

Raising expectations for easier underground inspections

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

PROTEUS LITE

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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.

Unique Cow-Horn
Locators for Easy
Fit CCU

Meterage Roller
Removable
for Easy Cleaning

250m 6.8mm
Kevlar
Reinforced
Cable

Friction
Brake

Removable
Space Saving
Fold Away
Handle

Spring Loaded
Connector No
Tools Required

Sturdy Powder
Coated Frame with
Rubber Feet



Easy-fit Control Unit



Sturdy Winding Handle



Manual Cable Layering Arm

RMPL250

Designed in-house, this sturdy cable reel is Minicam'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 6.5mm 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.



Friction Brake / Hand Brake



2-Step Quick Release Meterage
Rollers



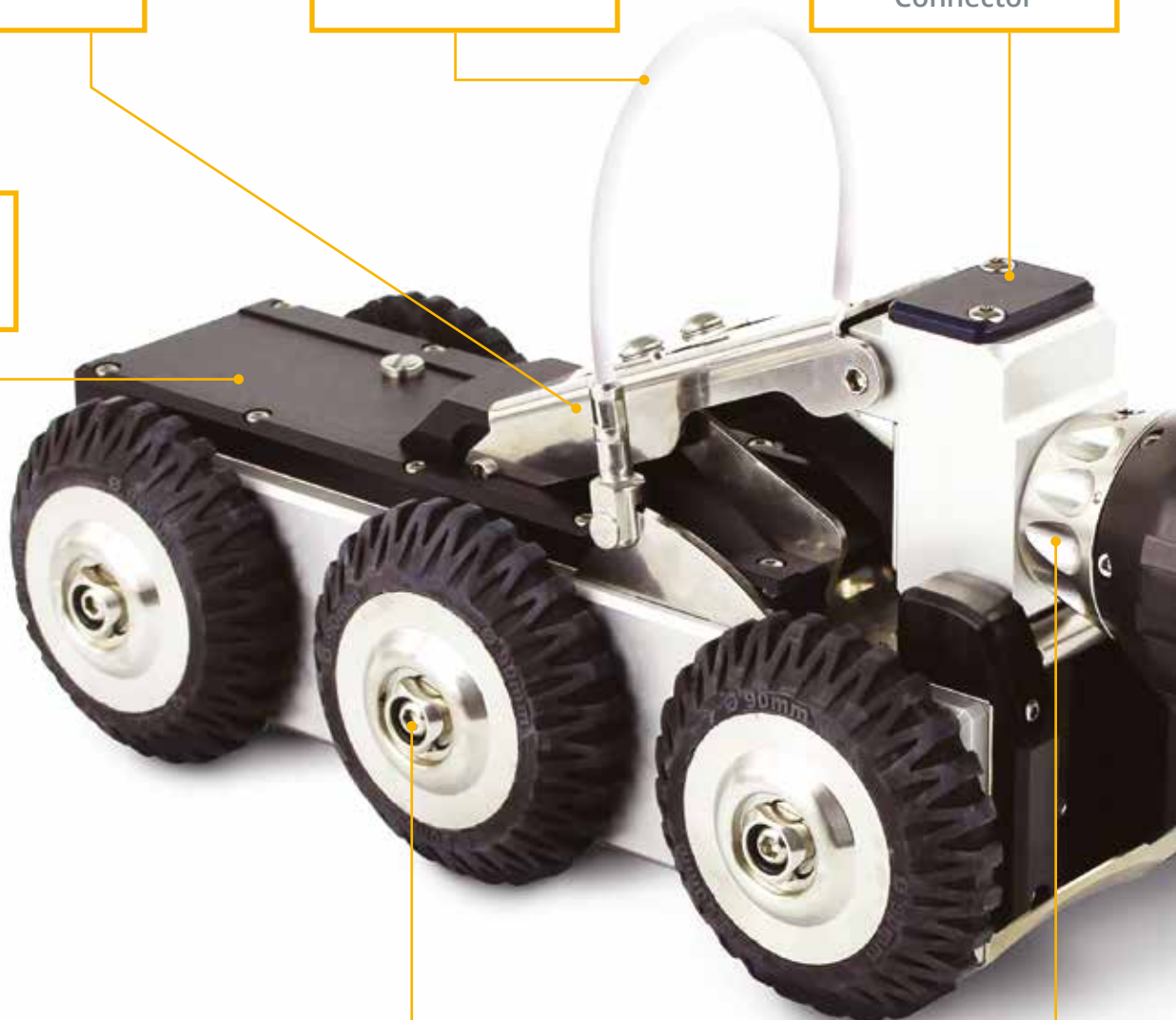
Fold-away Handle

Quick Release
Elevation Arm

Sturdy Easy-Grip
Lowering Handle

Auxiliary Light /
Backeye Camera
Connector

Heavy Duty
Waterproof Rear
Connector



Soft Rubber
Wheels Provide
Improved Traction

Minicam Patented
Quick Release Lock

Quick Release
Connector



Quick Release Elevator



Raised Elevator



Lowering Handle

CPL150S

The CPL150S crawler is the perfect companion to the RMPL250 Proteus Lite Cable Reel, it has the same professional grade quality, reliability and accuracy that our customers expect from Proteus products.

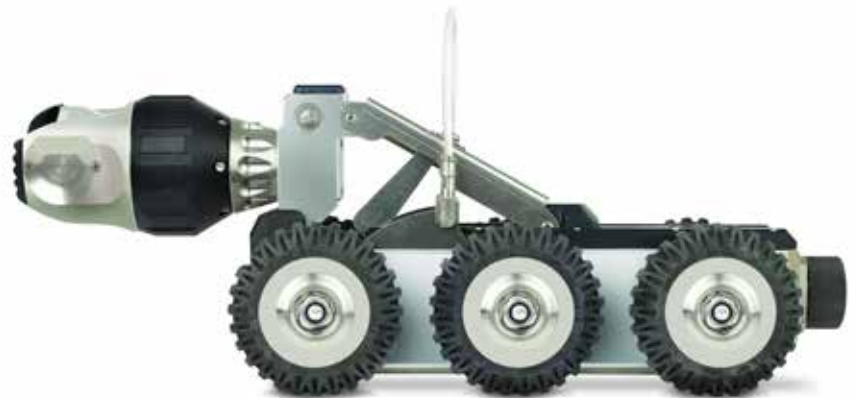
