minicam

Raising expectations for easier underground inspections

We specialise in the manufacture and distribution of Pipeline Inspection Systems including Proteus™ Crawlers, SOLOPRO+™ Push Cameras.

PROTEUS

Contents

About Us

Dedicated to pipeline inspection innovation
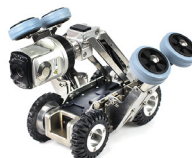
For over 30 years we have used our industry experience and customer feedback to continually innovate. We develop leading solutions for challenging environments, producing smart, user-friendly, durable, high-quality systems that keep our customers working.

We place a very strong emphasis on reliability and robustness, designing systems that are durable under both in-pipe conditions and during handling, and that are efficiently serviced so that working time is maximised. We design and produce almost all components in-house, which ensure the highest levels of quality and the ability to meet our customers needs for fast delivery and response times, and are an ISO9001 certified company.

CCU208 Control Unit

VKU500 Desktop Keyboard
VCU500 Desktop Controller

Automatic Reel
350/500m

Motorized Reel
250/350m

Manual Reel
250/350m

Lite Manual Reel
250m

Lateral Reel

CRP90 Tractor

CRP140 Tractor

CPL150S Tractor

CRP300 Tractor

LAT150 Tractor

Soft Rubber
Wheel

Wide Axle Wheel

Carbide Wheel

High Grip Wheel

Balloon Wheel

Auxiliary Light Pods

Auxiliary Light

Auxiliary Light/
Backeye

Pan, Rotate Camera

Axial Camera

Pan, Rotate and
Laser Camera

Pan, Rotate, Zoom
and Laser Camera

Pan, Rotate and
Laser Camera

Tractor Cradle

Tilting Table

CCP60R/D Compatible
Coiler

Roller Skids

Portable Storage
Trolley

Brick Egg Stabilizer

Camera Elevation
Platform

Lateral Pin Kit

Battery Pack

Cable Guide Pulley

Manhole Top Roller

4 Button Remote
Controller

Floatation Raft

Pressure Kit

ProLaser

Extra Weight Plate

Tractor Camera
Extender

Extension Reel

Reel Bracket

Van Guide Pulley

Joystick Remote
Controller

Inline Camera
Adaptor

MINIATURE TO MASSIVE

Proteus handles them all

CRP300 Crawler with **CAM028** Pan, Rotate & zoom, **ALN300** Auxiliary Lights, **ALB300** Auxiliary Light/Backeye, **CEP300** Camera Elevation Platform and **QRW250** Balloon Wheels in a 2200mm diameter pipe.

With four crawlers, six cameras, two compatible coilers and over twenty accessories, the Proteus system can be configured to perfectly meet your requirements. As your business grows simply add more components from the Proteus range to your kit, enabling you to significantly increase your inspection capabilities for larger diameter pipes and tricky, challenging environments. No matter what the pipe diameter, Proteus crawlers are rugged, agile and rapidly responsive to your commands.

The example shown here demonstrates the scope of the Proteus system. The compact size of our smallest CRP90 crawler allows it to easily survey relined 100mm pipes, while the CRP300 crawler, the largest in the range, with the optional CEP300 Camera Elevation Platform, centres the camera in an impressive 2200mm pipe diameter. For mid-size inspections, there are countless configurations possible with our CRP140 and CPL150 Crawlers - which one will you drive?

CRP90 Crawler with **CAM026** Pan & Rotate Camera. Elevator Down, inside a 100mm diameter relined pipe.

2200mm

100mm

PIPE DIAMETER
FROM 100mm
TO 2200mm

PROTEUS FAMILY
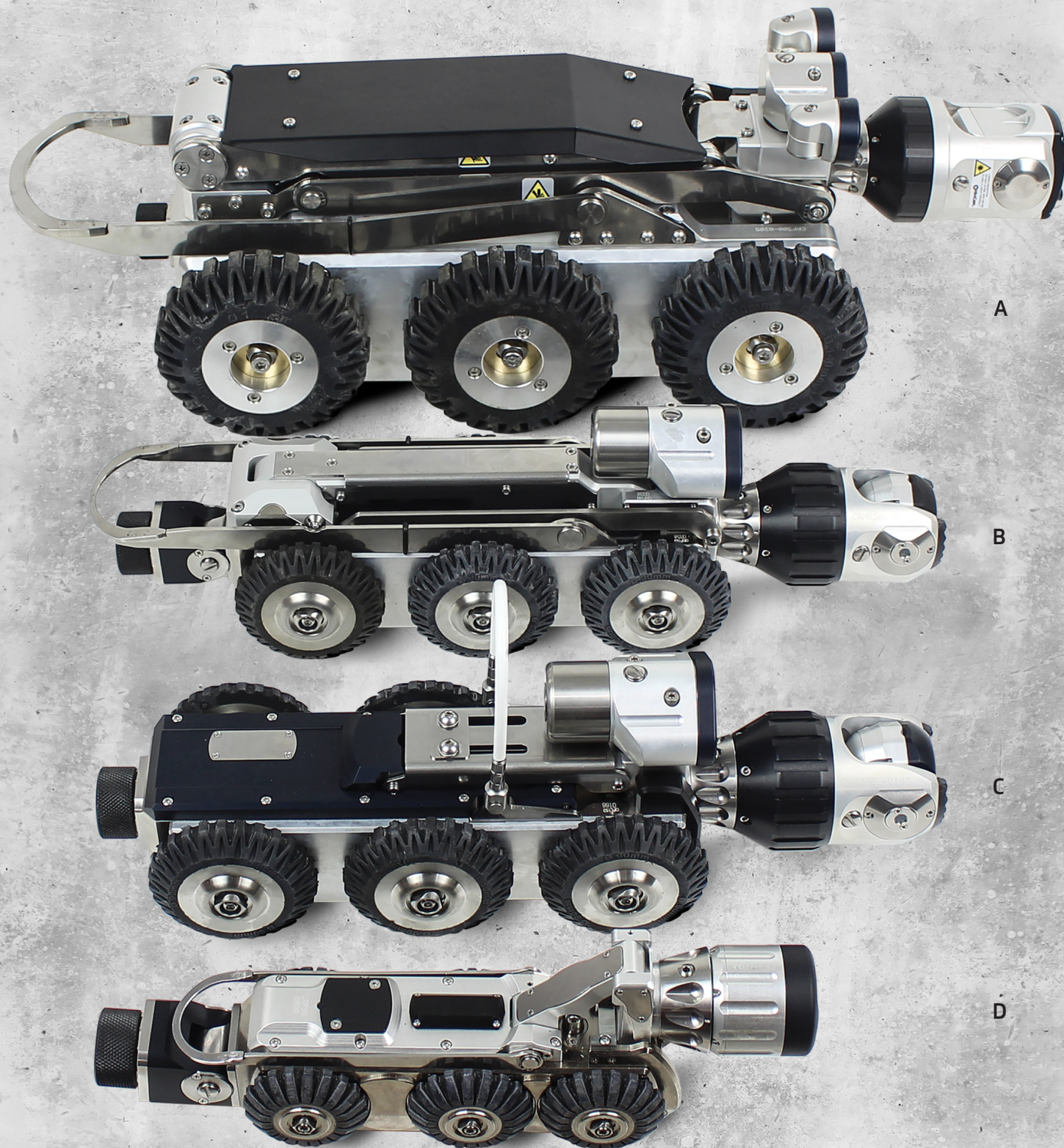
A

B

C

D

A - CRP300 Crawler, **CAM028L** Pan, Rotate, Zoom & Laser, **ALN300** Auxiliary Lights
B - CRP140 Crawler, **CAM028** Pan & Rotate, **ALB300** Auxiliary Light/Backeye
C - CPL150S Crawler, **CAM026** Pan & Rotate, **ALB300** Auxiliary Light/Backeye
D - CRP90 Crawler, **CAM027** Axial

IN-BUILT INNOVATION

Key Features of Proteus Crawlers

Quick Change Wheel Lock

Wheel Options

In-built Inclination Sensor

Articulated Knuckle Connector
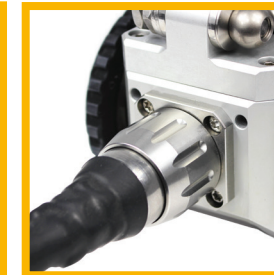
Heavy Duty Rear Connector

Connector Protective Cap

Aux Lights & LED Pod Mounting

Heavy Duty Camera Connector

Motorized Elevator
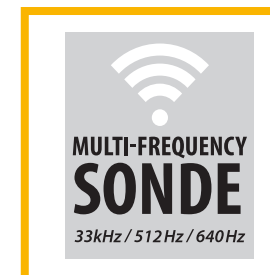
Multi-Frequency Sonde
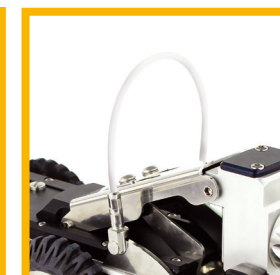
Lowering Arm

PROTEUS LATERAL

Pan-Tilt Laser Camera

Expertly engineered in stainless steel and aluminium, this robust camera offers maximum pan and rotate flexibility for use in small diameter pipe applications, from 60mm up. The camera features an integral distance sensor and dual aligned visible lasers, to enable accurate pipe diameter, defect, and object measurement, directly from the control unit. The precision camera lens and four ultra-bright LED's guarantee clear, defined, quality inspection images.

Flexible Pivot

Horizontal pan and vertical tilt positioning of the deployment arm provides the operator with optimum flexibility.
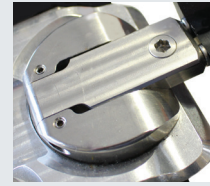
Hinged Mid-section

The hinged mid-section allows for flexible mainline entry for access sizes as small as 300mm. No hinge locking required due to constant wheel support.

Observation Camera and LED Auxiliary Light

Forward facing precision camera capable of 740TVL resolutions with powerful ultra-bright LEDs provides a bright, clear picture to assist launching into the unknown with confidence.

Meterage Counter

Close to deployment for an accurate lateral distance measurement.
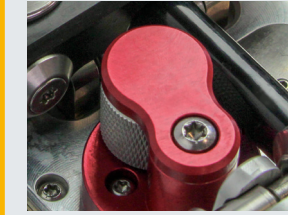
Back-eye Camera and LED Auxiliary Light

Taken from our tried and tested Proteus Back-eye camera and positioned above flow, this colour camera and LED light enables confident cable management during reverse travel.

