

P340 flexiprobe™ system

Pipeline inspection technology – Advanced performance. Class leading flexibility.





Portable controller

Light-weight controller with built-in rechargeable battery, weatherproof and easy to use.



Ultra-tough high resolution cameras

Stainless steel construction in a compact design. 3 choices: 1" (25mm) for small pipes, and self-levelling 1 1/4" and 2" (32mm and 50mm) for larger diameter applications. High resolution sensors and ultra bright white LEDs ensure a clear picture, even when submerged in water up to 330' (100m) deep.



P340 flexiprobe pushrod inspection systems deliver high quality pipeline surveys in a flexible and durable package

At the heart of the P340 flexiprobe system is the weatherproof P340+ flexiprobe controller, which displays color footage in digital quality on an ultra-bright 8" TFT screen. USB flash drive and Compact Flash storage options along with PC connectivity provide flexible data storage and comprehensive reporting capabilities.

The P340+ controller features an internal lithium-ion battery, providing convenient power for up to a full day's typical usage, removing the inconvenience and set-up time of an external power lead.

P340 flexiprobe systems have been designed to deliver controllable and high quality video inspection for any situation, from residential work and commercial use through to specialist plant and municipal applications.

A choice of 3 sealed cameras can be mounted on a range of rods: from the ultra-flexible 100' (30m) Plumbers reel, designed for transiting tight bends, to the 500' (150m) P343 reel designed to push for long distances. A range of compatible sondes, skids, brushes and accessories completes the package.

Digital recordings

The fully digital controller system architecture provides precise control over inspections and recordings. Digital rotate, pan and zoom functions let you focus in on problem areas during live or recorded inspections.

Video and still images are recorded directly onto USB memory sticks or Compact Flash cards for easy management and transfer.

With no moving parts your valuable data is protected against shocks and impacts.

One-touch recording and still picture capture

A single key press on the ruggedized keypad records high quality, full digital video, which is automatically time and date stamped and logged against the job that you are working on. Similarly, still pictures can be captured, inspected and filed at any point during your inspection with a single key press.



An 8Gb storage device is capable of storing up to 7 hours of high quality video.

To enhance the inspection, audio can be added to recordings via the optional microphone headset, and text commentary incorporated using the splashproof keyboard. To add flexibility, up to 20 pages of text can be stored into the controller module.

Ruggedized construction

Despite weighing less than 13.5lbs (6.2kg), the P340+ controller is designed to operate reliably in harsh weather conditions. The tough polypropylene casing is designed to resist scuffs and impacts, while the comprehensive sealing gives an IP53 rating when operating – and IP55 with the covers closed, minimizing the risk of damage from debris or water ingress.

USB flash drives

The P340 command module supports the popular USB flash drive: simply plug your own or your customer's high speed memory stick into the USB slot and start recording and storing inspection videos, photos and observations directly into it.

USB memory sticks can be connected to any PC for direct access to your digital data without the need of an external card reader or the P340 controller.

Outstanding picture quality

The P340 flexiprobe system offers three cameras, 1" (25mm), 1¼" (32mm) and 2" (50mm), equipped with high resolution sensors and the latest generation ultra-bright white LEDs, which combine to deliver a crisp, clear picture in most pipe conditions.

The P340 self-levelling cameras feature tough sapphire lens windows, and automatically position the bottom of the pipe at the base of the picture, helping operators to identify issues and orientate their position.

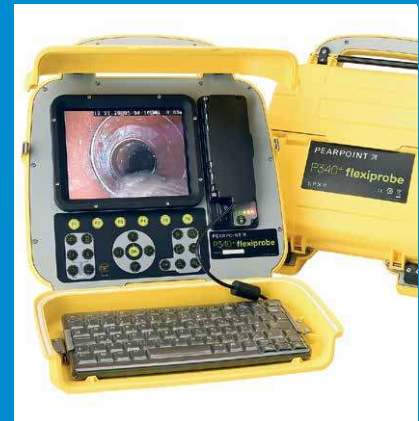
The P340 1" (25mm) camera features a tough polycarbonate cover to protect the LEDs all in a small, compact package, specifically designed to help navigating through bends.

Packaged in tough stainless steel cases, the P340 system cameras are designed to work as hard as you do.

