

InPipe Innovation



Contents

20 YEARS OF INNOVATION	4
SOLOPro+	6
CAMERAS & AUXILIARY LIGHTS	14
PROTEUS SYSTEMS	16
COMPATIBLE COILER	26
MANUAL CABLE REELS	28
MOTORISED CABLE REEL	30
PROTEUS POWER	31
PORTABLE STORAGE TROLLEY	32
FLOATATION RAFT	34
PROLASER PROFILING	35
MANHOLE TOP ROLLER	36
CABLE GUIDE PULLEY	36
ROLLER & CENTERING SKIDS	38
PRESSURE KIT	39
ALL TERRAIN WHEELS	39
LATERAL PIN KIT	39
ACCESSORIES	4(
CUSTOM VAN FIT-OUTS	42
SERVICE SUPPORT	45





20 YEARS OF INNOVATION



CONTINUING TO DELIVER CUTTING EDGE PIPELINE INSPECTION SOLUTIONS

Founded over 20 years ago, Mini-Cam Ltd specialises in the manufacture and distribution of Pipeline Inspection Systems. Our growing reputation has enabled us to establish a strong global presence through our International Dealer Network providing sales, servicing and support to customers in over 25 countries worldwide.

Our industry knowledge, experience and customer feedback have enabled us to continually innovate and develop leading solutions for challenging environments, producing smart, user-friendly, durable, high-quality systems at very affordable prices. Our own custom design and manufacturing facilities provide us with a quality control process of the highest order, maintaining our own, as well as UK and EU standards, including the ISO9001 for which we have been accredited since 2005.

Our complete range of innovative systems provides for every need of most pipeline inspection requirements. The modular architecture of our systems, with ongoing developments introducing new technologies, gives us the flexibility through our custom design and build service to provide bespoke solutions for specific requirements, where your specifications can be incorporated into our own designs.

Long after our customers have purchased, we understand the importance of keeping their equipment working and performing. Our enviable after-sales service is highly respected throughout the industry and we always aim to service and repair equipment in as short a time as possible, to ensure minimal downtime for our customer's businesses.



Left: Mini-Cam's UK Headquarters and Production Facility Above: Part of Mini-Cam's Support Vehicle Fleet

TOTAL INSPECTION PRODUCTIVITY

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.

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





SOLOPro+

INTELLIGENT, FLEXIBLE, RUGGED WITH TOTAL INSPECTION PRODUCTIVITY

Mini-Cam's mission is simple: to design and build intelligent, reliable pipeline inspection 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.

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.

Mini-Cam's cameras are unrivalled for quality and reliability, the Self Levelling 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.







Left: SOLOPro+ 60 Metre with Self Levelling Axial Camera
Top right: Easy-fit CCU Locators Bottom right: CCU210

SOLOPro+ FEATURES

INNOVATION THAT EXCELS



HOT KEYS
Intuitive user-friendly
multi-function keys. Colour
coding matches the key to
the on-screen menu.



JOYSTICK CONTROL
The joystick provides
smooth accurate control of
the Pan & Rotate camera.



SOFT KEY NAVIGATION Soft-touch QWERTY style keyboard for responsive key actions.



EASY-FIT CCU Mini-Cam's unique cow-horn shaped CCU locator makes for a secure quick fit, ready for work.



FRICTION BRAKE
A simple one handed
operation. The brake can
be fully locked, unlocked or
applied as a friction brake
to avoid unwanted pay-off
of the rod.



DATA TRANSFER
Offloading images and data is as simple as plugging in a USB stick or SDHC card.
WiFi enabled to allow remote access to stored images and data.



OPTIONAL CAMERAS
Both cameras feature high
powered LED lighting.
Choose from Self Levelling
Axial camera or the Pan &
Rotate with 360° endless
rotation and Pan 135° +/-



ADAPTOR KIT
Optimize your view in lines
75mm and larger using the
adaptor kit with three
centering skids supplied
with your SOLOPro+ system.

FUNCTIONALITY AT YOUR FINGERTIPS



Capture Footage

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

Enter Observations

Use optional data-entry module to log inspection findings.

Review Footage

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

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.

Write Screen Text

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

Control Hardware

Use the

SOLOPro+

control unit to

view, record

and annotate

footage from any composite

video source

inspection

Set sonde frequency, adjust illumination, and zero/offset meterage.

Configure Preferences

Set language and date/time; establish file formats and naming conventions; adjust camera parameters; choose interface theme and power-saving scheme; update firmware



INDUSTRY STANDARD REPORTING SOFTWARE

ProPIPE Report was designed and developed by Mini-Cam's in-house team of software engineers. It enables users to create professionally presented, detailed reports while on site. Quick and easy-to-use, ProPIPE Report streamlines pipeline inspection diagnostics, making your business ultra efficient, reducing your

costs and eliminating those long hours in the office.