Rod Rollers

Assists smooth friction-free guiding of the push rod.

Lateral Pin

The optional pin adjusts the direction and guides the camera smoothly along the pipe.

Pan-tilt Deployment Arm

The standard deployment arm provides horizontal pan and vertical tilt via the flexible front pivot, which enables accurate positioning of the camera/push rod prior to launch. For larger mainlines, the unique design of the pivot provides quick and easy attachment of deployment tubes in varying sizes.

Quick Change Wheel Lock

Easy single tool wheel lock enables you to use a variety of wheel sizes and type to offer significant performance benefits in various pipe diameters and for specific operating conditions.

Lateral Drive Belt

The drive mechanism maximizes your productivity by powerfully feeding the push rod up to 45 metre. The drive belt is designed to repel debris whilst in operation, using a flexible, the tread is designed to remove dirt and prevents belt clogging, meaning long service intervals. The drive belt housing is user-serviceable enabling a quick single tool cartridge change while on-site.

Articulated 'Knuckle' Connector

Enables easy deployment of the crawler and prevents water ingression to the connections.

Crawler Nudge Mode

Use the orange coloured arrows on the keyboard to nudge incremental distance for truly accurate positioning of the crawler.
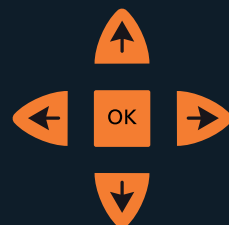
Single Click Mode Change

Changing control mode between mainline and lateral is made easy by a single click of the joystick top button.

Wheel Configurations

LAT150 with 140mm Soft Rubber Wheels (QRW140SR/150)

Minicam's patented quick release wheel lock enables the user to quickly change wheel configurations of the LAT150 to launch in main lines from 150 to 2000mm diameter. Wheel sizes compatible with LAT150 are 90mm, 115mm and 140mm.

PROTEUS CRAWLERS

CRP90

Massive capabilities
Skillfully miniaturised

CRP90's compact size allows it to easily survey relined 100mm pipes. The motorised elevator enables the camera to be centred in pipes of up to 225mm diameter.

ALL STANDARD FEATURES INCLUDED (See page 14)

PLUS
• 6 x QRWX60SR 60mm Rubber Wheels
• Motorised Elevator - Range 40-77mm
• Articulated 'Knuckle' Connector

OPTIONAL
• Carbide Wheels
• High Grip Wheel

TECHNICAL SPECIFICATION	
Product Code	CRP90
Pipe Sizes	90mm - 225mm
Weight	4.50kg

CPL150S

Entry level, mid-size crawler with manual elevator

The perfect companion to the RMPL250 Reel. CPL150 has the same professional grade quality, reliability and accuracy as our mainline Proteus crawlers.

ALL STANDARD FEATURES INCLUDED (See page 14)

PLUS
• 6 x QRWX90SR 90mm Rubber Wheels
• Manual Elevator - Range 60-112mm
• Heavy Duty Rear Connector

OPTIONAL
• Multi-Frequency Sonde
• Inclination Sensor
• Carbide Wheels
• High Grip Wheel
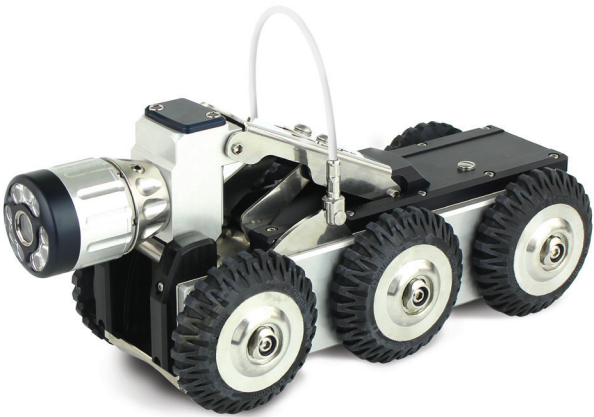
TECHNICAL SPECIFICATION	
Product Code	CPL150S
Pipe Sizes	From 150mm - 400mm to 800mm with PCC01 Crawler Cradle
Weight	9kg

CRP140

Sophisticated mid-size crawler modelled on the CPL150S

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 INCLUDED (See page 14)

PLUS
• 6 x QRWX90SR 90mm Rubber Wheels
• Motorised Elevator - Range 54-205mm
• Articulated 'Knuckle' Connector

OPTIONAL
• Carbide Wheels
• High Grip Wheel

TECHNICAL SPECIFICATION	
Product Code	CRP140
Pipe Sizes	From 140mm - 600mm to 1000mm with PCC01 Crawler Cradle
Weight	9.5kg

ATEX ZONE 1 ⟨Ex⟩ CERTIFIED

CRP300

Engineered to perform reliably in challenging conditions

Designed for larger pipe diameters with high flow rates, this heavy duty crawler makes easy work of inspections in more difficult environments.

ALL STANDARD FEATURES INCLUDED (See page 14)

PLUS
• 6 x QRWX140SR 140mm Rubber Wheels
• Motorised Elevator - Range 135-398mm
• Heavy Duty Rear Connector

OPTIONAL
• Wide Axle Balloon Wheels

TECHNICAL SPECIFICATION	
Product Code	CRP300
Pipe Sizes	From 300mm - 1000mm to 2200mm with Elevation Platform
Weight	32kg

Standard Features

Compatible with:

- CAM026 Pan & Rotate
- CAM026L Pan, Rotate & Laser
- CAM027 Axial
- CAM028L Pan, Rotate, Zoom & Laser
- ALB300 Auxiliary Light with Backeye Δ
- ALN300 Auxiliary Light (Non-Backeye) Δ
- APB300 LED Pod with Backeye Δ
- APN300 LED Pod (Non-Backeye) Δ
- 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 (14.50psi) 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

*Δ Except CRP90, *Except CRP300*

Proteus Lite System

RMPL250 Reel
• 250m Kevlar Reinforced Cable
• Manual Cable Layering Arm
• 2-Step Quick-Release Meterage Rollers
• Friction Brake
• Removable Winding Handle
• Spring Loaded Connector
• Powder Coated Frame with Rubber Feet
• Unique Cow Horn locator for easy-fit Control Unit

CPL150 Crawler
• Quick-Adjust Manual Elevator
• Lowering Handle
• Heavy Duty Rear Connector
• 6 Soft Rubber Wheels
• Quick-change Wheel Lock

CAM026 Pan & Rotate Camera
See page 24

Control Unit
See page 18

CPL150S Crawler,
CAM026 Pan &
Rotate Camera

RMPL250
Lite Reel

CCU208
Proteus Control
Unit

Proven Reliability
Modular Capability

Minicam's Proteus Lite brings together, the well proven performance and reliability of the Proteus family, in a value for money, entry level system.

Designed and developed in-house, 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+, WinCan Embedded and WinCan Web software as standard, you can deliver accurate, detailed reports, instantly on-site.

Future proof and totally modular, when your business budget allows, simply upgrade your Proteus Lite with a larger or smaller crawler, extra cameras and auxiliary lights, or one of the many other Proteus compatible accessories available.

Quick-Adjust Manual Elevator   **Lowering Handle**   **Manual Cable Layering Arm**   **Friction Brake / Hand Brake**   **2-Step Quick Release Meterage Rollers**   **Fold-away / Removable Handle**
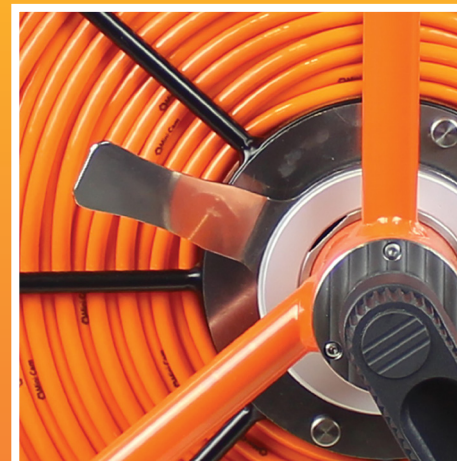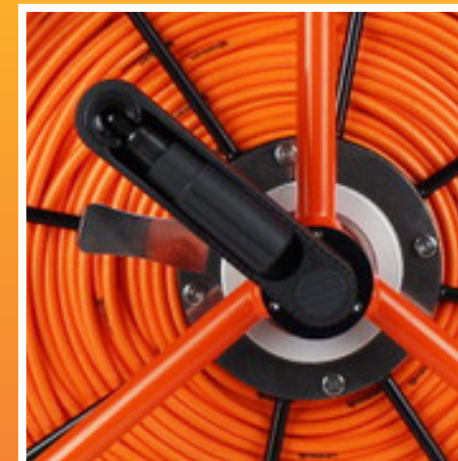
16   17

PROTEUS CCU
CCU208

Review Footage

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

Illumination

Increase or decrease the intensity of the unltra-bright camera LEDs.

Survey Features

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

Hot Keys

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

F1	F2	F3	F4	F5	F6

Write Screen Text

Type and store up to 16 pages of on screen text. Customize text color, position and background color.

Capture Footage

Record MPEG video and JPEG images, and zoom up to 3x on video playback.

Sonde Settings

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

Offload Data

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

Control Meterage

Accurately set the meterage zero offset using the meterage key.

Alternative Languages

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

Generate Reports

Use embedded reporting software to create detailed inspection reports with a pipe graph to pinpoint defects.

Screens Intensity

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

Internal Batteries

The Proteus CCU includes internal batteries so that it can be used autonomously to view inspection reports and video.
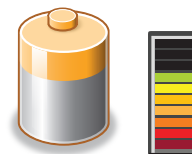
Setup & Configuration

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.

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.

Joystick Controls

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

Van Control Unit

The Van Control Unit and Desktop Keyboard system has been designed and developed specially for van-fits.

The free-standing/built-in keyboard (opposite), and under-shelf control unit (below) replaces the traditional CCU to offer more flexibility for van-fit layouts and user specific requirements.

A development of Minicam's best-selling CCU208 control unit, the Proteus VCU500 is a screenless control unit housed in a 1U high (44mm) rack mount enclosure for integration into a 19in rack enclosure, in a typical van installation. Designed to support all the existing Proteus features, VCU500 can be used with any combination of Minicam Proteus and Proteus Lite cable reels, cameras and crawlers.

