

# ROVION®

# CCTV INSPECTION SYSTEM

Australia & New Zealand's most popular CCTV pipe inspection system. From small pipes to large pipes ROVION® has you covered.



Available in ATEX zone 1

## SPECIFICATIONS

### RX95 Crawler



Drive	6-wheel-drive
Equipment	Steerable, location transmitter, roll and pitch sensor, pressure monitoring
Nominal pipe widths	DN 100 up to DN 300
Location transmission	512 Hz / 640 Hz (to be activated at choice, switch between frequencies)
Protection class	IP68 up to 10 m water depth
Dimensions (L x W x H)	274 x 86 x 75 mm
Weight	4.5 kg

### RX130 Crawler



Drive	6-wheel-drive
Equipment	Steerable, backeye camera, electrically controllable clutch, location transmitter, roll and pitch sensor, pressure monitoring
Nominal pipe widths	DN 150 up to DN 1000 (with carrier and elevator)
Location transmission	33 kHz / 512 Hz / 640 Hz (frequency must be determined at purchase)
Protection class	IP68 up to 10 m water depth
Dimensions (W x H x D)	110 x 90 x 310 mm
Weight	6 kg

### RX400 Crawler



Drive	4-wheel-drive
Equipment	Steerable, electr. operated 2-speed gearbox, electr. operated clutch, electr. adjustable elevator, interface for elevator extension, Automatic camera centering, location transmitter, roll and pitch sensor, monitoring of internal pressure and temperature, manually adjustable LED lamps, additional LED lamps for pipe bottom illumination, backeye camera
Nominal pipe widths	DN 400 up to DN 1300 (optionally up to DN 2000)
Location transmission	512 Hz / 640 Hz (to be activated at choice, switching between frequencies)
Protection class	IP68 up to 10 m water depth
Dimensions (L x W x H)	approx. 700 x 240 x 250 mm (without wheels)
Weight	approx. 32 kg (without wheels)

### PTC50 Pan and Tilt Camera



Nominal pipe widths	DN 100 - DN 300
Viewing range	- 55° - +152°
Panning range	- 90° - +122°
Rotation range	Endless
Illumination	LED illumination
Angle of view	80° horizontal
Focus	1 mm - ∞
Horizontal resolution	500 TVL / PAL
Light sensitivity	0.4 Lux
Laser pointer	Yes
Internal pressure sensor	Yes
Protection class	IP68 up to 10 m of water depth

### RCX90 P&T Zoom Camera



Nominal pipe widths	DN 100 - DN2000
Panning range	+/- 135°
Rotation range	Endless
Illumination	LED-Illumination
View angle	about 60° (horizontal)
Focus	10 mm - ∞ (automatically and manually)
Optical zoom	10 x
Digital zoom	12 x
Resolution horizontal	530 TVL/PAL
Light sensitivity	1 Lux
Laser pointer	Yes
Internal pressure sensor	Yes
Protection class	IP68 up to 10 m of water depth

### RAL130 Auxiliary Light



Nominal pipe widths	DN 200 - DN 600
Internal pressure sensor	Yes
Illumination	6 HighPower LEDs
Protection class	IP68 up to 10 m of water depth

### RAL200 Auxiliary Light



Nominal pipe widths	DN 200 - DN 600
Internal pressure sensor	Yes
Illumination	6 HighPower LEDs
Special features	Integrated backeye camera
Protection class	IP68 up to 10 m of water depth

### RED200 Elevator



Nominal pipe widths	DN 375 up to DN 750
Internal pressure sensor	Yes
Drive	Motor-driven
Protection class	IP68 up to 10 m of water depth

### RAL1000-RCX90 for P&T Zoom Camera



Nominal pipe widths	DN 600 up to DN 1000
Internal pressure sensor	Yes
Illumination	12 HighPower LEDs
Protection class	IP68 up to 10 m of water depth

### RCR1000 Carrier



Nominal pipe widths	DN 600 up to DN 1000
Protection class	IP68 up to 10 m of water depth

## LASER PROFILING

iPEK Rovion is capable of being upgraded to performing Laser Profiling. When inspecting manholes and pipeline systems the Laser profiler serves as an accessory for pipeline inspection systems allowing the exact determination of the diameter and the detection of deformations. This ring is recorded by the camera. In a circular pipe, the device projects a ring of laser light onto the internal pipe wall allowing a cross-section profile and a deformation measurement to be established by means of the WINCAN Ring-Laser Scanner Software-Module.



LSS RCX90

## LASER PROFILE FEATURES

- ✔ Scope of application ranging from DN 150 to DN 700 (depending on pipe material) by combining rods of different lengths
- ✔ Laser can be focused
- ✔ Camera adapter with joint to easily lower the inspection system with the mounted Laser Profiler into the manhole
- ✔ The magnetic joint lock enables a 360° rotation of the camera with mounted Laser Profiler

## VC500 OPTIONAL EMBEDDED WSA & NZPIM INSPECTION SOFTWARE<sup>1</sup>

### Inspection management software for pipe inspection.

WinCan VX is the newest version of software in WinCan's long history Inpipe inspection and asset management. The VC500 with WinCan embedded installed allows projects and inspections created on the VC500 to be imported directly into WinCan VX<sup>2</sup> software.