WinCan SOFTWARE

You can also export observation data seamlessly to WinCan software (sold separately) and benefit from; database capabilities • WRc3 and WRc4 compliance • GIS Integration • advanced technology modules • enhanced reporting • support for network installation and enterprise databases (Oracle, SQL).





C

SPECIFICATIONS - SOLOPro+

			SOLOPro+ Axial	SOLOPro+ Pan & Rotate	SOLOPro+ Duo
Σ	Video Format	PAL	✓	√	✓
H	Battery	6-hour Lithium-Ion	✓	√	√
SYSTEM	Charging	Mains power (100-240 Vac) or vehicle power (12 or 24 VDC) using supplied adaptors	1	✓	✓
	Display	8" TFT LCD (800 x 600 pixels) Sunlight readable	✓	√	√
CCU210	Keyboard	Full QWERTY* style membrane keyboard with arrow keys for navigation and separate joystick for camera control.	1	√	✓
\Box	Video Recording	MPEG4 (WinCan compatible)	✓	√	√
ညြ	Image Capture	JPEG (live or from recorded video)	✓	√	✓
œ	Text Overlay	16 page (selectable text and colours)	✓	√	√
Ш	Internal Memory	32 GB (expandable to 128 GB)	✓	√	✓
	External Media	SDHC and USB 2.0	✓	√	✓
ONTROLLER	Language Support	Multiple	✓	√	✓
	Connections	Power Reel	✓	√	✓
	Environmental Rating	IP54	✓	√	✓
ၓႃ	Weight		3 kg (6.6lb)kg	3 kg (6.6lb)	3 kg (6.6lb)
	Dimensions	(W x H x D) mm (W x H x D) inches	435 x 250 x 140 17.1 x 9.8 x 5.5	435 x 250 x 140 17.1 x 9.8 x 5.5	435 x 250 x 140 17.1 x 9.8 x 5.5
	Construction	Welded Steel	✓	√	√
	Finish	Powder Coated	√	✓	✓
	Distance Counter Units	Feet, Metres	✓	✓	√
REEL	Controls	Friction Brake	✓	✓	√
<u>~</u>	Weight	40m/60m/100m	40m 15kg (33lb)	• 60m 20kg (44lb) • 1	00m 30kg (66lb)
	Dimensions	40m (130') / 60m (200') / 100m (330') (L x W x H) mm (L x W x H) inches	40m (130') 530 x 365 x 690 20.8 x 14.3 x 27.1	60m (200') 690 x 370 x 890 27.1 x 14.5 x 35	100m (330') 790 x 370 x 960 31.1 x 14.5 x 37.7
	Imager	1/4" colour CCD with DSP (Digital Signal Processor)	/	-	/
	Effective Pixels	512 x 582	√	-	√
	Resolution	470 HTVL	√	-	✓
⋖	Sensitivity	< 1.0 lux	✓	-	√
AXIA	Aperture / Field of View	F2.5 / 75°	√	-	✓
	Image Orientation	Auto-levelling	√	-	√
CAM025	Size	41mm (1.16") diameter	✓	-	√
8	Illumination System	4 LED	√	-	✓
Σ	Illumination Intensity	Adjustable (to 12.5k lux at 150mm)	√	-	√
	Construction	Stainless Steel	√	-	✓
	Pipe Compatibility	50mm (2") and up	√	-	√
	Sonde	33 kHz / 512kHz / 640 kHz	√	-	√
	Pipe Adaptor Kit	3" / 4" /6" Skids	√	-	√

			SOLOPro+ Axial	SOLOPro+ Pan & Rotate	SOLOPro+ Duo
111	Imager	1/4" colour CCD with DSP	-	✓	√
Ë	Effective pixels	512 x 582	-	✓	✓
Ι≅	Resolution	470 HTVL	-	✓	✓
Ö	Sensitivity	< 1.0 Lux	-	√	√
l Œ	Aperture / field of view	F2.5 / 75°	-	✓	√
18	Image Orientation	Auto-levelling	-	✓	✓
CAM026 PAN & ROTATE	Size	41mm (1.16") dia	-	✓	√
a	Illumination System	6 LED	-	✓	✓
92	Illumination intensity	Adjustable (to 12.5K lux at 150mm)	-	✓	√
2	Construction	Aluminium / Stainless steel	-	✓	√
ĮΣ	Pipe compatibility	150mm (6") and up	-	√	√
5	Sonde	33 kHz / 512 kHz / 640 kHz	-	√	√
	Pipe adaptor kit	6" / 8 " Skids	-	✓	✓
SOFTWARE	ProPIPE Reporting WinCan Embedded		0	•	✓ ○
S	Reel-to-controller cable		/	/	/
ACCESSORIES	Vehicle power adaptor		/	/	1
Ö	Mains power adaptor		/	/	/
S	Memory	8 GB USB Drive / 8 GB SDHC card	/	/	/
	Accessory Case		/	/	√
A	Mini-Cam Lanyard		√	✓	√ ·
NS	Composite video input pigtail		0	0	0
PTIONS	Memory card upgrade		0	0	0
9	Roller skids	130mm / 180mm	0	0	0