The front panel of the VCU500 includes two USB ports for connection of memory devices. A push-button allows a memory device to be ejected safely, and an array of four multicolour LEDs shows the status of these ports and of the system.

It is intended that the VCU500 is incorporated into a rack enclosure with an industrial PC mounted in the van studio, which is running WinCan or any other reporting software.

An array of displays may then be mounted in the studio, with one being driven from the HDMI output of the VCU500 and other being driven by the PC. A further VGA or composite video monitor can be mounted in the vehicle workspace to display the operation of the crawler.

TECHNICAL SPECIFICATION

Product Code	VCU500

Desktop Keyboard

Developed and manufactured to Minicam's rigorously high standards, the ergonomically designed VKU features our trademark user-friendly, multi-function hot keys, and twin, extra large, three-axis joysticks which control all the features and functions of the conventional CCU208.

The sturdy unit sports retractable rear legs, to tilt the face of the keyboard to the user, for ease of use and improved viewing.

By simply changing the connection socket from rear to base, the unit can easily be integrated into the desktop, enabling safe, concealed cable management. The VCU/VKU modules provide a flexible system and improved work-flow, for the discerning operation manager's inspection vehicle.

Camera Home and Zoom Function

Inuitive Hot Keys

Integral Fold-Away Tilt Legs

Ergonomic User Friendly Design

Durable Easy-Clean Finish
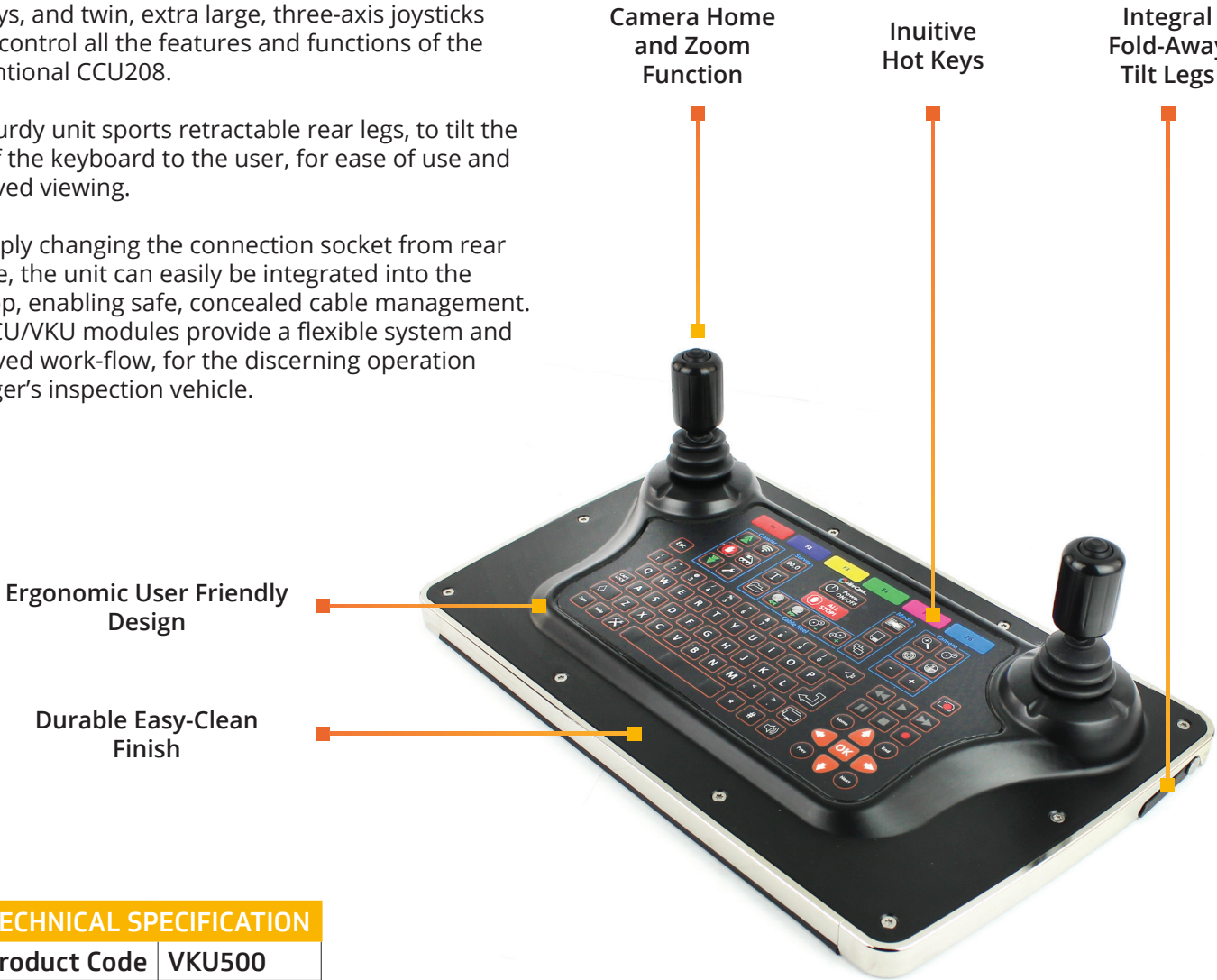
TECHNICAL SPECIFICATION

Product Code	VKU500

Seamless Connectivity With All Proteus Features

The rear panel houses connectors for the HDMI and VGA monitors, the BNC Composite Video outputs, a USB port to allow connection to a PC for external control functions, and a connection for the matching Minicam Desktop Keyboard.

Integral Height Adjustment Legs

Large Three-Axis Joystick Control

Alternative Base Socket Connection

PRECISION CAMERAS
FOR OPTICAL EXCELLENCE

Highest quality components are used in our camera designs, and our skilled technicians assemble and rigorously test the cameras at our UK production facility. Built for longevity, the cameras are rugged, with robust and precise connectors, and are engineered to perform with excellent optical qualities.

Pan, Rotate, Zoom & Laser
CAM028L

CAM028L Pan & Rotate camera with zoom has the same features as the CAM026L, but with the addition of an optical and digital zoom function to allow distant objects to be viewed in much greater detail. As with the CAM026L it has two aligned lasers for defect and object measurement and a distance sensor for pipe diameter measurement. It also has twin clusters of three powerful, ultra-bright LEDs for optimum illumination. Horizontal and vertical movement is smooth and shudder-free, with the full 360° rotate and +/-135° pan.

TECHNICAL SPECIFICATION	
Product Code	CAM028L
Pipe Diameter	90 – 600mm
Aligned Laser Spacing	30mm
Camera Resolution	530 HTVL
Sensitivity	< 1.0 lux
Aperture/Field of View	F1.8 - F2.9 / 46° - 4.6°
Dimensions	143 x 80 x 80 mm
Illumination Intensity	12.5k lux at 150mm
Pressure Depth Rating	1 bar (14.50psi)

Pan, Rotate & Laser
CAM026L

Modelled on Minicam's popular CAM026 the CAM026L features an integral distance sensor and two aligned visible lasers to enable accurate pipe diameter, defect and object measurement, directly from the Proteus control unit.

With a continuous 360° rotation and +/-135° Pan, CAM026L is a compact, robust camera with twin clusters of three high powered ultra-bright LED lights to provide optimum illumination for better image clarity. The hard wearing, scratch resistant sapphire glass provides protection of the camera lens.

TECHNICAL SPECIFICATION	
Product Code	CAM026L
Pipe Diameter	90 x 600mm
Aligned Laser Spacing	25mm
Camera Resolution	470 HTVL
Sensitivity	<1.0 Lux
Aperture/Field of View	F2.5/75°
Dimensions	132 x 73 x 73 mm
Illumination Intensity	12.5k Lux at 150mm
Pressure Depth Rating	1 bar (14.50psi)

Pan & Rotate
CAM026

A Minicam best seller, the forerunner to CAM026L it has a continuous 360° rotation and +/-135° Pan, plus twin clusters of three high powered ultra-bright LED lights and a hard wearing, scratch resistant sapphire glass to protect the camera lens.

TECHNICAL SPECIFICATION	
Product Code	CAM026
Camera Resolution	470 HTVL
Sensitivity	< 1.0 lux
Aperture/Field of View	F2.5/75°
Dimensions	120 x 73 x 73mm
Illumination Intensity	12.5k lux at 150mm
Pressure Depth Rating	1 bar (14.50psi)

Axial
CAM027

A robust camera head with triple clusters of 3 high powered ultra-bright LED lights for optimum illumination and a scratch resistant sapphire glass to protect the lens.

TECHNICAL SPECIFICATION	
Product Code	CAM027
Camera Resolution	470 HTVL
Sensitivity	< 1.0 lux
Aperture/Field of View	F2.5 / 75°
Dimensions	73 x 52 x 52 mm
Illumination Intensity	12.5k lux at 150mm
Pressure Depth Rating	1 bar (14.50psi)

Axial
CAM025

Tried and trusted, CAM025 Self-Levelling Axial camera performs reliably in daily use. The stainless steel housing with flexible spring and heavy duty connector features four high powered, ultra-bright LED lights and a hard wearing, scratch resistant sapphire glass to protect the camera lens.

TECHNICAL SPECIFICATION	
Product Code	CAM025
Camera Resolution	470 HTVL
Sensitivity	<1.0 Lux
Aperture/Field of View	F2.5/75°
Dimensions	271 x 41 x 41mm
Illumination Intensity	12.5k Lux at 150mm
Pressure Depth Rating	1 bar (14.50psi)
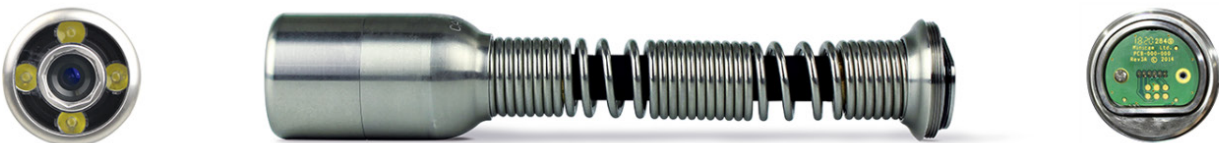
Pan, Rotate & Laser
CAM050

Continuous 360° rotation and +/-135° pan. Integral distance sensor and twin lasers to enable accurate pipe diameter, defect and object measurement. CAM050 is shipped with Minicam's SOLOPro+50 pipeline video inspection system.