- ✔ Create projects that can be imported into WinCan VX (WinCan VX is not included)
- ✔ Easily enter in pipe asset information required by the WSA or NZPIM standards, which can then be displayed on the video in completely customised on screen display text.
- ✔ Generate detailed reports including photos and videos that can be delivered on site to clients on USB
- ✔ WinCan Web - Quick exchange of project and inspection data via the internet\*  
(Send a hyperlink directly to the client for easy viewing, print reports and download of the project)
- ✔ Free viewing software means all inspection data can be shared for free with clients

Maintaining pipe line assets starts with understanding the assets condition and optional embedded inspection codes makes it easy to collect detailed inspection data. (Australian WSA and New Zealand NZPIM compliant inspections). Easy read pdf reports and collected data can be easily presented and organised, allowing understanding of pipes structural and service condition.

WinCan VX<sup>2</sup> software also allows you to manage the data collected on the embedded VC500 in the office pre and post inspection. Use GIS data to accurately pre-fill projects that can be loaded onto the VC500 saving valuable time in data entry. Post inspection in VX<sup>2</sup> software you can edit reports, add additional defect observations/photos, merge multiple projects, share with clients using free viewer software and export in a number of formats.

<sup>1</sup>VC500 option. <sup>2</sup>Additional WinCan VX licenses required

## One System Configured to suit your needs!

The user-friendly ROVION®-pipeline inspection system has successfully completed tests out in the field. It is scalable and all components are fully compatible with each other. Depending on the combination of the high-quality components inspections for pipe diameters ranging from 100 to 2000 mm can be performed.

### CAMERAS

High compatibility, robust design, wide selection of inspection cameras: axial camera, pan & tilt head cameras, camera with fisheye lens, shaft inspection camera with rotation unit.

### CRAWLERS

Inspection range DN 100 – DN 2000 Sophisticated construction, aesthetic design, modular accessories for different inspection tasks.

### CABLE REELS

An enormous range of application possibilities and high-quality workmanship. Extremely robust camera cable, operating ranges up to 500m, with both manual and automatic reels available with remotes.

## FEATURES

- ✓ High-resolution Zoom camera
- ✓ Suits pipes 95mm to 2000mm
- ✓ Cable length 200m to 500m
- ✓ Modular design for future growth and expansion
- ✓ Inspects all types of pipes to WSA & NZPIM standards communicates directly with WinCan reporting software
- ✓ Multiple configurations available to suit any operational needs
- ✓ Fully supported by SECA's German factory trained technicians in Sydney, Melbourne, Brisbane, Auckland & Christchurch



## VISIONCONTROL VC500



### MOBILE CONTROL PANEL

The ROVION® pipeline inspection system is equipped with the VC500 central control panel and the VISIONREPORTII software. This control panel can also be used with other iPEK systems e.g. the AGILIOS® push camera system.



## CONTROL PANELS

Mobile control panel & control panel for custom-built vehicles as base for all inspection tasks focus on intuitive operation, high-quality workmanship and ergonomic design

## DCX5000

### OPERATOR PANEL CUSTOM-BUILT VEHICLES & CORE CONTROL UNIT

The DCX5000 Control is the core control unit of custom-built vehicles equipped with the ROVION system.

## SPECIFICATIONS

### VC500 Control Unit



Display type	TFT
Display format	16:10
Display size (diagonal)	10.1"/257 mm
Display resolution	1280 x 800 px
Display brightness	1280 cd/m <sup>2</sup>
Viewing angle (hor./vert.)	150°/150°
Interfaces	2 x USB 2.0 (type A), 1 x Ethernet (RJ45), 1 x HDMI, 1 x analog Video Out (BNC), 1 x WIFI
Internal memory	32 GB
Video format/picture format	MPEG4/H.264/JPEG or PNG (selectable)
Protection class	IP55
Weight	Approx 1.8 kg (without spiral cable)
Wincan Inspections	Optional WSA/NZPIM2006
Inspection Catalogue Embedded	Optional



### DX5000 Control Unit and CCU I Control Unit

Display size (diagonal)	10.4"/264 mm
Display resolution	800 x 600 px
Dimensions (L x W x H)	approx. 800 x 400 x 120 mm
Weight (incl. frame for compact arrangement)	approx. 10 kg



### Float Device

Suits	RX1300
Fits inside	600mm manhole
Additional	torch lighting

Interfaces (front)	2x USB (USB-stick), 1 x SUB-D 9-poles (service interface (RS232))
Interfaces (rear)	1x connection touch-screen monitor, 1x Ethernet (network), 2x USB (keyboard & mouse), 1 x SUB-D 9-poles (external PC), 1x USB device, 1 x Y/C (analog TG), 1x BNC (analog video out with TG, (FBAS)), 1x BNC (analog video out without TG, (FBAS)) 1x BNC (analog video)
Video format	PAL
Voltage	230 V AC
Frequency	50 Hz
Electrical current	0.33 A
Dimensions (L x W x H)	approx. 483 x 44.5 x 350 mm
Rack	19", 1 HE
Weight	approx. 4 kg