Plumbers reel

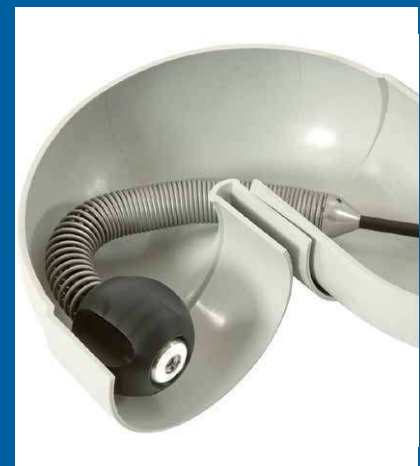
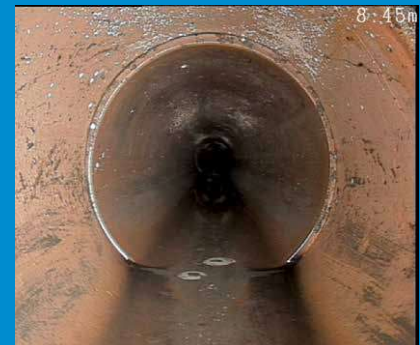
Where extra flexibility is needed, the P341 Plumbers reel coupled with the compact 1" (25mm) camera offers outstanding performance around tight bends and traps, negotiating most traps (from 2"/50mm) and bends (from 1¼"/32mm). The Plumbers system is the ideal tool for your small pipe plumbing needs.

The flexible rod termination has a built-in transmitter sonde (512Hz or 640Hz) which allows you to pinpoint its location and depth without compromising maneuverability around tight corners.



Digital video

Digital zoom and pan to focus in on problem areas. Rotate images to make them easier to interpret. Pictures and video are stored in portable USB or Compact Flash memory.



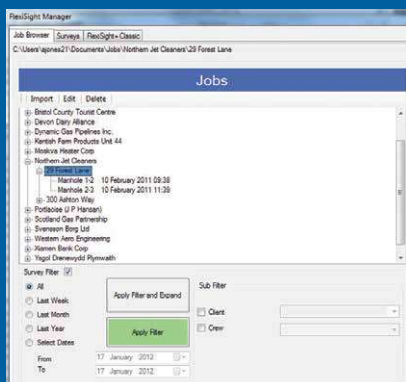


A range of rods to suit your application

From 100' (30m) for residential and small commercial plumbing use, right up to 500' (150m) for specialist applications.

Integrated report writer

Quickly enter observations on site and export Sewer.Dat report files without needing to connect up – then view and edit them at your convenience on a PC and produce detailed reports with pipe graphics.



Easy to use software interface

The P340+ controller software has been specifically developed to make the P340 flexiprobe system easy and intuitive to use. Setting up and customizing your controller is very simple thanks to the color based list menus, which clearly define all the options available.

Adding text to your survey is never more than one keyboard click away. Browse or edit up to 20 pages of text or automatically use them as titles at the beginning of your video recordings.

Organize work effectively

The P340+ controller quickly organizes your work in “Job” folders which are linked to the inspection you are carrying out, making the review and storage of videos, photos and observations straightforward.

Jobs can be created very quickly at the start of your first recording by entering a minimum set of information or by accessing the “Job Browser” menu and entering detailed information about your client, site and survey.

Jobs can be expanded by adding multiple surveys to the site you are inspecting or by adding different sites to the client you are working for.

Be more productive on-site

Use the comprehensive, built-in, P340 reporting system to quickly fill out report observations on-site without the need for extra equipment. Report templates are customizable to meet your own requirements.

Entering detailed observation, including grading and photos, could not be easier, thanks to the built-in WRC™, PACP or custom made defect code lists.

Produce a SEWER.DAT report file directly from your P340 controller.

Manage your data and produce reports

The FlexiSight™ Manager software is the ideal PC companion of the P340 controller. With this Windows® compatible software, you will be able to import, store and manage all your digital inspection data.

Use the “Job Browser” screen to quickly import and browse all your saved jobs.

Use the “Surveys” screen to review and edit videos, take snapshots, annotate photos and review, edit or create observations.

Produce comprehensive customizable reports, with your company logo, incorporating pipe graphics and color coded defect grading (requires Microsoft® Word 97 or higher).

Ultra-bright 8" TFT screen

Durable keypad for easy access to all key functions:

- One-touch still picture capture
- One-touch record
- One-touch digital functions

Splashproof keyboard for text entry

Easily transportable compact reel options

Waterproof stainless steel camera with ultra bright white LEDs

Compact self-levelling camera option

Video In/Out

Audio In/Out

USB flash drive socket

PC connection

Power socket

Internal battery power connector

Compact Flash card

Battery status indicator

Ultra-flexible Plumbers reel

Each P340 flexiprobe system comes complete with a universal easy-fit brush skid set, that allows the 1" (25mm) camera to be used in pipes up to 4" (100mm) diameter and the 2" (50mm) camera in pipes up to 6" (150mm) diameter. Brushes can be conveniently replaced in seconds. Additional standard equipment may vary due to regional variations.