TECHNICAL SPECIFICATION	
Product Code	CAM050
Pipe Diameter	Greater than 60mm
Aligned Laser Spacing	Dual aligned front facing
Camera Resolution	740 HTVL
Sensitivity	<1.0 Lux
Aperture/Field of View	F2.5/75°
Dimensions	50 mm Diameter
Illumination Intensity	12.5k Lux at 150mm
Pressure Depth Rating	1 bar (14.50psi)
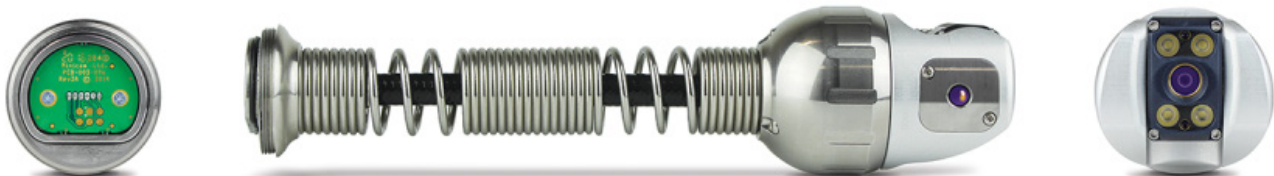
Camera Adaptor
PCA01

Invaluable for hand-held walk-throughs and vertical inspections in manholes, chimneys, tanks and vessels.

A useful accessory for your inspection kit. PCA01 allows the user to connect a camera to the CCU without the need for a crawler. Precision engineered from high specification materials, this compact tool is invaluable for vertical inspections, hand-held walk-throughs, and for use in a service department.

TECHNICAL SPECIFICATION	
Product Code	PCA01
Compatiability	Proteus System
Features	Dual Aux Light Housings
Dimensions	130 x 70 x 80 mm
Weight	790g

Adaptor Guides
BAK01

Invaluable for vertical inspections. The robust arms keep the camera centred in the pipe and help to prevent damage to the camera and adaptor. BAK01 kit includes 2 sizes: 150mm and 225mm.

LED Pods
APB300 / APN300

Adjustable LED light pods for larger pipe diameters.

Twin LED light pods are in-built to the auxiliary light. Manually adjustable, the directional light function provides a full horizontal 180° rotation and a 90° upward rotation, enabling forward, upward, rear or sideways facing positions. The light pod accessory fits all Proteus crawlers, and is quick and easy to fit. The APB300 backeye version features a colour rear view camera to aid crawler reversing.

Auxiliary Lights
ALB300 / ALN300

Ultra-bright LEDs for optimum illumination

A must-have accessory for crawler users. The durable anodised aluminium housing features three high-powered ultra-bright LED lights and a scratch resistant sapphire glass to protect the lens.

AUTOMATIC CABLE REEL

All our reels feature a cable layering mechanism for uninterrupted, tangle-free pay-out and re-winding

ACR500 Automatic Cable Reel,
RJP Joystick Remote Control

Automatic Reel
ACR350 / ACR500

Experience powered winding in both directions!

Developed for the CCTV Inspection Van market, and modelled on our best-selling Proteus 300 metre motorised cable reel, the ACR500 large capacity reel gives users an impressive 200 metres of extra inspection capability. The ACR is also available in a mid-sized 350m cable length.

Fitted with high strength, Kevlar reinforced inspection cable, ultra-smooth operation is provided by the powerful, three phase motor and cable layering mechanism, specially designed for uninterrupted, tangle free pay-out and re-winding. A clear safety screen prevents contact with the cable whilst coiling, and for additional safety there's a rigid cover and an instant motor stop button.

Fully synchronised with the camera control unit, operation is controlled using the hand-held Bluetooth® Joystick Remote Controller (included), which is also capable of controlling camera and crawler functions. Or use the ACR control panel buttons in conjunction with the dedicated keys and intuitive on-screen display on the Proteus CCU.

The ACR500 is supplied complete with the VGP500 (Van Guide Pulley), The guide pulley can be adjusted to pre-set angles, and is fully extendable to reach the optimum working position, reducing friction and providing additional guidance for the cable when paying out and rewinding. An integral, sturdy, stainless steel mounting base secures the reel to the platform in the inspection van.

TECHNICAL SPECIFICATION		
Product Code	ACR350	ACR500
Cable Lenght	360meters	500 meters
Dimensions	660 x 390 x 652 mm	660 x 550 x 652 mm
Power Supply	90 n- 264 VAC	90 - 264 VAC
Power Consumption	600Q	600W
Environmental Protection	IP45	IP45
Weight	45kg	55kg
Remote Controller (Included)	RJP Joystick	RJP Joystick
Van Guide Pulley	VGP350 (Optional)	VGP500 (Included)

Extendable
Van Guide Pulley
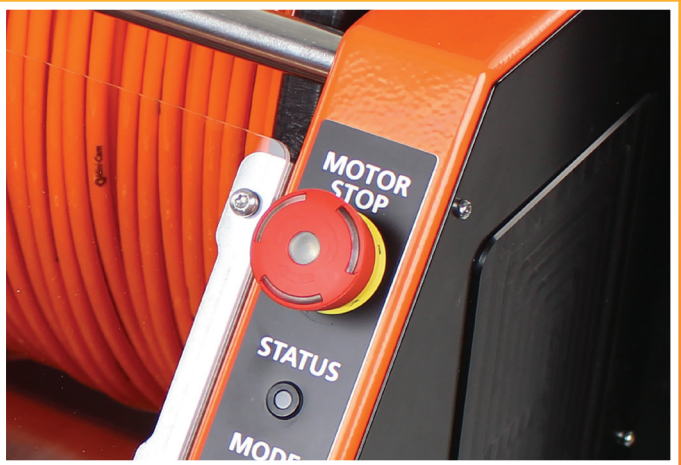
Motorised Stop
Button

MOTORISED CABLE REEL

All our reels feature a cable layering mechanism for uninterrupted, tangle-free pay-out and re-winding

RAP200 Motorised Reel

Motorised Reel
RAP200 / RAP300

Experience powered winding in both directions!

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

Minicam 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.

The reel is operated using the dedicated keys and intuitive on-screen display on the Proteus CCU.

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.

Two optional hand-held Bluetooth® controllers are available to remotely control paying-out and rewinding cable, and crawler movement. Choose from the 4 button or Joystick version.

Motorised reels are available in 2 sizes – Large 350m and Small 250m. The 250m reel has secure fixing points for fitting to our PTP02 Portable Storage Trolley.Both reels are ideal for being installed in our SurveyPro CCTV Van Fit.

TECHNICAL SPECIFICATION		
Product Code	RAP200	RAP300
Cable Lenght	250meters	350meters
Dimensions	530 x 320 x 520 mm	530 x 440 x 520 mm
Weight	30.5kg	40.5kg
Power Supply	24v	24v
Environmental Protection	IP45	IP45
Operational Remote Controller	RJP/RCP4	RJP/RCP4

MANUAL
CABLE REEL

RMP200 Manual Reel

Manual Reel
RMP100 / 200 / 300

Experience powered winding in both directions!

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

Smooth pay-out and re-winding is performance enhanced by the cable layering mechanism and durable heavy duty turning handle. The specialised crawler connector provides a waterproof seal and there's a removable drip tray for easy cleaning and maintenance.

The reels are available in 3 sizes: small 100m, mid-size 250m and large 350m reels. The small and mid-size reels can be fitted to our Portable PTP01 Storage Trolley, and the large reel is ideal for being installed as part of our SurveyPro CCTV Van.

RMP100

RMP200

RMP300

TECHNICAL SPECIFICATION			
Product Code	RMP100	RMP200	RMP300
Cable Lenght	100meters	250meters	350meters
Dimensions	530 x 220 x 520 mm	530 x 280 x 520 mm	530 x 400 x 520mm
Weight	16kg	27kg	35kg
Environmental Protection	Splash Proof	Splash Proof	Splash Proof

LATERAL
CABLE REEL

LCR350 Lateral Reel

Lateral Reel
LCR350

Experience powered winding in both directions!

Fitted with 350 metres of high strength, Kevlar reinforced inspection cable and 45 metres of flexible ½" diameter push rod. The extendable arm of the guide roller has 4 distance locks enabling the cable/rod to be deployed from the optimum position. Dual reels with installation flexibility in van arrangements are used to drive the LAT150 tractor. The Lateral Reel gives you 350 metres of mainline capability to then extend the main camera up to 45 metress into a lateral pipe, while the mainline reel provides cable to the tractor for runs of up to 350 metres within the mainline pipe. Ultra-smooth operation is provided by a powerful motor and cable layering mechanism, specially designed for uninterrupted, tangle free pay-out and re-winding. Clear safety screens prevent contact with the cable whilst coiling, and for additional safety there is a rigid lid and an emergency stop button.
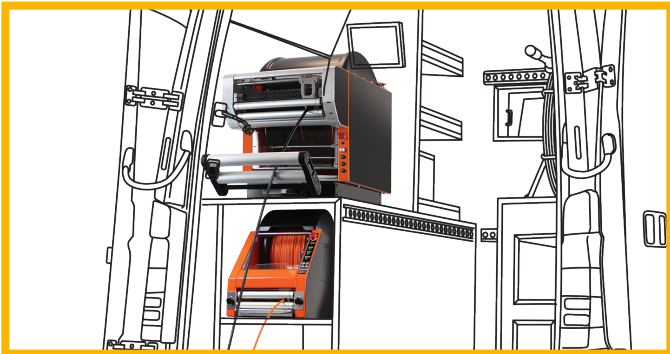
Van-fit configuration with LCR350 (top) and ACR350.

Used in conjunction with the lateral reel the fully automatic reel provides a distance capability of 350 metres power the crawler along the pipeline. It uses our tried and tested Kevlar reinforced inspection cable, and has all the functionality and safety features of the lateral reel. For additional smooth friction-free guiding, an optional van guide pulley is available.