### RMX200 Manual Cable Reel

Drive	Manually
Cable length	max. 200 m
Meter counter	Yes
Voltage	230 V AC
Frequency	50 Hz
Electrical current	2 A
Dimensions (L x W x H)	315 x 495 x 680 mm
Weight (incl. cable)	20 kg



### RAX500 Automatic Cable Reel with Wireless Remote

Drive	motor-driven
Cable length	max. 500 m
Meter counter	Yes
Large deflection pulley	Yes
Voltage	230 V AC
Frequency	50 Hz
Electrical current	2.5 A
Dimensions (L x W x H)	520 x 674 x 680 mm
Weight (incl. cable)	111 kg



### RAX300 Automatic Cable Reel with Wireless Remote

Drive	motor-driven
Cable length	max. 300 m
Meter counter	Yes
Voltage	230 V AC
Frequency	50 Hz
Electrical current	2.5 A
Protection class	IP44
Dimensions (L x W x H)	368 x 575 x 625 mm
Weight (incl. cable)	56 kg



### RMB150 Back Yard Reel

Drive	Manually
Cable length	max. 150 m
Meter counter	Yes
Power supply	via cable reel RAX300 or RMX200
Dimensions (L x W x H)	315 x 495 x 680 mm
Weight (incl. cable)	24 kg



### LSS Laser Scanner

Normal pipe widths	DN 150 – DN 700 (depending on pipe material)
Telescope range	371 mm - 900 mm
Laser class (according to DIN EN 60825-1)	1
Power supply	1 pce. standard battery type CR 123A, 3 Volt
Protection class	IP64



### RCC90

Normal pipe widths	As of DN 90 - 2000mm
Pressure tightness	Up to max. 1 bar
Internal pressure sensor	Yes
Illumination	8 x 3 HighPower LEDs
Protection class	IP68 up to 10 m of water depth
Dimensions (WxHxD)	70 x 70x 212 mm
Weight approx	1.95 kg

\* incl. push rod. without camera, batteries, control panel and trolley.  
 \*\* battery life depending on the used control panel, camera and environmental condition.

# ROVION®

## SYSTEMS CAN BE BUILT TO SUIT YOUR NEEDS

### POPULAR SYSTEM SETUPS



**DCX500 control with RAX500 reel & RX400 crawler**  
Long Range - Built-In 500m system  
150mm - 2000mm



**VC500 control with RAX300 reel, RX130 crawler & RED200 Elevator**  
Medium Range - 300m system  
150 - 750mm\*  
\*with optional extra-large wheel set



**VC500 control with RM200 reel & RX95 crawler and PTC50 camera**  
Standard Range - 200m portable system  
100 - 300mm\*  
\*with extra-large wheel set

## ACCESSORIES



**RAL130**  
Additional forward facing light for large pipes. Suits RX130/RX400/RED200.

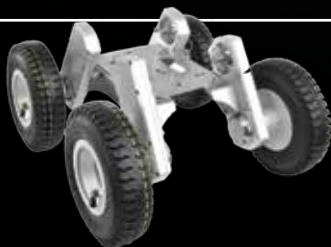
**RAL200**  
Additional forward facing light with colour reversing camera built in. Suits RX130/RX400/RED200.



**RED200**  
Increase the height of your RX130 - old design. Electronic lift with additional light mount.



**RAL1000**  
Additional lighting for pipes above 600-2000mm. Focuses light on side of pipe to allow illumination of defects on side wall.



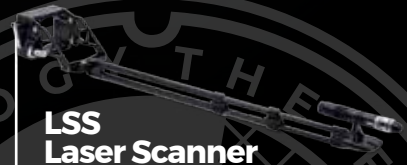
**RCR1000 Carrier**  
Increase the range of the RX130 centres RX130 with RED200 in 1m pipe wide stance & high clearance.



**FLOAT**  
Turn your RX130 into a floating inspection tool with tether points at front and rear.



**RCC90**  
Inspect shafts with your standard camera. With focused lighting and additional light mounts.



**LSS Laser Scanner**  
When inspecting manholes and pipeline systems the Laser profiler serves as an accessory for pipeline inspection systems allowing the exact determination of the diameter and the detection of deformations.

**Head Office**  
5/85-115 Alfred Road  
Chipping Norton  
NSW 2170  
T: 02 9724 0433  
E: info@seca.com.au

**Victoria**  
44 Axis Crescent  
Dandenong South  
VIC 3175  
T: 03 9708 2233  
E: info@seca.com.au

**Queensland**  
2/14 North Road  
Wynnum West  
QLD 4178  
T: 07 3396 1777  
E: info@seca.com.au

