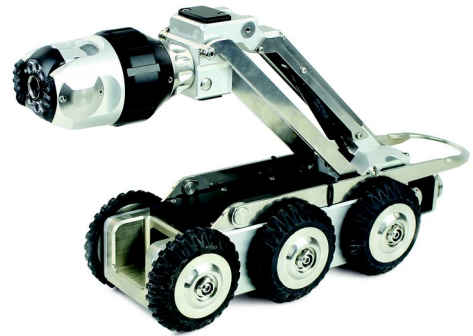# Proteus Tractor/Crawler System

PROTEUS CRAWLERS/TRACTORS

4 versatile sizes. Engineered to excel in challenging environments.

Standard Features

- Continuous monitoring of speed, internal

- pressure, inclination and temperature

- Dual Axis Inclination Sensor

- Single Auxiliary Light/Backeye/Mounting

- Multi-Frequency Sonde 33kHz / 512Hz / 640Hz

- Steerable High Torque

- All-Wheel Drive

- Robust Housing

- 1 bar Pressure Tight

- Quick Change Wheel Lock

- In-Built Lowering Arm

- Heavy Duty Camera Connector

- Protective Front Connector Cap

- Protective Rear Connector Cap

- Lowering Rope

- Protective Carry Case

- Tools

CRP140

Sophisticated mid-size crawler, For pipes from 140mm (even in a relined pipe) up to 600mm, with the optional PCC01 Crawler Cradle it can even be used in pipes up to 1000mm diameter.

ALL STANDARD FEATURES (SEE ABOVE) INCLUDED PLUS

6 x QRWX90SR 90mm Rubber Wheels

Motorised Elevator - Range 54-205mm

Articulated Knuckle Connector

Up to 1000mm Pipe Diameter with PCC01 Crawler Cradle

PROTEUS PAN & ROTATE CAMERA

CAM026

Pan and Rotate Camera

Continuous 360° rotation and +/-135° pan. Dual clusters of 3 high powered ultra-bright LED lights.

Specification

Effective Pixels   512 x 582

Resolution   470 HTVL

Sensitivity   < 1.0 Lux

Aperture/Field of View   F2.5 / 75°

Illumination Intensity Adjustable to 12.5k Lux at 150mm

Pressure Depth Rating   1 bar (14.50psi)

Dimensions   120 x 74 x74mm

Weight 861g

Compatibility Proteus / Proteus Lite / SOLOPro+

Atex Zone 1 Approved   NO

Atex Zone 2 Approved   YES

PROTEUS CABLE REELS

MANUAL CABLE REELS

Compact, portable and easy-to-use

Sturdy, rugged and built to withstand harsh environments. Mini-Cam manual cable reels are compact, portable and easy to use. The robust powder coated frame houses high tensile strength Kevlar reinforced drain survey cable.

Smooth pay-out and re-winding is performance enhanced by the cable layering mechanism and durable heavy duty turning handle. The reels are fitted with high tensile strength Kevlar reinforced inspection cable. Mini-Cam's specialised crawler connector provides a waterproof seal, and there's a removable drip tray for easy cleaning and maintenance (see video below).

The reels are available in 2 sizes - 250m and large 350m. 250m reel can be fitted to our Portable Storage Trolley (PTP01), and the large reel is ideal for being installed as part of our Custom Van-fit.

MOTORISED CABLE REELS

Compact, portable and easy to use

Built to the same exacting standards as our manual cable reels, these labour saving motorised reels are sturdy, rugged and built to reliably perform efficient pipeline inspections.

Mini-Cam motorised cable reels are designed for easy one-person operation in remote locations. The reels are fitted with high tensile strength Kevlar reinforced inspection cable. The ultra-smooth operation is provided by the powerful three phase motor and cable layering mechanism for uninterrupted, tangle free pay-out and re-winding. A rigid, clear safety screen prevents contact with the cable whilst coiling. In the event of an emergency, the reel also features an emergency stop button. The specialised crawler connector provides a waterproof seal and there's a removable drip tray for easy cleaning and maintenance. The reel is operated using the dedicated keys and intuitive on-screen display on the Proteus Control Unit.

Remote Control

The optional hand-held 4 button, Bluetooth® control allows the user to remotely operate paying-out, rewinding and crawler movement.

The reels are available in 2 sizes - Large 350m and Small 250m. The 250m reel has secure fixing points for fitting to our Portable Storage Trolley (PTP01). Both reels are ideal for being installed as part of our Custom Van Fit-Out.

PROTEUS CONTROL UNIT

CONTROL UNIT CCU208

Functionality at your fingertips

Feature rich, Mini-Cam's CCU208 Control Unit has twin integral joysticks for camera control and crawler manoeuvrability, and an ergonomic soft-touch keypad. User friendly multi-function hot keys control an intuitive on-screen display, to enable quick and accurate navigation of the numerous features which all come as standard on the brain of the Proteus system.

FEATURES

Capture Footage

Grab MPEG video and JPEG images, and zoom up to 3X on video.

Review Footage

Organise videos and images folders, then find them using the thumbnail gallery. Review media using standard controls.

Control Meterage

Accurately set the meterage zero offset using the meterage key.

Internal Batteries

The Proteus CCU208 includes internal batteries so that it can be used autonomously to view inspection reports to video.

Share Files

WiFi enabled to allow remote access to stored images and data. Users can instantly share PDF reports, images and footage via email, or upload WinCan Reports via the Cloud to WinCan Web for secure, immediate team-wide access online.