REELS	Lateral Reel - LCR350	Mainline Reel -ACR350
Operation	3 Phase motor	
Payout / Rewind	Cable layering mechanism	Cable layering mechanism
Emergency stop button	**In-built**	In-built
Push rod length	45m	-
Cable length	350m	350m
Cable type	Kevlar reinforced	Kevlar reinforced
Power Supply	100-240 VAC	100-240 VAC
Power Consumption	600W	600W
Dimensions L x W x H	895 x 480 x 725mm	660 x 440 x 640mm
Weight	120kg	42kg
Van Guide Pulley	Integral	VGP350 (Optional)

ATEX Systems

Uncompromising Performance and Safety

Proteus™ ATEX crawlers have been engineered, built and tested for safe use in some of the most dangerous situations, without compromising on any of the features and benefits of our other Proteus crawlers.

All our crawlers are available in ATEX approved versions which make working in ZONE 1 and other explosion risk environments much easier and safer than alternative methods, giving you a clear, sharp eye into the unknown, without introducing risk through use of electronic devices.

ATEX crawlers have all the features, functionality and agility of the standard versions, and offer the same professional-grade quality, reliability and accuracy our customers expect from the Proteus brand.

The Proteus ATEX crawlers feature as standard: built-in height adjustment, multi- frequency SONDE, lowering device, and variable wheel size options using our unique quick-release locking system.
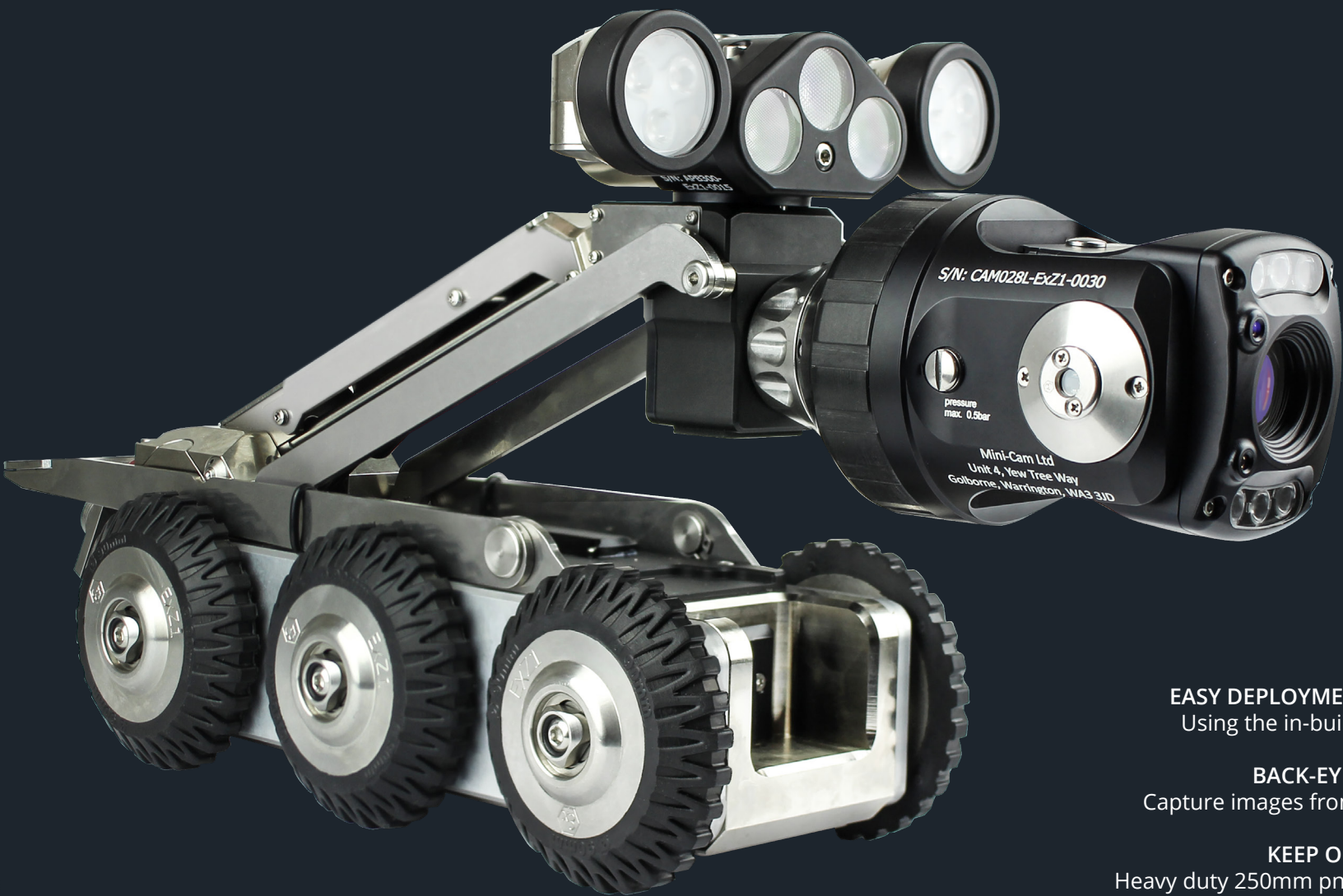
ATEX **ALB300** &
ATEX **APB300**

ATEX ZONE 1 CERTIFIED

EASY DEPLOYMENT AND RETRIVAL
Using the in-built lowering device

BACK-EYE CAMERA
Capture images from behind the camera

KEEP ON TRACK
Heavy duty 250mm pneumatic balloon wheels

PAN & ROTATE
360° continuous rotation and +/- 135° pan

DUAL AUX LIGHTS
Optimum illumination for image clarity

ATEX Cameras

ATEX Pan, Rotate and Laser Camera

ATEX Pan, Rotate and Laser Camera

ATEX Auxiliary Light and Backeye

ATEX Features

ATEX Connector

ATEX Crawler Cradle

ATEX Override Key Switch

CRAWLER WHEELS

Our specially designed wheels offer significant performance benefits in various pipe diameters and for specific operating conditions.

Soft Black Rubber

Available in four sizes and wide axle

Black, soft rubber wheels developed to provide improved traction in regualr pipes.

Carbide

Available in four sizes and wide axle

Fragmented copper particles fused to an heavy duty stainless steel body.

High Grip

Available in three sizes and wide axle

Hard wearing carborundum manufactured with a deeo bevel profile to provide improved traction in wet and greasy pipes

Phuematic Balloon

Available in four sizes and wide axle

Heavy duty, 250mm wide tyres designed to improve performance on our large Proteus CRP300 crawler. Optional for Crawler Cradle PCC01

Wheel Sizes & Compatibility

WHEEL TYPE	TO FIT CRP90	TO FIT CRP140 & CPL150L	TO FIT CRP300	RECOMMENDED PIPE DIAMETER
Soft Black Rubber Whe				
60 mm	QRW60SR/90	-	-	100 mm
90 mm	QRW90SR/90	QRW90SR/150	-	150 mm
90 mm XL	QRW90XLSR/90	-	-	150 mm
115 mm	-	QRW115SR/150	-	200 - 300 mm
140 mm	-	QRW140SR/150	QRW140SR/300	300 - 450 (150) 300 - 600 (300)
140 mm XL	-	QRW140XLSR/150	-	450 - 600 mm

Carbide Wheels				
60 mm	QRW60CB/90	-	-	100 mm
90 mm	QRW90CB/90	QRW90CB/150	-	150 - 200 (90) 150 (150)
90 mm XL	QRW90CBXL/90	-	-	200 - 300 mm (90)
115 mm	-	QRW115CB/150	-	200 - 300 mm
140 mm	-	QRW140CB/150	-	300 - 450 mm

High Grip Wheels				
90 mm	QRW90HG/90	QRW90HG/150	-	150 - 200 mm
90 mm XL	QRW90HGXL/90	-	-	200 - 300 mm
115 mm	-	QRW115HG/150	-	200 - 300 mm
140 mm	-	QRW140HG/150	-	300 - 450 mm

Pneumatic Balloon Wheels				
250 mm	-	-	QRW250	600 - 1000 mm
250 mm XL	-	-	QRW250XL	600 - 1000 mm

Quick Release Lock

All Proteus crawlers feature Minicam's unique, patented wheel lock device. This makes it easy to change the crawler wheel type to suit the size and condition of the pipe. Using the supplied 4mm Hex T-Bar driver, the operation is quick and simple with no other tools required.

Wide Axle Wheels

Extend the capability of your crawler. Quick and easy to attach, wide axle wheels provide instant extra width for inspections in wider pipe diameters

Wide Axle wheels are also available in soft black rubber, high grip and carbide

ACCESSORIES

PTP04 Portable Storage Trolley,
RMPL250 Proteus Lite Cable Reel,
CPL150S Proteus Lite Crawler,
CCU208 Control Unit,
BPP24 Proteus Power Battery Pack

Lateral Pin Kit

Smooth inspection of incoming laterals

For use with the CAM026 Pan & Rotate camera when attached to the CCP60/100 Compatible Coiler. Simply attach the pin to allow the inspection of incoming lateral pipes. The pin adjusts the direction, and guides the camera smoothly along the pipe. The kit comes with three sizes of pin: small 150mm, medium 225mm and large 300mm. Fixings and instruction included.

TECHNICAL SPECIFICATION	
Product Code	ASS-001-968
Small Pin Length	150mm
Medium Pin Length	225mm
Large Pin Length	300mm
Fixings Supplied	6 Screws

Roller Skids

Optimise your view

Roller skids expand the Compatible Coiler for use in 150mm to 450mm pipelines. The three pivoting arms with specially shaped nylon wheels adjust to fit the required pipe diameter, keeping the camera head centred in the pipeline at all times, allowing it to negotiate multiple corners and bends. Manufactured from stainless steel and ABS plastic, the device is sturdy, rugged and corrosion resistant to withstand the punishment of daily field work. No tools or manual adjustments are required.
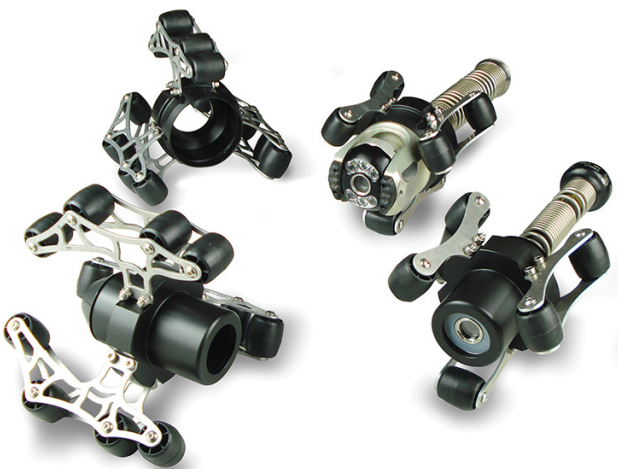
TECHNICAL SPECIFICATION	
Compatability	Product Code
180mm skid for CAM025	ASS-002-009
180mm Skid for CAM026	ASS-001-955
130mm Skid for CAM026	ASS-002-160
130mm Skid for CAM025	ASS-002-008

Compatible Coiler

Companion accessory to the Proteus System

Push rod coiler CCP60R with removable CAM025 Self Levelling Axial camera head, designed to plug directly into the Proteus CCU. Also available as CCP60D (Duo) allowing a CAM026 Pan & Rotate camera to be attached. Robust construction with mobility wheels and a durable powder coated finish. Centering skids optimize your view in pipes 75mm and larger. The CCP coiler comes complete with a set of three skids and a removal tool.