The crawler features a specially designed, manually operated quick release elevator arm, sturdy lowering handle and in-built connector for an optional auxiliary light or auxiliary light with backeye camera. Minicam's water resistant camera connectors and rear cable connectors come as standard, as does our quick release wheel lock, and soft rubber wheels, engineered for improved traction. Built to perform reliably in harsh conditions, the modular configuration of the Proteus Lite system means CPL150S can be enhanced with cameras and accessories to extend it's inspection capabilities.

Integration with additional Proteus wheels and accessories enables the CPL150S to be used for pipe inspections from 150mm upwards .

Full 360°
Continuous
Rotation
& +/- 135° Pan



Ultra Bright
Signature Dual 3
LED Cluster



Heavy Duty Rear Connector



Optional Aux Light & Backeye
Camera



Soft Rubber Quick Release
Wheels

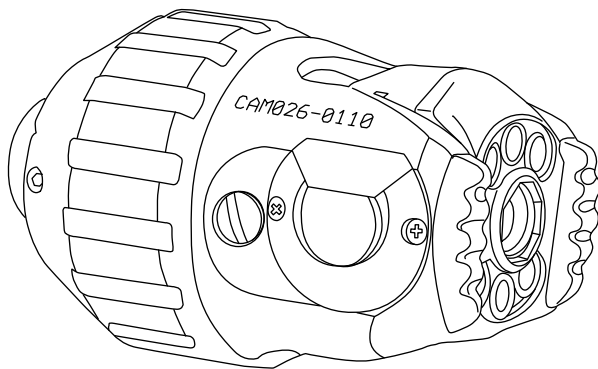
PRECISION CAMERAS FOR OPTICAL EXCELLENCE

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 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)

Optional Cameras for Proteus Lite



Axial CAM027



Aux Light & Backeye ALB300



Pan, Rotate & Zoom CAM028

PROTEUS CCU

CCU208

Survey Features

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



Sonde Settings

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



Control Meterage

Accurately set the meterage zero offset using the meterage key.