⁻ Not applicable

 $[\]bigcirc$ optional

^{*}alternative languages available

Above: A – Self Levelling Axial Camera CAM025 B – Pan & Rotate Camera CAM026 C – Proteus Auxiliary Lights (Non Back Eye) ALN300 D – Proteus Auxiliary Lights (Reverse Camera) ALB300 E – Axial Camera CAM027

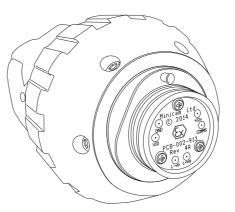
CAMERAS & AUXILIARY LIGHTS

PRECISION CAMERAS FOR OPTICAL EXCELLENCE

Designed and developed in house, Mini-Cam's expanding range of high quality cameras includes our trusted Self Levelling Axial camera for use with the SOLOPro+ system, and the Pan & Rotate with 360° continuous rotation and 135° +/- pan for use with both Proteus and SOLOPro+ systems.

Featuring high powered ultra-bright LED lighting and motorised focus our Auxiliary Lights provide optimum illumination for better clarity of images.

Highest quality components are sourced from around the world and our skilled technicians assemble and rigorously test the cameras and lights at our UK production facility. Built for longevity the cameras are rugged, with robust and precise connectors, and engineered to perform with excellent optical qualities.





NEW

PAN & ROTATE ZOOM CAMERA CAM028

The latest addition to the MIni-Cam range of cameras is the Pan & Rotate Zoom Camera (CAM028). Designed and manufactured to our enviable standards, the big-brother to our smaller Pan & Rotate (CAM026) this larger, rugged built camera features our signature clusters of 3 powerful, ultra-bright LEDs for maximum illumination, and dual lasers for diameter and defect measurement.

Shudder-free horizontal and vertical viewing is smooth and easy with the pan and tilt function and full 360° rotation, and our unique quick install connector makes getting ready for inspection as easy as twist-and-lock.





A HIGHLY FLEXIBLE MODULAR EXPANDABLE SYSTEM MASSIVE CABABILITIES SKILLFULLY MINIATURISED CUTTING EDGE INNOVATION MADE AFFORDABLE BUILT TO WORK AGAIN AND AGAIN IN THE HARDEST PLACES

PROTEUS SYSTEMS

FUTURE-PROOF AND EXPANDABLE THE PROFESSIONAL PIPELINE INSPECTION SOLUTION

With our experience of innovating solutions for the Pipeline Inspection Industry extending back over 20 years, we have created our most advanced, most capable, most feature-rich, and most expandable system.

Proteus has been designed to meet your needs in the real world: a system which is highly affordable, reliable, fully supported by experienced engineers, our "Here to Help™" video built-in support, highly expandable and - most importantly - future proof.

All our Proteus crawlers also feature CAN bus technology, allowing communication directly between each piece of attached equipment, and can relay control and status information such as activity, speed, pressure, inclination and temperature.

Designed and developed in-house, Mini-Cam's Proteus crawlers are part of an entry-level modular system for the pipeline inspection market, and can be installed as part of our Custom Van Fit-Out service (UK only see page 42), or be fully portable with the Proteus Storage Trolley (see page 32) and Battery components, giving up to 5 hours of inspection in a highly compact solution.

CRP150 CRP300 CRP300 The Beast (with Balloon Wheels)

A - Proteus Crawler CRP300 **B – Portable Storage Trolley** *PTP01* (Equipment shown sold separately) - Manhole Top Roller TRP01

PROTEUS FEATURES

INNOVATION THAT EXCELS



MANUAL ELEVATOR
The in-built elevator device
allows for quick and easy
centring of the camera in
pipe sizes up to 600mm.



OPTIONAL CAMERAS
Choose from Axial camera
(CAM025) or Pan & Rotate
(CAM026) with full 360°
rotation and Pan 135° +/-



AUXILIARY BACKEYE
The auxiliary light features a colour rear view camera to aid crawler reversing.



CONNECTOR

Our robust, heavy duty lock system requires no tools to connect or dis-connect.



WHEELS
4 different size wheel
options allow the crawler
to be centred in pipe sizes
from 150mm to 600mm.



