SPECTRUM

Rugged, Reliable Visual Inspection Cameras





SPECTRUM PTZ INSPECTION CAMERAS

Simply the best in its class, period.

Unmatched Detection Capability

Often over looked at the expense of pixel count, the minimum defect size is one of the key parameter when trying assess defect or corrosion. Spectrum Camera have been engineer to see things impossible to see with naked eyes. The Spectrum™ 120 can see feature as small as 0.0035 mm (0.00014 in) in optimal condition, making it a reference in its class.

Simple and Efficient Setup

Using our dedicated camera controller and our well known ICON $^{\mbox{\scriptsize M}}$ software, inspection setup has never been easier. Designed with the user in mind ICON keeps the work on the field as simple as possible while allowing in depth analysis off site.

Robust by Design

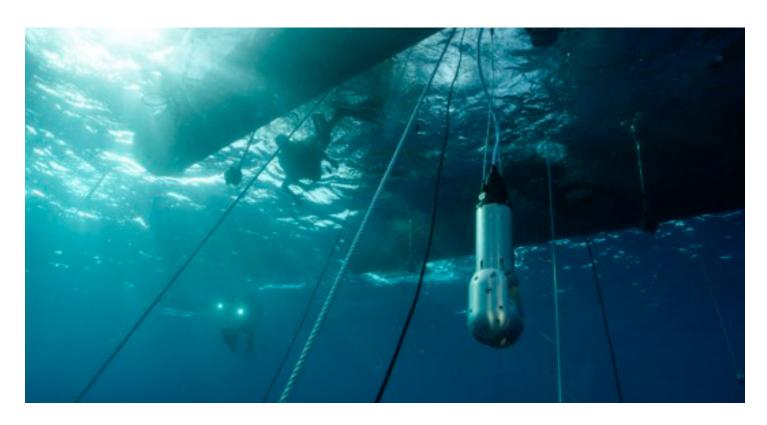
Spectrum PTZ cameras have been engineer to withstand water, dust and harsh environment. The standard depth rating being 60 m (200 ft) making it the perfect companion for splash zone or underwater application. Spectrum cameras are design to the higher standards and are built to last.

Integrated lighting and lasers

All Spectrum cameras come with integrated adjustable LED lighting. The 90 and 120 offer better lighting, laser lines, optical zoom and of course better resolution. The Spectrum 45 on the other hand is unmatched in confined space, measuring only 45 mm (1.75 in) in diameter, it can easily slide through a 2 in hole.

Key Applications

- · Tank Inspection
- Vessel Inspection
- FPSO Tank Inspection
- · Confined Space
- Mine Shaft
- · Underwater Drop Camera System



STIK CAMERA SYSTEM

Let the camera do the work.



Add a STIK to Spectrum Camera

The optional STIK system allow you to deploy the camera from a hatch quickly and efficiently. No more hassle, simple clamp the provided pole and run your inspection. Additional pole length are also available for deep vessel.

Features

- Enhanced stability for tank and vessel inspection
- Adjustable for a perfect fit on hatch from 17 to 36 in
- Combine with our Spectrum 120 for the best result possible
- Easy clamping mechanism for quick installation of the camera
- · Additional pole segment for bigger tanks



Portable and rugged systems

The Spectrum system shown bellow is equipped with a 100 m (328,08 feet) tether reel with a build in slip ring for convenience and ease of use. A Spectrum 90 PTZ inspection camera with laser and LED lighting. On top of that you have the ICON controller 100 especially design for camera inspection.



IC100 Portable Controller

Our most advanced and portable controller for camera system.

- Input = 100 240 VAC, 50/60 Hz
- Output = 48 VDC/100W (max)
- · Intel i5, 16 Gb RAM, 1000 Gb SSD
- 15.6 in FHD touchscreen, 1000 nits
- Bluetooth 5.1
- Wi-Fi 6 (802.11ax), 2.4/5 GHz
- Gigabit Ethernet
- 1 × USB 3.0
- 1 × USB 2.0
- 1 × Tether connector
- Emergency Stop
- Operating temperature: 0 °C (32 °F) to 45 °C (113 °F)
- Storage temperature: -10 °C (14 °F) to 60 °C (140 °F)
- 9 Kg (20 lb)
- $40 \times 33 \times 18 \text{ cm} (15.75 \times 13 \times 7 \text{ in})$

High resistance tether

- Proprietary reinforced tether design for enhance durability and pull strength
- Standard tether length: 30 m (100 ft) and 100 m (330 ft).
 Other option offered on request
- Depth rated connectors and stress relief cone for drop camera configuration
- · Portable reel with integrated slipring for quick deployment
- · Optional tether encoder

Icon Software

- User friendly interface
- · Live video stream
- · Job grouping and recording
- · Snap pictures while recording
- · Defogging, zoom, brightness, focus control
- · Variable lighting and laser line control
- · Automation routine
- · Simple reporting
- · Joystick, touchscreen, or keyboard control
- Customisable user group
- Background exporting

*** Some features might require higher ICON tier, contact your Sales representative for more information.

SPECTRUM SELECTION TABLE







| | SPECTRUM 45 | SPECTRUM 90 | SPECTRUM 120 |
|-----------------------|---|--|--|
| Diameter | 45 mm (1.75 in) | 90 mm (3.5 in) | 120 mm (4.75 in) |
| Length | • 163 mm (6.4 in) | 273 mm (10.8 in)-60 m (200 ft) depth rating 298 mm (11.7 in)-300 m (1000 ft) depth rating | 332 mm (13.1 in)-60 m (200 ft) depth rating) 357 mm (14 in)-300 m (1000 ft) depth rating) |
| Weight | 0.8 kg (1.5 lb)-Aluminium | 2.8 kg (6 lb)-Aluminium | 3.4 kg (7.5 lb)-Aluminium |
| Material | Aluminium Optional: Stainless Steel | Aluminium Optional: Stainless Steel | Aluminium Optional: Stainless Steel |
| Depth Rating | 60 m (200 ft) Optional: 150 m (500 ft) | 60 m (200 ft) Optional: 300 m (1000 ft) | 60 m (200 ft) Optional: 300 m (1000 ft) |
| Tether Length | 30 m Optional: 100 m (328 ft) 300 m (1000 ft) ** | 30 m Optional: 100 m (328 ft) 300 m (1000 ft) ** | 30 m Optional: 100 m (328 ft) Longer conf. available on request *** |
| Operating Temperature | 0-50°C (32-122°F) | 0-50°C (32-122°F) | 0-50°C (32-122°F) |
| Resolution | 420 TVL | 720 TVL | HD (1920×1080) |
| Minimum Illumination | 1.0 Lux | 0.5 Lux | 1.4 Lux |
| Zoom | - | 120x (10x optical, 12x digital) 360x (30x optical, 12x digital) | 120x (10x optical, 12x digital) 360x (30x optical, 12x digital) |
| Pan | 360° continuous pan @ 18°/sec | 360° continuous pan @ 26°/sec | 360° continuous pan @ 26°/sec |
| Tilt | 280° @ 35°/sec | 260° @ 7°/sec | 280° @ 9°/sec |
| Focus | Manual | Auto or Manual | Auto or Manual |
| Depth of field | 10 mm (0.4 in) to infinity (∞) | 10 mm (0.4 in) to infinity (∞) | 10 mm (0.4 in) to infinity (∞) |
| Lighting | Variable LED light | Variable LED light | Variable LED light |
| Laser Line | - | 2× Parallel | 2× Parallel |

^{**} Requires a different controller



^{***} Longer tether options available on request only