



RADCAM[®] Freya

New radiation tolerant RADCAM Freya camera

The new RADCAM Freya has been developed to meet the needs of a compact, lightweight and HD camera for any nuclear facility. Usable in air or underwater, the RADCAM Freya is radiation tolerant up to 40,000 Rad (400 Gy) and easy cleanable from contamination.

Perfect for new inspection & surveillance systems, this RADCAM Freya will also be your best alternative to replace standard off the shelf cameras and update the facility with high-definition surveillance cameras, without modifying cables.

Features

- Low/Mid **rad-tolerance HD PTZ** camera with **LED lights**
- Highly **cost competitive Nuclear Freya** camera
- Very easy to **decontaminate & maintain**
- Very **compact, light weight** and no **ext. moving parts**
- Suitable for **any CCTV infrastructure** (analog or digital)
- Suitable for **all nuclear market segments** (active operation/back-end, In-air/Underwater)

Benefits

- **Low Total Cost Ownership** with **minimal investment** for a fully integrated **nuclear camera**
- **Easy to deploy/install** with highly **reduced FME risks**
- **Simplify** modern CCTV architectures (**no CCU**) **Replace/upgrade** obsolete cameras
- **Unified solution and Synergies** for integrators and site wide NPP operations



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NEW PRODUCT TECHNICAL FEATURES

Compact design

- Dome type design
- No ext. moving parts
- Diameter 170 mm
- Lightweight (3 kg)

Underwater and Nuclear quality

- Radiation tolerant (40 kRad / 400 Gy)
- IP68 to 30 m depth
- Nuclear pools compatible
- No FME-risk
- LED lights following PT
- Internal rad. Damage sensors

HD - PTZ camera

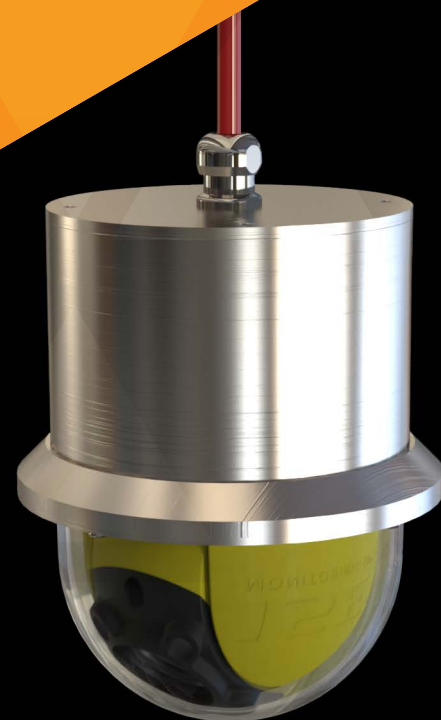
- Full HD (1080p), up to 60 fps
- Low latency video (HD-SDI/HD-TVI)
- 30x (in air) / 10x (in water) Optical Zoom
- 360° Pan / 180° Tilt

Easy to integrate

- Self-supportive by cable
- Any orientation installation
- 24 VDC power supply
- RS-485, Pelco-D control
- Advanced camera control (focus, iris, shutter, LEDs, 180° flip ...)
- Accessories (laser, workstation, pole adaptor, cables ...)

TECHNICAL SPECIFICATIONS

Sensor resolution	1945 × 1097 pixels
Output format	Up to 1080 p 60 fps
Minimum lighting	Day (color) 0,1 Lux" F1.6
Optical zoom	30x (in air) / 10x (in water)
Viewing horizontally	59.2 (W)° ~2.0°(T)
Viewing vertically	33.8 (W)° ~1.15°(T)
Focus min working distance	0 m (wide) to 1.5 m (tele)
Focus / Iris	Yes, auto and manual
Pan // Tilt	+/- 180° / +/- 90°
Speed	Variable speed Pan/Til (up to 5 sec full revolution)
Pan-Tilt resolution	0.02°/step (both pan and tilt)
Lamps	4 LED following P&T
LED intensity	650 Lm
Dimensions	Ø Diameter 170mm, Height 210mm
Weight	3 kg
Power supply	24 VDC, 24W
Communication	RS-485 Pelco D
Video output	HD-SDI (EX-SDI, TVI, CVBS as option)
IP class	IP 68, over 30m depth
Operating temp	+0 °C to +40 °C
Humidity	0 – 100% RH
Type of protection	Radiation tolerant design
Dose dose rate (Co60)	> 40 kRad (400 Gray) > 10 kRad/h (100 Gray/h)
Internal sensors	Internal radiation damage sensor, temperature sensor
Cable mechanical strength	Yes
Dome material composition	Optical clear PC
Base composition	Stainless steel



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The innovative,
cost-efficient choice
in nuclear monitoring
systems