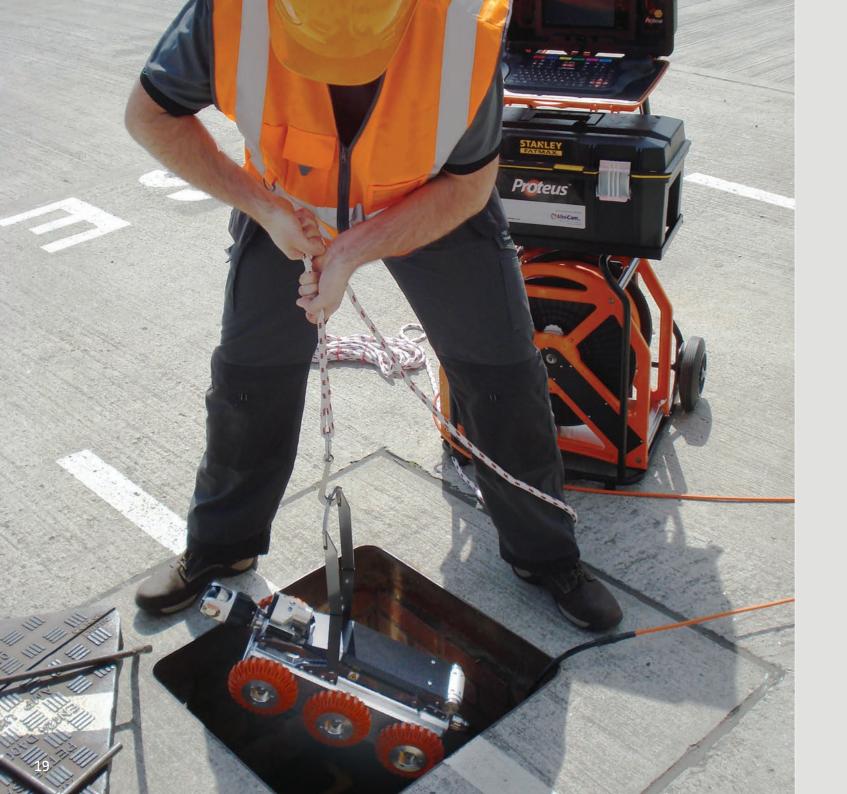
INCLINATION SENSOR
The lateral axis detects
the crawler roll angle. The
longitudinal axis determines
pipe inclination and can be
recorded in the survey.



IN-BUILT LOWERING DEVICE For fast and easy deployment and retrieval.



WHEEL LOCK
Designed and developed
exclusively by Mini-Cam,
our patent pending wheel
lock device makes changing
wheels quick and easy.



THE BEAST

Proteus™

ENGINEERED TO MAKE EASY WORK OUT OF CHALLENGING ENVIRONMENTS

The Proteus CRP300 is a beast of a crawler, substantially solid enough to provide unparalleled inspection possibilities in larger diameter pipes with high flow rates. "The Beast" was made for challenges and makes easy work of some of the more difficult environments, and yet gives even more benefits as part of the wider Proteus system.

It has all the features and functionality of its smaller, more compact partner — the CRP150 — and the same professional-grade quality, reliability and accuracy our customers expect from a Proteus crawler.

The Proteus CRP300 features as standard: an electronic clutch, motorised height adjustment, built-in multi-frequency SONDE, LED auxiliary lights and variable wheel size options using our unique patent pending quick release locking system.





PROTEUS ATEX CRAWLER

UNCOMPROMISING PERFORMANCE AND SAFETY







The 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. With ATEX approval these crawlers make working in ZONE 2 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. They have all the features, functionality and agility of the CRP150 & CRP300 crawlers with the same professional-grade quality, reliability and accuracy our customers expect from a Proteus crawler.







SPECIFICATIONS - PROTEUS

		CRP150	CRP300	
Pipe Diameter	mm	150 - 600	300 - 1000	
r ipe biameter	inches	6 - 24	12 - 40	
Weight		9.25 kg (20.3lb)	32 kg (66lb)	
Pressure Depth Rating		1 bar (14.50psi)	1 bar (14.50psi)	
Built-in Elevator		Manual	Motorised	
Quick Change Wheel Lock		✓	√	
Optional Large Wheels		4 size options	3 size options	
Multi-Frequency Sonde Transmitter		✓	√	
Inclination Sensor		√	√	
Heavy Duty Connector		√	√	
Dimensions	L x W x H mm L x W x H inches	320 x 120 x 100 12.5 x 5 x 4	500 x 220 x 170 19 ¹¹ / ₁₆ x 8 ²¹ / ₃₂ x 6 ¹¹	
Operating System	Linux	√	/	
Screen	XGA (1024 x 768 pixels) Daylight Viewable			
Interfaces	Ethernet, RS232, USB 2.0		✓	
Internal Storage	Internal Solid State	/		
External Storage	2 x USB 2.0 /SDHC	•		
File Format	MPEG-4 / JPEG Stills			
Weight	5.5 kg (12.12lb)			
Dimensions	L x W x H mm L x W x H inches	430 x 280 x 150 16.9 x 11 x 6	430 x 280 x 150 16.9 x 11 x 6	
Standard	PAL			
Pressure Depth Rating	1 bar (14.50psi)			
Power consumption	6W	,		
Weight	0.25 kg (0.55lb)	√	/	
Dimensions	52 x 52mm (OD) 2.04 x 2.04 inches (OD)			
Standard	PAL			
Pressure Depth Rating	1 bar (14.50psi)			
Power consumption	6W			
Weight	0.85 kg (1.87lb)	√	✓	
	120 x 73mm (OD)			
Dimensions	4.7 x 2.8 inches (OD)			
Standard	PAL			
Pressure Depth Rating	1 bar (14.50psi)			
Power consumption	6W	1	_/	
Weight	0.32 kg (0.7lb)	•	V	
Dimensions (L x W x H)	84 x 68 x 50mm (OD) 3.3 x 2.6 x 1.9 inches			











