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flexiprobe™ P540c

Portable video inspection system.

Comprehensive. Convenient. Connected.

SPX

Pearpoint's flexiprobe P540c

Welcome to a Connected World

The flexiprobe P540c system simplifies your operations by automatically creating a survey report, allowing you to concentrate on your inspection tasks.

Share your reports quickly and easily via email or the Dropbox file sharing service.*

flexiprobe P540c systems – easy to use, efficient to own

- Powerful controller provides a comprehensive and intuitive user interface, simple menus and dedicated function buttons.
- Incorporates reporting templates to comply with multiple standards to meet most needs:
  - Share MSCC3, 4 and 5-compliant reports as soon as you have completed your survey.
  - WinCan compatible option† – can be purchased with flexiprobe P540c, or later.
- Built-in rechargeable batteries provide up to 7.5 hours usage. Charge on the move for longer use time.
- Ruggedized case and IP55 rating provide reliability and usability most challenging environments.

Reliability where you need it

*WiFi access point required, such as mobile phone, tablet or dongle.

†May require a separate licence from WinCan.

Connectivity aiding productivity

- Create reports:
  - Basic [1]
  - MSCCx [2]
  - WinCan [3]

- Wi-Fi connection
- USB

- Email directly to client/manager or share to DropBox using wireless hotspot connection to phone

- Stream video to local device [3]

Notes:

1 Basic. Reports include your observations and remarks

2 MSCCx. Reports created using condition codes from WRc MSCC version 3, 4 or 5

3 Contact Pearpoint for details and availability

Simpler, Faster, Smarter

The flexiprobe P540c system is managed by the most powerful and intuitive Controller ever designed by Pearpoint. A quick boot-up, an intuitive user interface and a high definition 10.1" TFT display, the P540c lets you concentrate on the job in hand.

Time on site is time well spent

The P540c Controller features a high capacity internal Lithium-Ion battery, providing power for up to a full day's typical usage. Also on board is 128Gb of no-moving-parts memory, sufficient for over 90 hours of video recording.

Reports

An MSCC-compliant report will be ready to share as soon as your survey is completed, using the condition codes of your chosen standard. Or, for those surveys that don't require an MSSC-compliant report, flexiprobe P540c can do that for you too.

On-board WiFi connectivity allows you to use your communications device or dongle as a hotspot, letting you share your survey with your customer, manager or accounts department, creating productive time for you.

Video streaming

Share the flexiprobe P540c display with a compatible device such as your customer's phone or your colleague's tablet. [3]

Fast, intuitive inspection

Spend your time surveying, not computing

- Short boot-up time to get you inspecting, not waiting
- Menus in multiple languages
- Context-sensitive buttons on both sides of the display guide you through your survey – no complex menus to remember
- Dedicated buttons for frequently-used tasks, including “Record”, “Make an Observation” and “Count reset”
- Full QWERTY keyboard with IP55 ingress protection (regional layouts also available)

Reporting

Multiple standards: meeting both your and your customers’ requirements

- flexiprobe P540c offers a suite of customisable report options, and the WRc's MSCC3, 4 and 5 condition codes.
- Reports are exported as docx documents, which allow editing and customisation on a PC, and xml files are also available for MSCC5-compliant reports.
- Optional WinCan export license available, can be upgraded in the field*.
- Report templates and condition classification codes can be modified to create reports adhering to your own standards.
- On-board connectivity capabilities allow reports to be created and shared within seconds of completing your video inspection survey. Exporting to a USB stick, in any of the 3 available ports, is also available.

*Contact Pearpoint for details and availability

LEDs for WiFi and battery status

Find the battery charge state without turning P540c on

HD display for clear, sharp picture

USB port and Headphone socket cover

Convenient cable-tidy hooks

Connectivity: USB, HDMI, WiFi, Analog video in, Audio in and out

IP55, open and closed

IP68 stainless steel cameras with ultra-bright white LEDs

Ultra-flexible Plumbers rod

Compact self-levelling camera option

Each flexiprobe P540c system comes complete with a universal easy-fit 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. Skids can be replaced in seconds, with no tools required. Additional standard equipment may vary due to regional variations.

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Options

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.

Ultra-tough high resolution cameras

Stainless steel construction in a compact design. 3 choices: 1" (25mm) for small pipes, and self-levelling 1¼" 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.