TECHNICAL SPECIFICATION	
Product Code	CCP60 / CCP100
Temperature Range	-20°c to +50°c
DImensions	890 x 360 x 690 mm
Weight	21.3kg
Environmental Protection	IP54

CCU Tilting Table

Customise the CCU position to suit the needs of the user

Quick and easy to attach, the Tilting Table allows adjustment of the control unit position, to give the user optimal screen viewing and keyboard positions. The table can be tilted 35° forwards and 75° backwards, with a full unobstructed 360° horizontal rotation. No tools are required, simply attach using the adjustable clamps.

TECHNICAL SPECIFICATION	
Product Code	TTC01
Dimensions	350 x 300 x 270mm
Weight	3kg

Centring Skids

Optimise your view

Centring Skids optimise your view in pipes 75mm and larger. Manufactured from ABS plastic, which can be washed and wiped clean, the skids are sturdy and rugged to withstand the punishment of daily field work.

Quick and easy to fit. Minicam's Proteus Compatible Coiler (CCP100/CCP60) is shipped with a complete set of 3 centring skids and a skid removal tool.

TECHNICAL SPECIFICATION
Supplied with CCP60 / CCP100
4 inch Skid
6 inch Skid
Protection Skid
Skid Removal Tool

Floatation Raft

Pipe inspecion in flowing water just got easier

Eliminate the need for man-entry. The raft features three powerful angled auxiliary LED ultra-bright light modules, to illuminate pipes in excess of 2000mm. Small enough to be lowered down most common sizes of manhole cover, the compact design allows inspection capabilities in pipes from 600mm. An in-built lowering loop makes for quick and easy deployment and retrieval, and the floatation plate ensures the device is perfectly balanced to eliminate rolling.

TECHNICAL SPECIFICATION	
Product Code	FRP01
Dimensions	680 x 420 x 200 mm
Weight	5.8kg
IP Rating	IP68

Proteus Power Battery Pack

Portable power... where will it take you?

No need to rely on vehicle or mains power. Minicam's unique Proteus Power Battery Pack enables pipeline inspections in the most remote locations with in excess of 5 hours inspection time*. The rugged pack is quick and easy to connect and features output short circuit protection and LED charge status indication. The battery is charged using the standard Proteus power supply unit.

PLEASE NOTE: Charging unit shown above for illustration only, not included with Proteus Power Pack. Charging Unit purchase seperately.

TECHNICAL SPECIFICATION	
Product Code	BPP24
Dimensions	280 x 100 x 120 mm
Weight	4kg
Optional	Carry Case

Dangerous goods shipping conformity required - please contact us for details

OPTIONAL EASY ACCESS CARRY CASE

Cable Guide Pulley

For smooth guiding of inspection cable during survey

Reduces wear by preventing kinks and chaffing, and assists in the smooth guiding of inspection cable during your survey. Comes complete with 12metres of rope and features a quick release mechanism to aid feeding the cable through the rollers.

TECHNICAL SPECIFICATION	
Product Code	CGP01
Dimensions	485 x 75 x 105 mm
Rope Length	12 meters
Weight	2.8kg

Manhole Top Roller

For smooth guiding of inspection cable during survey

Reduces wear by preventing kinks and chafing, and assists in the smooth guiding of inspection cable during your survey. Fully adjustable to fit most manhole sizes.ensures the device is perfectly balanced to eliminate rolling.

TECHNICAL SPECIFICATION	
Product Code	TRP01
Dimensions	650 x 290 x 140 mm
Weight	4.45kg

Crawler Cradle

Improved inspection capabilities

The Crawler Cradle adapts Minicam's CPL150, and CRP140 crawlers for use in large diameter pipes. Versatile, quick and easy to attach, the cradle provides extra ground clearance enabling improved inspection capabilities in pipes and culverts up to 1000mm in diameter.

This robust, steerable, 4-wheel drive cradle is driven by the crawler, and features a unique gear selector, enabling the user to change between high speed and high torque operation. Exclusively compatible with Proteus CRP150, CPL150, and CRP140 crawlers, PCC01 comes supplied with four 220mm balloon wheels.

For heavily silted pipes we recommend the optional 250mm Balloon Wheel (QRW250/150), which are also required to centralise the crawler in 1000mm diameter pipes.

UNIQUE GEAR SELECTOR

TECHNICAL SPECIFICATION	
Product Code	BPP24
Dimensions	280 x 100 x 120 mm
Weight	4kg
Optional	Carry Case

Crawler Camera Extender

Extends the camera position 100mm forwards

The Crawler Camera Extender moves the camera position 100mm forwards, extending the camera beyond the crawler. When the camera is positioned 90° downwards, this provides a view of the invert of pipeline, and not the crawler.

TECHNICAL SPECIFICATION	
Product Code	CCE01
Dimensions	115 x 50 x 50 mm
Weight	302g
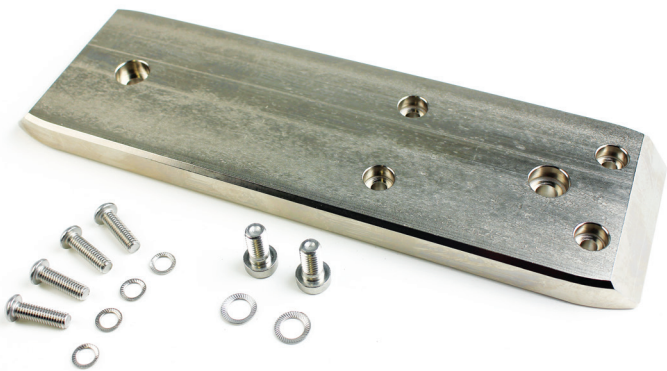
Extra Weight Plate

Extra down-force and traction for the crawler

Exclusively compatible with Proteus CPL150 and CRP140 crawlers, the 2.5kg Extra Weight Plate gives the crawler extra down-force to allow for more traction in tricky pipe conditions. Quick to attach, the assembly is supplied with fixing bolts and washers.

TECHNICAL SPECIFICATION	
Product Code	EWP01
Compatability	CPL150S / CRP140
Dimensions	264 x 80 x 14 mm
Weight	2.5kg
Supplied with	Fixing Bolts & Washers

Portable Storage Trolley

Complete mobility for your Proteus System

Eliminate health hazardous lifting, and time consuming carrying to your remote work site. Engineered to allow for the mobile operation of your Proteus inspection system in difficult to reach areas, such as inside buildings, or other situations a distance away from your vehicle.

The trolley securely holds everything you need to efficiently undertake your pipeline inspection; control unit, reel, battery pack and accessory case. Simply wheel the unit to your location, connect a camera and crawler, and you're up and running in minutes.

The added convenience of Minicam's unique Proteus Power Pack, means there's no need to rely on generator or mains power. The power pack enables pipeline inspection in the most remote locations with up to 5 hours* inspection time.

TECHNICAL SPECIFICATION				
Product Code	PTP01	PTP02	PTP03	PTP04
Compatability	RMP100/200	RAP200	RMP300/RAP300	Proteus Lite
Dimensions (mm)	650 x 1150 x 750	650 x 1150 x 750	650 x 1150 x 870	TBC
Weight	9.75kg	9.75kg	10.5kg	TBC

PLEASE NOTE: Equipment shown on trolley NOT included with PTP01/02/03/04
*Battery life sependant on operating conditions.

Remote Controllers

Instant control with Bluetooth® wireless connectivity

The 4 Button Remote Control and Joystick Remote Control are used to control a Crawler and Motorised Cable Reel using Bluetooth wireless technology. The Motorised Cable Reel can be controlled directly without the presence of the Control Unit. A handy size and lightweight, the controllers are simple to use and fully rechargeable. Supplied with full instructions.

TECHNICAL SPECIFICATION		
Product Code	RCP4	RJP
Compatability	RAP300/200	RAP30/200
Dimensions	88 x 146 x 27	88 x 146 x 27
Weight	175g	175g

Seesnake® Interface

Exlusively compatiable with Minicam Control Units

Sturdy and robust construction, the Minicam SeeSnake Interface unit quickly and easily connects the Rigid® SeeSnake Standard and SeeSnake Mini cameras to Minicam's intuitive and advanced Proteus Control Units.