Manual Cable Reel RMP300 / RMP200 RMP100



Motorised Cable Reel RAP300 / RAP200



CRP150 150mm Crawler



CRP300 300mm Crawler









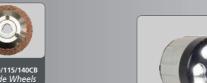


CAM027 Axial Camera

CAM028 Pan & Rotate Zoom







QRW90/115/140CB Carbide Wheels

QRW90 90mm Wheels

QRW115 115mm Wheels

0



QRW90/115/140HG High-Grip Wheels





















InPipe Innovation PFI5 AMX www.minicam.co.uk

COMPATIBLE COILER

Push rod coiler CCP60R (Ready) with removable self levelling camera head. Designed to plug directly into the Proteus CCU. Also available as CCP60D (Duo) allowing the Pan & Rotate camera (CAM026) supplied with the Proteus crawler to be attached. Robust construction with powder coated finish.



Above: A – Compatible Coiler with Pan & Rotate Camera CCP60/CAM026 B – Compatible Coiler with Axial Camera CCP60R/CAM025



MANUAL CABLE REELS

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 inspection cable.

Smooth pay-out and re-winding is performance enhanced by the cable layering mechanisim 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 200m and large 300m reels. The small and mid-size reels can be fitted to our Portable Storage Trolley (PTP01) shown opposite and on page 32, and the large reel is ideal for being installed as part of our Custom Van Fit-Out – see page 42.





SPECIFICATIONS

	Product ID:	RMP100	RMP200	RMP300
₽	Dimensions (Lx W X H)	530 x 220 x 520mm	530 x 280 x 520mm	530 x 400 x 520mm
Σ	Weight	18kg (40lb)	27kg (60lb)	37kg (82lb)
ď	Cable Length	100metres	200metres	300metres
	Environmental Protection	Splash Proof	Splash Proof	Splash Proof

Left: A – Control Unit CCU210 B – Portable Storage Trolley PTP01 C – Manual Cable Reel 200metre RMP200 D – Manhole Top Roller TRP01



Above: Motorised Cable Reel 300metre RAP300

MOTORISED CABLE REEL

EASY ONE-PERSON OPERATION IN REMOTE LOCATIONS

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 CCU.



The reels are available in 2 sizes – Large 300m and Small 200m. The 200m reel has secure fixing points for fitting to our Portable Storage Trolley (PTP01) see page 32. Both reels are ideal for being installed as part of our Custom Van Fit-Out – see page 42.









SPECIFICATIONS

	Product ID:	RAP300	RAP200
	Dimensions (Lx W X H)	530 x 440 x 520mm	530 x 320 x 520mm
C C	Weight	32.5kg (60lb)	42.5kg (40lb)
M	Cable Length	300metres	200metres
	Power Supply	24v	24v
	IP Rating	IP54	IP54

- A Emergency Stop Button
- B Cable Self Layering Mechanism
- C Waterproof Connector
- D Status Indicator

PROTEUS POWER

PORTABLE POWER... WHERE WILL IT TAKE YOU!

No need to rely on vehicle or mains power. Mini-Cam's unique Proteus Power Pack enables pipeline inspections in the most remote locations with 5 hours inspection time.

The rugged pack is quick and easy to connect. Output short circuit protected, the device features LED Charge status indication, LED battery fault indication, Proteus battery state indication and Proteus auto power down on low battery.



ProteusPower

31



SPECIFICATIONS

덩	Product ID:	BPP01
9	Dimensions (L x W x H)	280 x 100 x 120mm (11 x 3.9 x 4.7in)
<u> </u>	Weight	4kg (8.80lb)

Charge Status Indicator



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. Simply wheel the unit to your location, connect a camera and crawler and you're up and running in minutes, and with the added convenience of Mini-Cam's unique Proteus Power Pack (see opposite page), 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.

Designed with simplicity in mind, the trolley incorporates Control Unit *CCU208*, Manual Cable Reel *RMP200* or *RMP100*, Battery Pack *BPP01* and Accessory Case making the whole Proteus system highly portable and suitable for one-man operation.