Inspect pipes from 4"/100mm to 12"/300mm

Sonde and locator combination

Combine your P540c flexiprobe system with a suitable locator to pinpoint your camera's location and depth, providing a valuable tool for repairs and tracing alike. The RD5100S locator is capable of detecting 3 different sonde frequencies and is specifically designed for the water industry, and is capable of precisely locating a sonde even in electrically noisy areas.

flexitrax™ P550c compatible

The flexitrax P550c controller is compatible with the full range of flexiprobe P540c/P340 cameras, reels, sondes and accessories providing unmatched modularity from the small 100' (30m) Plumbers system to the 1000' (305m) motorized P356 steerable crawler system.

flexiprobe P540c systems include as standard:

- flexiprobe P540c controller.
- Choice of NTSC/PAL color camera and 512/640Hz flexisonde:
  - 1" (25mm) camera, skid ball, universal skid set and sonde.
  - 1¼" (32mm) self-levelling camera and skid.
  - 2" (50mm) self-levelling camera, skid ball, universal skid set and 1.4" (35mm) sonde.
- Choice of pushrod reels:
  - 100' (30m) or 200' (60m) P541 Plumbers reel.
  - 115' (35m) P541 reel.
  - 200' (60m) or 400' (120m) P542 reels.
  - 500' (150m) P543 reel.
- Controller swivel mount (Optional for the P541 plumbers reel).
- Mains power supply/charger, IP55 keyboard and Pearpoint tool bag.

Summary specifications

P540c Controller		
Power supply	Mains Input	100-240VAC, 50-60Hz, 1.7A
	DC Output	16V, 3.75A, 60W
Input power requirements		10-30V, 60W
Battery capacity	Internal Li-Ion Battery (4S2P)	14.68V, 6.4Ah (93.95Wh)
Battery run-time	Up to 1 day's typical usage, 7.5hrs view only/5hrs continuous recording*	
Battery level indication	5 LEDs in handle (user activated) and on-screen symbol	
Charging Status	2 LEDs	
WiFi Status	1 LED and on-screen symbol	
Display	10.1", 1280x800 transmissive HD color TFT	
Storage	Integral 128Gb and support of USB flash storage	
Recording formats	Video: H.264. Audio: MP3. File format: MP4	
Connectivity	USB 2.0 (x3), HDMI video out, Analog video in (PAL/NTSC), Headphones out, Microphone in, Rod/Camera connectivity and 802.11 b/g/n WiFi	
Environmental Protection	P540c controller Power supply/charger	IP55 IP54 rated for indoor use
Temperature	Storage Operating Charging	-4°F to 176°F/-20°C to +80°C 14°F to 122°F/-10°C to +50°C 32°F to 104°F/0°C to +40°C
Fuse rating	5A	
Dimensions	17.5 x 15.2 x 6.1"/445 x 385 x 155mm	
Weight	16lb/7.25kg	
Construction	High impact ABS and powder-coated, zinc-plated mild steel	

*May vary depending on power management settings chosen, ambient conditions, accessories attached, recording time and other factors

Rods and Reels	**P541 Plumbers**	**P541 Mini**	**P542 Reels**	**P543 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 ¼"/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

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flexitrax™ P550c

Comprehensive. Convenient. Connected.

Portable video inspection for drainage, water and plumbing networks

SPX®

flexitrax **P550c**

Portable, modular pipeline inspection – designed with you in mind

Inspect pipes faster to complete more surveys each day

- The intuitive interface is quick to set up and simple to operate.
- Dedicated function keys make it easy to use.
- Built-in rechargeable batteries lasting all day.

Stay connected

Reports are ready to share as soon as your survey is complete.

- WiFi connection for sending reports via DropBox or email.
- Advanced connectivity with USB, HDMI and ethernet, making it easy to view and export your data.
- Video streaming to nearby devices.

A suite of reporting formats

Expand your client base by offering a variety of tailored surveys through;

- MSCC3, 4 & 5 compliant reports.
- WinCan compatible files.
- Basic reports.

Customised solutions

- Modular by design, the flexitrax P550c system can be paired with a range of products and accessories.
- Our solution gives you flexibility when you need it, enabling you to survey pipes from 1¼"/32mm to 60"/1500mm.