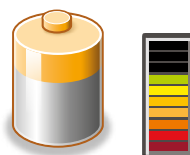
Generate Reports

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



Internal Batteries

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



Review Footage

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



Hot Keys

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



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.



Illumination

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



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.



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.

Alternative Languages

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

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.



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°.



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
Compatibility	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 dependant on operating conditions.

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



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
Compatibility	RMP200/300 & RAP200/300

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

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 separately.



OPTIONAL EASY ACCESS CARRY CASE

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

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.

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

UNIQUE GEAR SELECTOR



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 regular pipes.



Carbide

Available in four sizes and wide axle

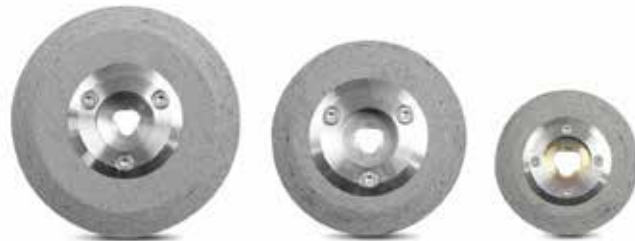
Fragmented copper particles fused to an heavy duty stainless steel body.



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



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.

CONTROL UNIT

Video Format	PAL
Battery	Lithium-Ion (CCU stand alone) 6 hours
Battery	Lithium-Ion (CCU and Comp Coiler) 3 hours
Charging	Mains power (100-240 Vac) or vehicle power (12-24 VDC) using supplied adaptors
Display	10.4" XGA (1024 x 768 pixels) Sunlight viewable
Keyboard	Full QWERTY style membrane keyboard with arrow keys for navigation and separate joysticks for camera and crawler control
Video Recording	MPEG4 (WinCan compatible)
Image Capture	JPEG (live or from recorded video)
Text Overlay	16 page (selectable text and colours)
Internal Memory	32 GB (expandable to 128 GB)
External Media	SDHC and USB 2.0 Memory Stick
Language Support	Multiple
Connections	Power and Cable Reel
Environmental Rating	IP54
Weight	5.5kg
Dimensions	550 x 385 x 150

REEL

Cable Length / Diameter	250 meters / 6.5 mm
Dimensions	550 x 385 x 700 mm
Weight	29.3kg
Environmental Protection	Splash Proof
ATEX Zone 1 Certified	OPTIONAL

CRAWLERS

Pipe Diameter	150 - 375 mm
Weight	9.25kg
Pressure Depth Rating	1 bar (14.50psi)
Built-in Elevator	Manual
Quick Change Wheel Lock	YES
Optional Large Wheels	4 Size Options
Sonde Transmitter	OPTIONAL
Inclination Sensor	OPTIONAL
Heavy Duty Connector	YES
Flexible Rear Connector	OPTIONAL
Dimensions	307 x 133 x 110 mm
ATEX Zone 1 Certified	NOT AVAILABLE

CAMERAS

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 Luz at 150mm
Pressure Depth Rating	1 bar (14.50psi)
Dimensions	120 x 74 x 74 mm
Weight	860g
ATEX Zone 1 Certified	OPTIONAL

SOFTWARE

ProPIPE+ Reporting	
WinCan Embedded	
WinCan Web	

ACCESSORIES

Reel-to-CCU Cable	
Vehicles power adaptor	
Mains power adaptor	
Memory	8 GB USB Mememort Stick / 8 GB SDHC Card
Accessory Case	with Centring Skids
Minicam Lanyard	

OPTIONAL ACCESSORIES

Memory Card Upgrade	16MB / 32 MB
Cable Guide Pulley	CGP01
CCU Tilt Table	TTC01
Battery Pack	BPP24
Crawler Cardle	PCC01
Proteus Wheels	
Compatible Coiler	CCP60 / CCP100
Roller Skids	130mm / 180mm (for use with Comp Coiler)
All Terrain Wheels	SPP-ATA (for use with Comp Coiler)

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.



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 ordered before 3pm*. The portal stocks parts for all Minicam systems and equipment.

*Terms and conditions apply - contact us for details



Contact Us

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

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Tuesday: 8am - 4:30pm

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Thursday: 8am - 4:30pm

Friday: 8am - 3.15pm

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