Alternative Languages

Proteus is currently available with keyboards in English, French, German and Russian.

Generate Reports

Use optional reporting module to create an inspection report, then transfer it to USB media for on-site delivery.

Offload Data

Copy video, images and data to USB or SDHC media for easy transfer to PC and seamless integration with WinCan reporting and querying capabilities.

Survey Features

Access embedded reporting software to create detailed on-site reports.

Joystick Controls

The left hand joystick controls crawler manoeuvrability. Movement of the Pan & Rotate camera is smooth and effortless using the right hand joystick control. Perform a 360° endless rotation and pan the camera +/- 135°.

Screens Intensity

The brightness, colour and backlight intensity of the internal display can be adjusted to suit the environment in which the system is being used.

Write Screen Text

Type and store up to 16 pages of on-screen text. Customise text colour, position and background colour.

Sonde Settings

Set the frequency of the sonde transmitter to 33kHz, 512Hz or 640Hz.

Hot Keys

User friendly, multi-function hot keys control an intuitive on-screen display of the numerous features.

Setup + Configure Preferences

Easily and quickly configure the Proteus CCU to your specific requirements using the various menu options. Set language, date and time; establish file formats and naming conventions; adjust camera parameters; choose interface theme, enable power saving options and update firmware.

Illumination

The Proteus CCU208 includes internal batteries so that it can be used autonomously to view inspection reports to video.

Figure 1: PCC01 Cradle

Figure 2: BPP24 External Battery Pack

Figure 3: Full System on PTP01 Trolley

Proteus Lite Crawler/Tractor System

Features

- 250m Kevlar Reinforced Cable
- Manual Cable Drum
- 150mm 6 Wheeled crawler, for pipes from 150mm to 400mm
- Battery Powered Control Unit
- CAM026 Pan & Rotate Head

Description

Mini-Cam's NEW Proteus Lite brings together, the tried and trusted performance and reliability of the Proteus family, in a value for money, entry level system. Proteus Lite is the ideal starter kit for a one-man operation, integration into a small inspection van, or a low-cost option for larger companies to use for off-road, remote locations. Proteus Lite provides all the resources required to undertake efficient, easy to perform inspections, and with ProPIPE+ and WinCan Embedded software as standard, you can deliver accurate, detailed reports, instantly on-site.

The system comprises a CCU208 Control Unit, RMPL250 Reel and a CPL150 Crawler.

Designed in-house, this sturdy cable reel is Mini-Cam's latest innovation. The core of the Lite system, RMPL250 is engineered to the same exacting standards as our mainline Proteus equipment. Compact, space-saving design, robust construction with a powder coated finish, and equipped with easy-to-use features including a manually operated cable layering arm and meterage roller, which is easily removed for cleaning. The friction brake can be fully locked, unlocked or applied as a friction brake to avoid unwanted pay-off of the cable, and a sturdy winding handle folds away neatly to save space.

The cable reel comes complete with 250 metres of 6.8mm Kevlar reinforced cable, and sports our signature "cow-horn" CCU locators, enabling a secure quick fit of the Proteus Lite control unit ready for work. For added flexibility an optional Tilt Table allows adjustment of the control unit position, to give the user optimal screen viewing and keyboard positions.

SOLOPro+ Pushrod Systems

Description

SOLOPro+ has all you need to inspect pipes, document your findings, and create detailed reports for on-site delivery. It captures detailed footage under tough conditions, and its interface offers robust tools – including observation entry and reporting options – and accepts USB and SD media for easy offload of data, video, images and reports. SOLOPro+ is WiFi enabled to allow remote access to stored images and data.

Mini-Cam's mission is simple: to design and build intelligent, reliable drain survey systems with innovative features. The new SOLOPro+ combines the tried and tested best selling SOLOPro and SOLOPro 360° systems, with a host of new features that deliver an improved user experience for efficient inspections and accurate reporting.

Control Unit

The redesigned control unit features an integral joystick control, ergonomic soft-touch keypad, and user friendly multi-function hot keys which mirror an intuitive on-screen display to enable quick and accurate navigation of the numerous features. The customisable interface displays real-time footage on a 200mm sunlight readable LCD screen, you can zoom video 3X, capture still images, enter up to 16 pages of text, browse thumbnail galleries and select among available languages. Offloading images and data is as simple as plugging in a USB stick or SD Card. The controller runs off mains power, vehicle power or an internal rechargeable 6-hour battery, and comes WiFi enabled to allow remote access to stored images and data, users can simply drag and drop files from CCU to PC, or upload to the Cloud directly on-site. Mini-Cam's ProPIPE reporting software comes as standard with all systems, and WinCan Embedded catalogues allow you to form industry standard reporting directly from the field.

Cameras

Mini-Cam's cameras are unrivaled for quality and reliability, the Self Leveling Axial Camera (CAM025) and Pan & Rotate Camera (CAM026) come as standard with the top end SOLOPro+ DUO System. Separate Axial Camera and Pan and Rotate Camera systems are part of the new line-up. Each system is available with a choice of 40m, 60m or 100m reel of rugged construction with a sealed slip ring and new style friction brake.

Coiler

Welded steel construction with a protective powder coat finish mean SOLOPro+'s reel stands up to the punishment of daily field use. It's sealed slip ring ensures reliable operation, while measurements from the integral distance counter apppear onscreen. SOLOPro+ reel is available in 3 sizes; 40m, 60m and 100m