Crawlers

The two crawlers enable you to center your camera across a wide range of pipe sizes.

P356 crawler
Center in pipes
from 6"/150mm
to 60"/1500mm

Auxiliary lighthead
for additional light in
large or dark pipes

P354 crawler
Center in pipes
from 4"/100mm
to 12"/305mm

flexitrax P550c controller

Alerts for WiFi and battery status

High resolution
12.1"/307mm screen

IP55 ingress protection open and closed

Regional keyboard layouts available

Dedicated buttons for shortcuts to commonly used functions

Convenient cable-tidy hooks

Connectivity: USB, HDMI, WiFi, ethernet, audio and analog video in

Fingertip control of drum/crawler/camera/light with joysticks and control buttons

Drums

Manual drum

If you need a more portable solution, the manual drum can help you reach access points beyond the range of your vehicle

PSU (power supply) for manual drum

Powered drum can be fitted with up to 1000'/305m of cable

Easier

Faster

Simpler

Easier. Faster. Simpler.

The flexitrax P550c is designed around simplicity of operation. Ready to use in 30 seconds from powering on, it requires minimal training to operate, letting you concentrate on pipe inspection.

A large 12.1"/307mm HD, daylight visible screen combined with full-size keyboard and dedicated function keys guide you through the survey process, making the system faster and easier to use.

Built in is a high capacity internal lithium-ion battery, providing power for up to a full day's typical usage, and 128Gb of solid state memory, sufficient for over 90 hours of video recording.

Tailored solutions

This portable and modular crawler system enables operators to customise the flexitrax P550c solution for the inspection of a vast range of pipes, in all locations.

The flexitrax P550c can be readily transported and easily wheeled onto site through our rugged, ergonomic design, allowing you to reach access points beyond the range of your vehicle.

Survey an extensive range of pipes

Survey pipes as small as 1 ¼"/32mm or as large as 60"/1500mm.

Comprehensive

Reporting

The flexitrax P550c has complete on-board reporting capabilities and connectivity, quickly delivering content-rich survey reports to you and your customers. Creating a comprehensive report is quick and easy;

Convenient

1 Choose the reporting template

Use customisable report templates for each occasion; including the Water Research Council's MSCC3, 4 and 5 condition codes and WinCan compatible file formats.

2 Complete the survey

Enter your survey details using a tactile, full-size keyboard. Dedicated and context-sensitive function buttons guide you through the survey process.

3 Distribute the report

Share reports, images and video as soon as your survey is complete via DropBox or email*. Alternatively you can export a report to a USB stick or stream videos to a nearby device.

(*WiFi access point required, such as mobile phone, tablet or dongle)

Connected

Accessories and Options

When building your flexitrax P550c solution, centering your camera in the middle of the pipe is key. Once the drum and crawler system have been chosen, enhance your pipeline inspection capabilities by incorporating our expert range of accessories to meet the demands of the various pipes you are working in.

Wheels

Select from a range of small, medium or large wheels and/or spacers to suit your pipe size and terrain.

Cameras

Choose from three camera models; Forward view only, Pan and Tilt or Pan and Tilt, with 10 x optical zoom.

Elevators

Both manual and powered elevators are available, for centered inspection up to 36"/900mm.

Other accessories are available.

Cradle

Combine the cradle and elevator together with the large crawler for centered inspection up to 60"/1500mm.

Pushrods

A choice of pushrod reels of varying length and flexibility can be connected to the flexitrax P550c system. Use a pushrod to survey pipes as small as 1¼"/32mm.

Locator

A sonde is integrated into each crawler, enabling you to use a suitable locator to pinpoint the crawler's location.

With three sonde frequencies, the RD5100™S can be used to trace the crawler whilst in use.

The flexitrax P550c crawler system is fully compatible with Pearpoint's flexiprobe™ P540, P340 and P350 range.