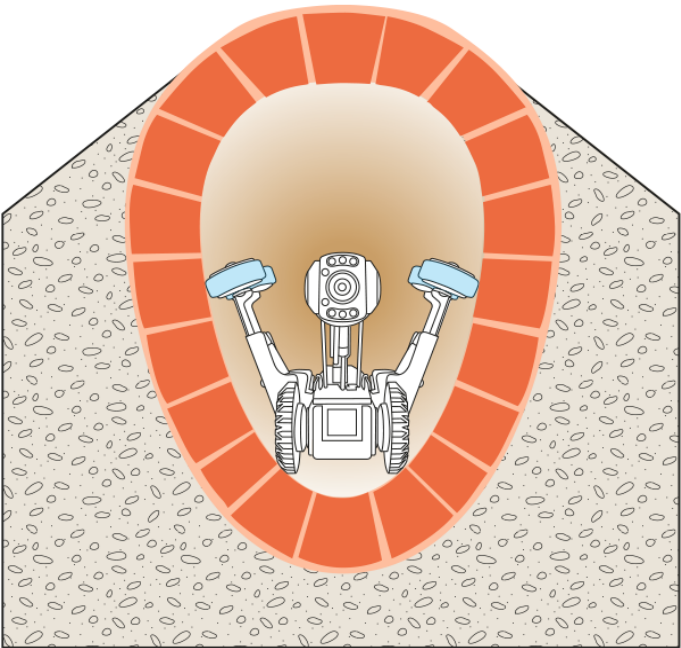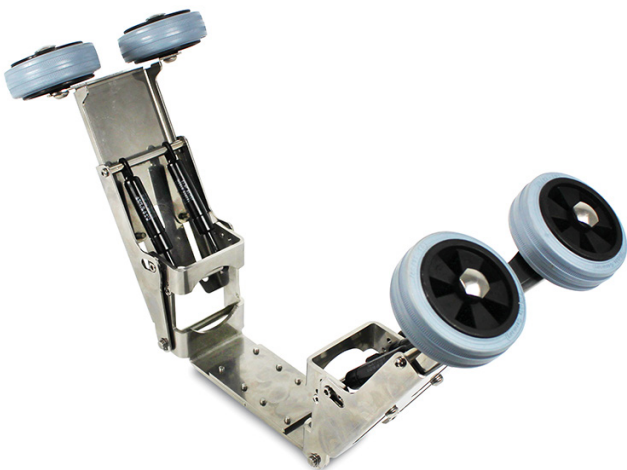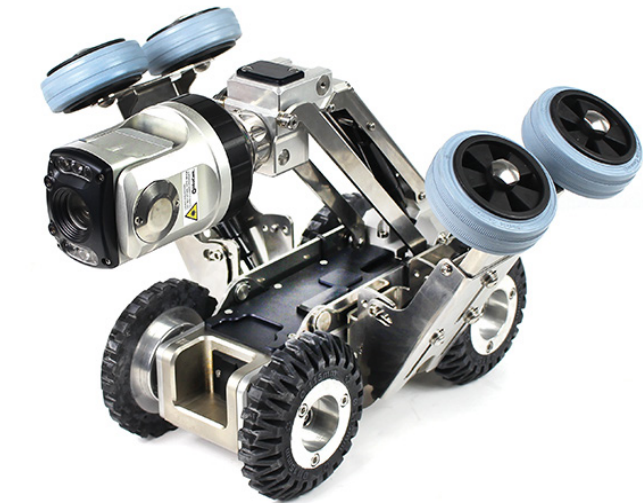| TECHNICAL SPECIFICATION	
Product Code	SSP01
Compatability	Proteus Control Unit
Dimensions	50 x 268 x 40 mm
Weight	115g

Brick Egg Stabiliser

Eliminates rolling over of the crawler

A simple quick fit to our Proteus Crawler, the Brick Egg Stabilizer stops the crawler from rolling over during inspections in pipes with an egg-shaped profile. Exclusively compatible with Minicam's Proteus CRP300, CPL150 and CRP140 crawlers.

Compatibility:
BEP300 fits Proteus CRP300
BEP150/140 fits Proteus CRP150, CPL150 and CRP140

Cable Reel Guide

Smooth Friction-Free Cable Guiding

Reduces Friction And Provides Additional Guidance For The Cable When Paying Out And Rewinding. Also Brushes And Cleans The Cable When Rewinding. Exclusively Compatible With Minicam Motorised And Manual 300 Metre And 200 Metre Cable Reels.

TECHNICAL SPECIFICATION		
Product Code	CGP300	CGP200
Compatability	RAP300/RMP300	RAP200/RMP200
Dimensions	540 x 490 x 175 mm	540 x 370 x 175 mm
Weight	3.5kg	2.9kg
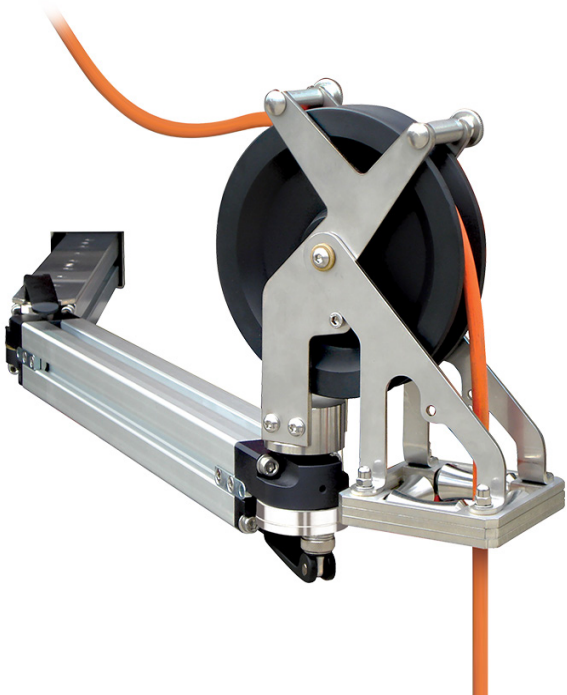
Van Guide Pulley

Smooth friction-free cable guiding

Reduces friction and provides additional guidance for the cable when paying out and rewinding. Exclusively for use with Minicam Motorised and Manual, 300 metre and 200 metre Cable Reels.

TECHNICAL SPECIFICATION	
Product Code	VGP01
Compatability	RMP200/300 & RAP200/300

TECHNICAL SPECIFICATION	
Product Code	BEP300
Compatability	CRP300
Dimensions	450 x 190 x 220 mm
Weight	2.95g

TECHNICAL SPECIFICATION	
Product Code	BEP150/140
Compatability	CPL150S/CRP140
Dimensions	375 x 180 x 210 mm
Weight	2.05kg

Camera Elevation Platform

Increase Your Inspection Capabilities

The Telescopic Elevator Is Quick To Attach To The Crp300 Crawler And Can Be Manually Moved Up Or Down To Increase Inspection Capabilities Up To 2200mm. Interface Provides Easy Connection For Various Combinations Of Camera, Auxiliary Lights And Pods.

TECHNICAL SPECIFICATION	
Product Code	CEP300
Connections	Camera connection, Lifter connection, 2x additional lamp connections, 1x additional lamp connector with backeye camera
Top Camera Position	1090mm (pipe centre) suing pneumatic balloon wheels
Mid Camera Position	Approx 830mm)pipe centre) with extended plate
Low Camera Position	565mm (pipe centre) with pneumatic wheels
Dimensions	142 x 130 x 476 mm
Weight	5.7kg

Reel Bracket

Use the reel as a CCU holder, for portability in remote areas

This lightweight tubular bracket is quick and easy to attach, using the bolts and washers supplied. The bracket holds the control unit firmly in place in a comfortable working position for the user. Available in 2 sizes.

TECHNICAL SPECIFICATION		
Product Code	RBP01	TBP02
Compatability	Fits 200m Reel	Fits 300m Reel
Dimensions	350 x 215 x 118 mm	430 x 215 x 118 mm
Weight	675g	735g

Pressure Kit

All you need to purge a Proteus crawler and camera head

Pressurisation is safe, quick and easy. Two kits are available: Standard CO2 and a Nitrogen version for ATEX equipment. Supplied in a handy padded carry case. Replacement cylinders can be purchased separately.

| TECHNICAL SPECIFICATION	
Product Code	**Description**
PKP01	Standard CO^2 Pressure kit
PKP02EX	ATEX Nitrogen Pressure Kit

Pro Laser

Pinpoint accurate laser profiling of pipes and sewers

Pro Laser is the perfect partner for any CCTV inspection system and provides accurate analysis of the true pipe condition prior to and after rehabilitation.

Data Analysis and Delivery
The Minicam Laser profiler has been designed to provide accurate and repeatable pipe geometry for many pipeline conditions. Simply attach the device to your CAM026 and WinCan will do the rest! All results are automatically calculated and can be delivered via WinCan. The WinCan software generates the report automatically, including diameter, ovality, capacity and also provides 3-dimensional XYZ-data.

WHY DO YOU NEED A PIPE PROFILER?
If you are a municipality, consulting engineer or contractor, the Profiler is a necessary tool for the analysis of the true pipe condition prior to and after rehabilitation. When used as a video survey tool it can provide accuracy up to 1mm when measuring pipe size, deformation, erosion encrustation, debris, grease, flows, lateral protrusion, surface damage and holes.
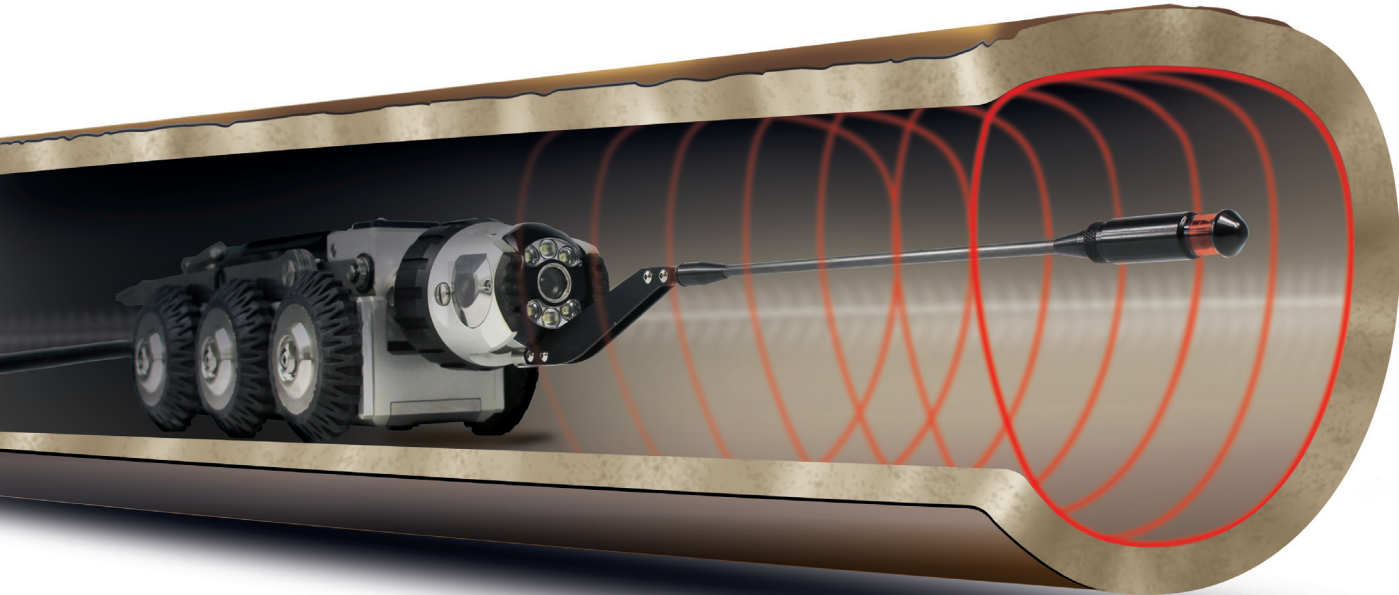
Extension Reel

Gets your equipment were it needs to be. Connects equipment to the cable reel. High quality cable and connectors housed on a sturdy reel with integral floor stand and carry handle. Available with 50 metre and 30 metre cable lengths.