Available with a choice of cable reel sizes: 200metre (RMP200) or 100metre (RMP100)

SPECIFICATIONS

덩	Product ID:	PTP01
鱼	Dimensions (W x H x D)	65 x 115 x 74.5cm (25.5 x 45.2 x 29.7in)
۵	Weight (unladen)	09.75kg (21.5lb)



Above: **Portable Storage Trolley** PTP01 Equipment shown on trolley not included with PTP01

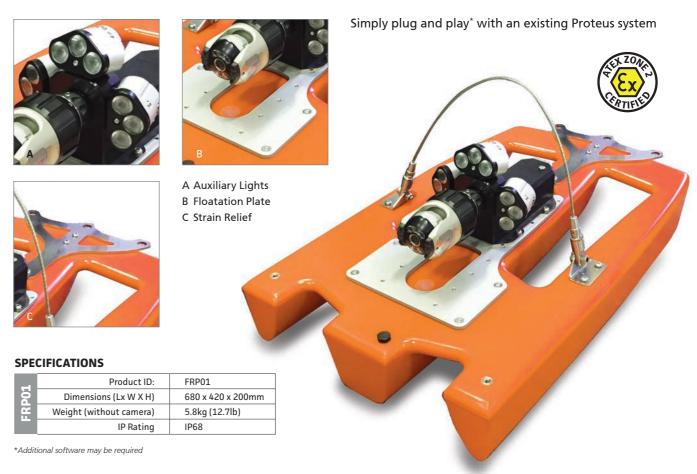


FLOATATION RAFT

PIPE INSPECTION IN FLOWING WATER JUST GOT EASIER!

Eliminate the need for man-entry. The floatation raft features three extremely powerful angled auxiliary LED ultra-bright light modules to provide enough light 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.

Designed and manufactured in-house to exacting standards, the tough polyethylene construction of the raft body is impact resistant and designed to withstand challenging inspections. An in-built lowering loop makes for quick and easy deployment and retrivial, and the factory tested floatation plate ensures the device is perfectly balanced to eliminate rolling.



PROLASER PROFILING

PROLASER PROVIDES **ACCURATE ANALYSIS** OF THE TRUE PIPE CONDITION PRIOR TO AND AFTER REHABILITATION

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.

A laser scan of a pipe is a valuable addition to any CCTV

inspection. It assists tremendously in classification of the pipe observations. WinCan Laserscan software generates the report fully automatically, including diameter, ovality, capacity and also provide XYZ-Data.

ProLaser

KEY FEATURES

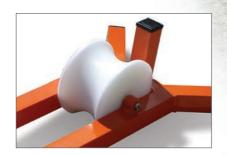
- For use in pipe sizes 100mm to 450mm
- Fully integrates to WINCAN LaserScan module
- Ideal for measuring real pipe diameters continuously along the length of the pipe
- Verification of structural integrity of network, ovality and deep corrosion
- Fast cross-sectional area calculations for determining flow reduction
- Deformation measured as an out-of-circle
- Erosion loss of pipe wall can easily be ascertained
- Quantifies defects, holes, or other abnormalities
- XYZ-Data for import into CAD software

DATA ANALYSIS & DELIVERY

The Mini-Cam Laser profiler has been designed to provide accurate and repeatable pipe geometry for many pipeline conditions. Simply attach the device to your camera and WinCan will do the rest! All results are automatically calculated and can be delivered via WinCan.

MANHOLE TOP ROLLER

FOR SMOOTH GUIDING OF INSPECTION CABLE



Reduces wear by preventing kinks and chaffing to cables and ropes, and assists in the smooth guiding of the inspection cable during your survey. Fully adjustable to most manhole widths

PRODUCT DETAILS

Description	Product Code
Manhole Top Roller	TRP01

CABLE GUIDE PULLEY

FOR SMOOTH GUIDING OF INSPECTION CABLE



Reduces wear by preventing kinks and chaffing, and assists in the smooth guiding of the inspection cable during your survey. Comes complete with 12metres of rope and

PRODUCT DETAILS

Description	Product Code
Cable Guide Pulley	CGP01





PRODUCT DETAILS

	Description	Product Code
Α	180mm Roller Skid for CAM023/25	ASS-002-009
В	180mm Roller Skid for CAM026	ASS-001-955
С	130mm Roller Skid for CAM026	ASS-002-160
D	130mm Roller Skid for CAM023/25	ASS-002-008

ROLLER & CENTERING SKIDS

INCREASE THE EFFECTIVENESS AND LIFESPAN OF YOUR PIPELINE INSPECTION SYSTEM

Use Mini-Cam Roller Skids to increase the effectiveness and lifespan of your pipeline inspection system. Manufactured from high quality materials. No tools or manual adjustments are required, simply fit the skid and the three pivoting arms with specially shaped nylon wheels adjust to fit the required pipe diameter keeping the camera head centered in the pipeline at all times.