P340 flexiprobe system specifications

P340+ Controller

Power requirements	P340+ controller input	12-24VDC, 40W
	External power supply (PSU) input	100-240VAC, 50-60Hz, 1.2A
	P340+ automotive battery charger input	10-30VDC, 4.0A
Battery capacity	14.8V, 6.6Ah (98Wh)	
Battery run-time	Up to 1 day's typical usage, 7hrs view only / 4hrs continuous recording*	
Display	8" Industrial TFT	
Storage	High speed Compact Flash Card or USB flash drive	
Connectivity	USB, Analog video in/out (PAL/NTSC), Analog audio in/out	
Environmental protection	P340+ controller	IP55 (covers closed) IP53 (covers open and socket panel closed)
	External PSU and charger	IP54 rated for indoor use
	Optional External PSU	IP67 for outdoor use
Temperature	Storage:	-4°F to 176°F / -20°C to +80°C
	Operating:	14°F to 122°F / -10°C to 50°C
	Charging:	14°F to 104°F / -10°C to 40°C
Dimensions	14" x 14" x 8" (360 x 360 x 200mm)	
Weight	13.5lbs/6.2kg	

*May vary according to ambient conditions, accessories attached, recording time and other factors

P340 flexiprobe systems include as standard:

- P340+ flexiprobe controller
- Choice of NTSC/PAL color camera and 512/640Hz flexisonde:
 - 1" (25mm) camera, skid ball, universal brush and skid kit and sonde.
 - 1 1/4" (32mm) self-levelling camera and skid
 - 2" (50mm) self-levelling camera, skid ball, universal brush and skid kit and 1.4" (35mm) sonde.
- Choice of pushrod reels:
 - 100' (30m) or 200' (60m) P341 Plumbers reel.
 - 115' (35m) P341 reel.
 - 200' (60m) or 400' (120m) P342 reels.
 - 500' (150m) P343 reel.
- Controller swivel mount (Optional for the P341 plumbers reel).
- FlexiSight™ Manager Windows® PC software.
- Compact Flash card.
- Splashproof keyboard, mains power supply and 12V automotive jackplug lead.
- 10-30V automotive charger and mains charger.

Rods and Reels	P341 Plumbers	P341 Mini	P342 Reels	P343 Reel
Dimensions	22.4" x 16.9" x 10.6" 570 x 430 x 269mm	22.4" x 16.9" x 10.6" 570 x 430 x 269mm	33.5" x 29.5" x 16.5" 850 x 750 x 420mm	32.0" x 46.0" x 18.7" 813 x 1168 x 475mm
Weight	21lbs/9.4 kg 25lbs/11.2kg	24lbs/11kg	40lbs/18.2 kg 55lbs/25kg	81.6lbs/37kg
Construction	Powder-coated tubular steel frame			
Rod	100'/30m 200'/60m	115'/35m	200'/60m 400'/120m	500'/150m

Cameras	1"/25mm camera	1 1/4"/32mm self-levelling camera	2"/50mm self-levelling camera
Dimensions	1" x 1.52" / 25.4 x 38.7mm	1.23" x 2.6" / 31.24 x 66mm	1.89" x 2.87" / 48 x 72.8mm
Weight	0.1lbs / 0.06kg	0.4lbs / 0.18kg	0.8lbs / 0.36kg
Construction	Stainless steel / polycarbonate	Stainless steel/sapphire glass / polycarbonate	
Power	1.8W	1.3W	3.8W
Environmental	IP68 to 330' (100m) / 11bar	IP68 to 230' (70m) / 7bar	IP68 to 330' (100m) / 11bar
Temperature	Storage: -4°F to 176°F / -20°C to +80°C Operating: 14°F to 122°F / -10°C to +50°C		
Focus	Manually adjustable	Fixed	Manually adjustable
Focal range	10mm to ∞	Fixed	10mm to ∞
Lighting	Ultra bright white LEDs		
LED luminance	≥ 75lm	≥ 150lm	≥ 208lm
Active pixels (HxV)	656 x 492 NTSC 768 x 576 PAL	640 x 480 (NTSC) 640 x 576 (PAL)	768 x 492 NTSC 765 x 582 PAL
Horizontal resolution	≥ 460TVL	≥ 420TVL	≥ 460TVL





Options

Sonde and locator combination

By combining your P340 flexiprobe system with a suitable locator, you can pinpoint the camera's location and depth, providing a valuable tool for repairs and tracing alike. The RD7100DL locators are capable of detecting 4 different sonde frequencies. Featuring Dynamic Overload Protection and Compass, specifically designed for the water industry, and capable of precisely locating a sonde even in electrically noisy areas.



Accessories that extend your capabilities

Tailor your system to your needs with a range of solid sondes, flexisondes, cable and pipe locators and flexis.

P350 flexitrax™ compatible

The P350 flexitrax controller is compatible with the full range of P340 flexiprobe cameras, reels, sondes and accessories providing unmatched modularity from the small 100' (30m) Plumbers system to the 1000' (305m) motorized P356 steerable crawler system.



Extended Modularity

All cameras, controllers, rods and accessories are fully interchangeable*, giving you the flexibility to expand your system at your pace.

*P341 Plumbers sonde not detachable.