display Unit:
- Display: 5.6 LCD
- Resolution: 540 LPPH
- Brightness: 900cd/ft
- Digital Recorder:
- Recording format: Digital to SD Card (MPEG4)
- Recording capacity: 32 Hours (60 mins per Gb)
- Recording resolution: D1
- Keyboard:
- Sealing: Waterproof to IP68 (160 psi)
- Control: Textwriter/DVR/Cameras

Charger:
- Input Voltage: 90VAC-255VAC
- Output Voltage: 13.2V
- Output Current: 2.0A
- Charge Time: ~4 hours