The roller skids expand the system for use in 15cm to 45cm (6"-18") pipelines, this enables you to use

your push camera inspection system in pipelines that would otherwise require a crawler system. The roller skids allow inspection cameras to negotiate multiple corners and bends and increase the depth range significantly.

Available in 2 sizes to fit Self Levelling Axial Camera (CAM025) and the Pan & Rotate Camera (CAM026). Manufactured from stainless steel and ABS plastic the device is sturdy, rugged and corrosion resistant to withstand the punishment of daily field work.



Optimize your view in lines 75mm and larger using the adaptor kit with three centering skids (shown right) supplied with your SOLOPro+ system.





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 carry case. Replacement cylinders can be purchased separately.

> Product Code: Standard CO₂ Kit - PKP01 ATEX Nitrogen Kit - PKPO2EX





LATERAL PIN KIT

A useful addition to the SOLOPro+ pipeline inspection system. Used exclusively with the Pan & Rotate camera (CAM026), simply attach the pin to allow the inspection of incoming lateral pipe. The pin adjusts the direction and guides the camera smoothly along the pipe. The kit comes with three sizes of pin small 150mm (6in), medium 225mm (9in) large 300mm (12in), fixings and full instructions.

Product Code: ASS-001-968

ALL TERRAIN WHEELS

The All-Terrain Wheels attachment provides better stability for the user when rolling a coiler through rocks, grass, woodland, mud and pavement. Sturdy construction, portable and easy-to-store. Quick and easy to attach and remove, no tools required.

Product Code: SPP-ATA

Please Note: The attachment is not intended for use on stairs or kerbs.



ACCESSORIES

ENHANCE YOUR INSPECTION SYSTEM WITH GENUINE MINI-CAM ACCESSORIES









CARBIDE FOR

Product	Description	Product Code	Dimensions W x H x D	Length	Weight
A 50 metre Extension Reel	Connects equipment to cable reel	ERP50	315 x 360 x 210mm	50 metres	5.6 kg (12.3lb)
B 30 metre Extension Reel	Connects equipment to cable reel	ERP30	315 x 360 x 210mm	30 metres	3.8 kg (8.3lb)
C Van Fit Box	Connects cable reel to CCU in vehicle	VBP05	120 x 100 x 35mm	5 metres	-
D Link Cable	Durable cable to connect CCU to cable reel	LCP05	-	5 metres	-

CRAWLER WHEELS

Mini-Cam's unique Patent Pending wheel lock device makes changing wheels, quick and easy.





	Product	Fit CRP150	Fit CRP300	Product Code
Ε	90mm Wheel	√	-	QRW90
F	115mm Wheel	/	-	QRW115
G	140mm Wheel	√	√	QRW140 (/300)
Н	140mm Extra Large Wheel	√	√	QRW140XL
1	250mm Wheel	-	√	QRW250
J	250mm Extra Large Wheel	-	/	QRW250XL

	Product	Fit CRP150	Fit CRP300	Product Code
K	140mm Carbide Wheel	√	-	QRW140CB
L	115mm Carbide Wheel	/	-	QRW115CB
М	90mm Carbide Wheel	✓	√	QRW90CB
N	90mm High Grip Wheel	√	-	QRW90HG
0	115mm High Grip Wheel	/	-	QRW115HG
Р	140mm High Grip Wheel	√	√	QRW140HG

Product	Fit CRP150	Fit CRP300	Product Code
90mm Wheel	√	-	QRW90
115mm Wheel	/	-	QRW115
140mm Wheel	√	√	QRW140 (/300)
140mm Extra Large Wheel	√	√	QRW140XL
250mm Wheel	-	√	QRW250
250mm Extra Large Wheel	-	/	QRW250XL
	90mm Wheel 115mm Wheel 140mm Wheel 140mm Extra Large Wheel 250mm Wheel	90mm Wheel 115mm Wheel 40mm Wheel 40mm Extra Large Wheel 250mm Wheel -	90mm Wheel

0000000000 Above: The rear workspace is designed for safe and secure storage. Compartments provide storage for coiler, accessories and ancillary equipment. Right: the crawler compartment features sturdy extending platform shelves to accomodate both CRP150 and CRP300 crawlers.

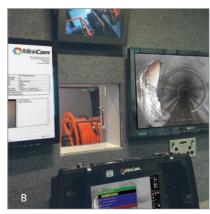
CUSTOM VAN FIT-OUTS

YOUR COMPLETE MOBILE BUSINESS FULLY EQUIPPED FOR PROFESSIONAL PIPELINE INSPECTION

Due to continual expansion our van-fit department has been re-located to a new, larger, dedicated van-fit workshop with multi-vehicle capacity. Our skilled installation technicians and electricians will take your vehicle and transform it into a fully equipped mobile pipeline inspection HQ – ready for work!