Specifications

flexitrax P550c	
Battery capacity	Internal Li-Ion Battery (4S2P) - 14.68V, 6.4Ah (93.95Wh)
Battery run-time	Up to one day's typical usage, 7.5hrs view only / 5hrs continuous recording*
Cameras	Forward View with 120 Lumen LEDs Pan / Tilt with 210 Lumen LEDs Pan, Tilt and 10 x optical Zoom with 420 Lumen LEDs
Connectivity	USB 2.0 (x3), HDMI video out, analog video in (PAL / NTSC), headphones out, microphone in, rod / camera / drum connectivity and 802.11 b/g/n WiFi
Construction	High impact ABS and powder-coated, zinc-plated mild steel
Controllers	flexitrax P550c command module with integrated joysticks to control the camera and crawler Optional pendant controller for deployment phase
Dimensions	17.5" x 15.2" x 6.1" / 445mm x 385mm x 155mm
Display	12.1" / 307mm, 1280 x 800 color LCD
Drums	Manual drum or powered drum, with cable length options from 500' to 1000' / 150m to 305m
Environmental Protection	flexitrax P550c controller: IP55 Power supply / charger: IP54 rated for indoor use
Input power requirements	10-30V, 60W
Power sources	Power from drum, external mains PSU or internal battery
Power supply	Mains input 100-240VAC, 50-60Hz, 1.7A DC output 16V, 3.75A, 60W
Recording formats	Video: H.264. Audio: MP3. File format: MP4
Report File Formats	Basic reports, MSCC3 & 4: docx MSCC5: docx or Xml WinCan: Xml Video: MP4 Image: JPEG
Storage	Integral 128Gb and support of USB flash storage
Temperature	Storage: 4°F to 176°F / -20°C to +80°C Operating: 14°F to 122°F / -10°C to +50°C Charging: 32°F to 104°F / 0°C to +40°C
Weight	16lb / 7.25 kg
Wheels	Small, medium and large solid rubber and large pneumatic for conventional / silted pipes Rasp wheels for smooth / relined pipes

*May vary depending on power management settings chosen, ambient conditions, accessories attached, recording time and other factors

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P374IS

Intrinsically Safe Color Video Inspection System

The Mini Flexiprobe system sets new standards by offering an intrinsically safe solution that allows successful inspection and reporting within hazardous environments

FM APPROVED

FEATURES/BENEFITS

- 1" (25mm) to 4" (100mm) pipe inspections
- 200 feet (61 Meters) of semi rigid rod
- Intrinsically safe camera for use in Class I, Div 1, Gas Groups ABCD, T6 Environments
- True portability, weighs only 46lbs (21kg) and can operate from a 12V DC external supply
- Composite video output/input allowing connection to a video recorder or external monitor
- Integrated high resolution 6.4" Color LCD allowing improved image recognition, retractable sun visor built in reducing the effects of sunlight on the screen
- QWERTY Keyboard for text annotation on site, with 9 pages of user defined text available, 9 programmable user defined fields enabling faster text generation
- A truly waterproof system for operation in most weather conditions, protected to Environmental spec IP55
- CMOS camera technology allowing increased operating time through low power consumption
- Maintenance free, white LED's for increased performance and reliability
- Integral electronic meterage counter that displays distance on screen in 0.1m increments which is accurate to +/- 1%

P374 TECHNICAL SPECIFICATIONS

CAMERA & LIGHTHEAD	
Diameter	0.94" (24mm)
Full Diameter Length	0.67" (17mm)
Total length	1.22" (31mm)
Material	300 Series Stainless Steel and Epoxy Resin Potted Lighthead
Focal Length	0.25" (6.35mm) to infinity, manually adjustable
Power consumption	100mA
Sensor Transfer Type	CMOS
Active Pixel Matrix	510 x 492
Horizontal resolution	360TVL per picture height
Sensitivity	3 lux
Viewing angle	44°
Voltage	21V max
Waterproofing	IP68 11Bar (160psi)

CONTROL UNIT & COILER	
Weight	46lbs (21kg)
Voltage	Auto Sensing 110V - 240V or 12V DC
Consumption Unit	3W
Waterproofing	IP55
Video output	Composite
Video input	Composite
Height	35.4" (900mm)
Width	23.6" (600mm)
Depth	12" (300mm)
Approvals	FCC compliant

12V DC Lead

Camera

3" Skids

4" Radial Skids

4" Axial Skids

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FM Class: 3600, 3610, 3810
P374 Camera: IS/I/1/ABCD/T6
Cage Assy. Coiler: AIS/I/1/ABCD

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