TECHNICAL SPECIFICATION		
Product Code	ERP30	ERP50
Dimensions	315 x 360 x 210mm	315 x 360 x 210mm
Weight	3.8 kg	5.6 kg
Cable Length	30 metres	50 metres

Link Cable

Connects your system components quickly and easily. Connects to Proteus Control Unit or SOLOPro Control Unit to the cable reel. High quality cable and durable connectors supplied with rubber protection caps.

TECHNICAL SPECIFICATION	
Product Code	LCP05
Cable Length	5 Metres

CONTROL UNIT

	CCU208	VCU500	CKU500
	Control Unit	Van Control Unit	Desktop Keyboard
Operating System	Linux	Linux	-
Screen	1024 x 768 Daylight Viewable	External	-
Interface	RS232, USB 2.0	USB 2.0	-
Internal Storage	Internal Solid State	Internal Solid State	-
External Storage	2 x USB 2.0 / SDHC	2 x USB 2.0	-
File Format	MPEG-4 / JPEG Stills	MPEG-4 / JPEG Stills	-
Dimensions	430 x 150 x 280 mm	483 x 271 x 43.6 mm	432 x 257 x 137 mm
Weight	5.5kg	2.5kg	4.45kg
ATEX Zone 1 Certified	OPTIONAL	OPTIONAL	OPTIONAL

CRAWLERS

	CRP90	CRP140	CPL150S	CRP300
	CRAWLER	CRAWLER	CRAWLER	CRAWLER
Pipe Diameter	90 - 225 mm	140 - 600 mm	150 - 375 mm	300 - 1000 mm
Weight	4.5kg	9.25kg	9.25kg	32kg
Pressure Depth Rating	1 bar (14.50psi)	1 bar (14.50psi)	1 bar (14.50psi)	1 bar (14.50psi)
Built-in Elevator	Motorised	Motorised	Manual	Motorised
Quick Change Wheel Lock	YES	YES	YES	YES
Optional Large Wheels	2 Size Options	4 Size Options	4 Size Options	3 Size Options
Sonde Transmitter	YES	YES	OPTIONAL	YES
Inclination Sensor	YES	YES	OPTIONAL	YES
Heavy Duty Connector	YES	YES	YES	YES
Flexible Rear Connector	YES	YES	OPTIONAL	OPTIONAL
Dimensions	296 x 87 x 72 mm	386 x 133 x 108 mm	307 x 133 x 110 mm	470 x 233 x 195 mm
ATEX Zone 1 Certified	OPTIONAL	OPTIONAL	NOT AVAILABLE	OPTIONAL

CAMERAS

	CAM025	CAM026	CAM027
	SELF LEVELING AXIAL	PAN & ROTATE	AXIAL
Effective Pixels	512 X 582	512 x 582	512 x 582
Resolution	470 HTVL	470 HTVL	470 HTVL
Sensitivity	< 1.0 Lux	< 1.0 Lux	< 1.0 Lux
Aperture / Field of View	F2.5 / 75°	F2.5 / 75°	F2.5 / 75°
Illumination Intensity	Adjustable to 12.5k Luz at 150mm	Adjustable to 12.5k Luz at 150mm	Adjustable to 12.5k Luz at 150mm
Pessure Dpeth Rating	1 bar (14.50psi)	1 bar (14.50psi)	1 bar (14.50psi)
Dimensions	220 x 41 x 41 mm	120 x 74 x 74 mm	62 x 52 x 52 mm
Weight	620g	860g	250g
ATEX Zone 1 Certified	OPTIONAL	OPTIONAL	NOT AVAILABLE

CAMERAS

	CAM026L	CAM028L	CAM050
	PAN, ROTATE & LASER	PAN, ROTATE, ZOOM & LASER	PAN, ROTATE & LASER
Pipe Diameter	90 - 600 mm	90 - 600 mm	Greater than 60mm
Aligned Laser Spacing	25 mm	30 mm	Dual aligned front facing/single side
Camera Resolution	470 HTVL	520 HTVL	740 HTVL
Sensitivity	< 1.0 Lux	< 1.0 Lux	< 1.0 Lux
Apature / Field of View	F2.5 / 75 °	F1.8 - F2.5 / 46° - 4.6°	F2.5 / 75 °
Illumination Intensity	12.5k Lux at 150 mm	12.5k Lux at 150 mm	12.5k Lux at 150 mm
Pressure Depth Rating	1 bar (14.50psi)	1 bar (14.50psi)	1 bar (14.50psi)
Dimensions	120 x 74 x 74 mm	143 x 80 x 80 mm	50mm Diameter
Weight	860g	1148g	570g

AUX LIGHT

	ALB300	ALN300
	AUX LIGHT WITH BACKEYE	AIX LIGHT NON-BACKEYE
Pressure Depth Rating	1 bar (14.50psi)	1 bar (14.50psi)
Dimensions	84 x 68 x 50 mm	51 x 68 x 50 mm
Weight	306g	225g
ATEZ Zone 1 Certified	OPTIONAL	OPTIONAL

LED PODS

	APB300	APN300
	LED POD WITH BACKEYE	LED POD NON-BACKEYE
Pipe Diameter	300 mm upwards	300 mm upwards
Illumination System	9 High POwer LEDs	9 High POwer LEDs
Backeye Camera	YES	NO
Pressure Depth Rating	1 bar (14.50psi)	1 bar (14.50psi)
Dimensions	85 x 150 x 55 mm	52 x 150 x 55 mm
Weight	480g	400g
ATEZ Zone 1 Certified	OPTIONAL	OPTIONAL

REEL

	ACR350	ACR500
	350M AUTOMATIC REEL	500M AUTOMATIC REEL
Cable Length / Diameter	350 meters / 6.5 mm	500 meters / 6.5 mm
Power Supply	90-264 VAC	90 - 264 VAC
Power Consumption	600W	600W
Envirnmental Protection	IP45	IP45
Dimensions	660 x 390 x 652 mm	660 x 550 x 652 mm
Weight	45kg	55kg
Remote Controller	RJP Joystick	RJP Joystick
Van Guide Pulley	VGP350 (Optional)	VGP500 (Included)
ATEX Zone 1 Certified	OPTIONAL	OPTIONAL

REEL

	RAP200	RAP300
	250M MOTORISED REEL	350M MOTORISED REEL
Cable Lenght / Diameter	250 meters / 6.5 mm	350 meters / 6.5 mm
Power Supply	24v	24v
Dimensions	530 x 320 x 520 mm	530 x 440 x 520 mm
Weight	30.5kg	40.5kg
Environmental Protection	IP45	IP45
Remote Controller	RJP/RCP4	RJP/RCP4
ATEX Zone 1 Certified	OPTIONAL	OPTIONAL

REEL

	RMP100	RMP200	RMP300	RMPL250
	100M MANUAL REEL	250M MANUAL REEL	350M MANUAL REEL	250M LITE REEL
Cable Lenght / Diameter	100 meters / 6.5 mm	250 meters / 6.5 mm	350 meters / 6.5 mm	250 meters / 6.5 mm
Dimensions	530 x 220 x 520 mm	530 x 280 x 520 mm	530 x 400 x 520 mm	550 x 385 x 700 mm
Weight	16kg	25kg	35kg	29.3kg
Environmental Protection	Splash Proof	Splash Proof	Splash Proof	Splash Proof
ATEX Zone 1 Certified	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL

AFTER SALES SUPPORT

We are Right behind you all of the way

At Minicam we pride ourselves on our commitment to always going the extra mile with our customer care.

After sales support and Service and Repair is available from 8am until 4:30pm Monday Thursday and 8am to 3:15pm on Friday.

Operator and Service Training is available to customers and their employees, at our UK headquarters, your company headquarters or your preferred location. Contact us for full details and costs.

Contact Us

Whether you're curious about product features, purchasing, servicing or live demonstrations - we are ready to answer all your queries.

Phone: +44 (0) 1942 270524
Email: info@minicam.co.uk
Website: minicam.co.uk

Business hours
Monday: 8am – 4:30pm
Tuesday: 8am – 4:30pm
Wednesday: 8am – 4:30pm
Thursday: 8am – 4:30pm
Friday: 8am – 3.15pm

Head Office and Northern Service Centre

Postal address
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Unit 33-35, Ravenscraig Road
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Salford
M38 9PU

PARTS PORTAL

Quick and easy online ordering and worldwide delivery.

Appointed Minicam Partners are given access to the online part shop which has the full range of genuine Minicam spares and accessories, all available to order online with same day dispatch if orderedbefore 3pm*. The portal stocks parts for all Minciam systems and equipment.

*Terms and conditions apply - contact us for details
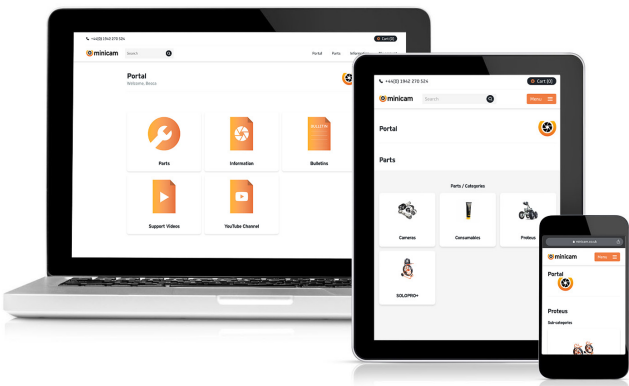
Southern Service Centre

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We will be happy to answer any questions you may have...

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