Strong, yet lightweight quality materials are used throughout the installation. The vehicle is partitioned into a studio area where inspections are controlled from, and a rear workspace from where the inspection equipment is deployed. Water wash down systems keep the equipment and work area clean. The in-built inverter battery power enables silent system use in sensitive situations - such as night-time and weekend work. Our best selling regular fit-out comes complete with a host of features tailored to the your business needs, enabling cost effective, efficient and professional pipeline inspections with instant on-site reporting. Customers can also upgrade by choosing from our selection of options (see next page). We also carry out upgrades to older van-fits that require new equipment or the latest technology.













- A Studio area
- B Monitors and viewing window
- C LED strobe lights
- D Hot and Cold Handiwash
- E Deb hygienic hand cleansing system
- F Paper towel dispenser

SPECIFICATIONS - CUSTOM VAN FIT-OUTS

		REGULAR FIT-OUT
	Desktop or workbench with lockable drawers	/
	Control Unit and PC housings	1
	LCD TFT anti-glare monitors 15" to 21"	/
	Concealed wiring	/
	Seating for 2 operators	√
STUDIO	Battery status and charging controls	√
5	12v low current lighting	✓
	Intercom system	✓
01	Studio heating with programmable timer	✓
	Storage for accessories, cones, signs (items supplied separately)	✓
	Pull-out shelf for notepad	0
	Printer Shelf	0
	Chemical toilet	0
_	Constitution and the state of the stands	
<u>⊼</u> —	Special generator powered by the main engine of the truck	V
M —	Sound absorbed fuel generators mounted in the back of the vehicle	V
ENERGY	Gel Batteries for the stand alone usage of the trucks	V
<u>-</u>	Combinations of different power supplies	V
	Protection for all electrical equipment	✓
	Work areas coated with impact resistant washable surfaces	✓
ᆼ	Rack construction for cable reel	✓
WORKSPACE	Heavyweight lockable slider unit for large crawlers	√
S	35 litre water tank with pump	✓
X	LCD TFT colour screen for live picture viewing	✓
8	Intercom system	✓
Ž	Tripod storage area	0
	Rear workspace heating	0
	Amazana alaka a a projeti a ara ali da ara	
~	Armour plate security on all doors LED roof beacons	0
\overline{o}		0
<u>~</u>	Reversing camera with cab monitor	0
四一	Air compressor	0
EXTERIOR	Amber LED strobe lighting to front and rear	0
ш	Towbar	0
	Rear access step	0
	Switches between operation tv system, add-ons and back of vehicle	0
	External power supply with CEE socket	0
	Solar Panels on the roof	0

Extra 12v sockets

AFTER SALES SUPPORT

WE ARE RIGHT BEHIND YOU ALL OF THE WAY!



At Mini-Cam we pride ourselves on our commitment to going the extra mile with our customer service and after sales support. Full telephone support for sales and administration enquiries is available from 8am until 5pm Monday to Friday.

Systems 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.

Mini-Cam's reputation for service and repair is unrivalled, and we always aim for a rapid turnaround to keep downtime for your business to an absolute minimum.

PARTS E-SHOP

QUICK, EASY ONLINE ORDERING AND WORLDWIDE DELIVERY*

Appointed Mini-Cam distributors are given access to the online parts shop which has the full range of genuine Mini-Cam spares and accessories, all available to order online with same day despatch if ordered before 3pm. The e-shop stocks parts for all Mini-Cam systems and equipment.

www.minicam.co.uk



O Denotes optional

^{*}Terms and conditions apply - see website for details

SERVICE SUPPORT

FOR JUST WHEN YOU NEED US MOST

Mini-Cam's enviable reputation for efficient, quality service is now mobile nationwide*.

Our dedicated, highly skilled service technicians are available to offer routine maintenance and emergency repairs both on-site and at your depot.

Mini-Cam's Service Support vehicle is equipped and stocked with a range of replacement parts and equipment that will cover almost all eventualities.

Mini-Cam customers that need an urgent repair, can take advantage of this our extended service.

- Competitive Pricing
- Rapid Service Turn-Around
- Loan equipment provided** whilst yours is repaired on-site
- Minimize downtime
- Replacement parts readily available





Service Support Line

For further information and to request a Service Support visit please contact: Glenn Guest - Service Manager Office: 01942 270524 8am – 5pm Monday to Friday Email: servicevan@minicam.co.uk

*Service Support coverage is Mainland UK only and does not include Scottish Highlands, Scottish Islands, Isle of Wight, Isle of Man, Dublin, Eire, Channel Islands. **Subject to availability.

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For more InPipe Innovation visit minicam.co.uk

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