



*"Fixed, small and
lightweight"*



RADCAM[®] Delta

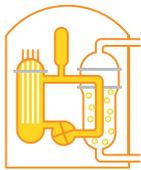
ISEC's newly developed analog camera for
radioactive areas with existing analog infrastructure.



ISEC
MONITORING SYSTEMS

Bringing analog systems to the next level

The RADCAM Delta is ISEC's newest addition to the RADCAM family of cameras. This unique analog radiation hardened camera is specially designed for existing nuclear analog systems.



Pressure Water Reactor

- Permanent supervision inside Containment
- Temporary supervision during production cycles
- Emergency response
- Outage work supervision



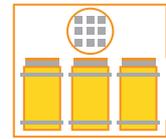
Boiling Water Reactor

- Permanent supervision inside Containment
- Temporary supervision during production cycles
- Emergency response
- Outage work supervision



Heavy Water Reactor

- Permanent supervision inside Containment
- Temporary supervision during production cycles
- Emergency response
- Outage work supervision



Nuclear Back-End

- Radwaste handling
- Crane positioning systems
- Storage vault
- Final Disposal Handling systems

Its development is a direct response to the ever increasing customer demand for high-quality, radiation tolerant cameras that can be deployed quickly and hasslefree in existing infrastructures.

The RADCAM Delta is the first of a new generation of radiation tolerant cameras which sets a new standard in easy deployment, radiation shielding and image quality – all at a very competitive price level.

Thanks to its special design and versatile connectivity, RADCAM Delta will integrate flawlessly in any existing analog infrastructure providing operators a stress free upgrade of existing video monitoring system.



Prevention & fire watch



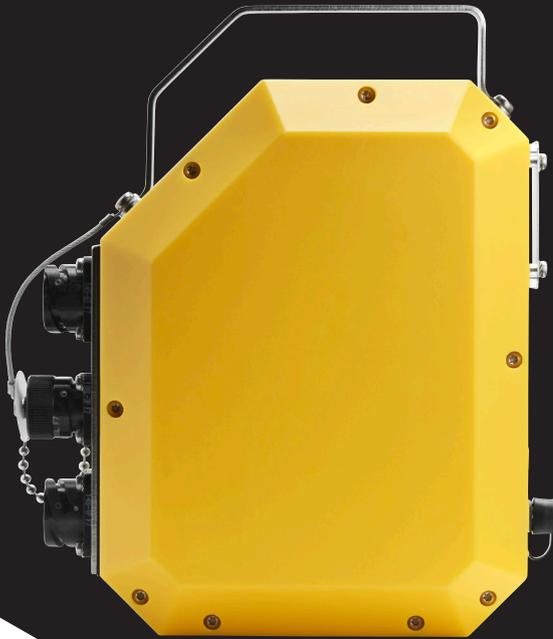
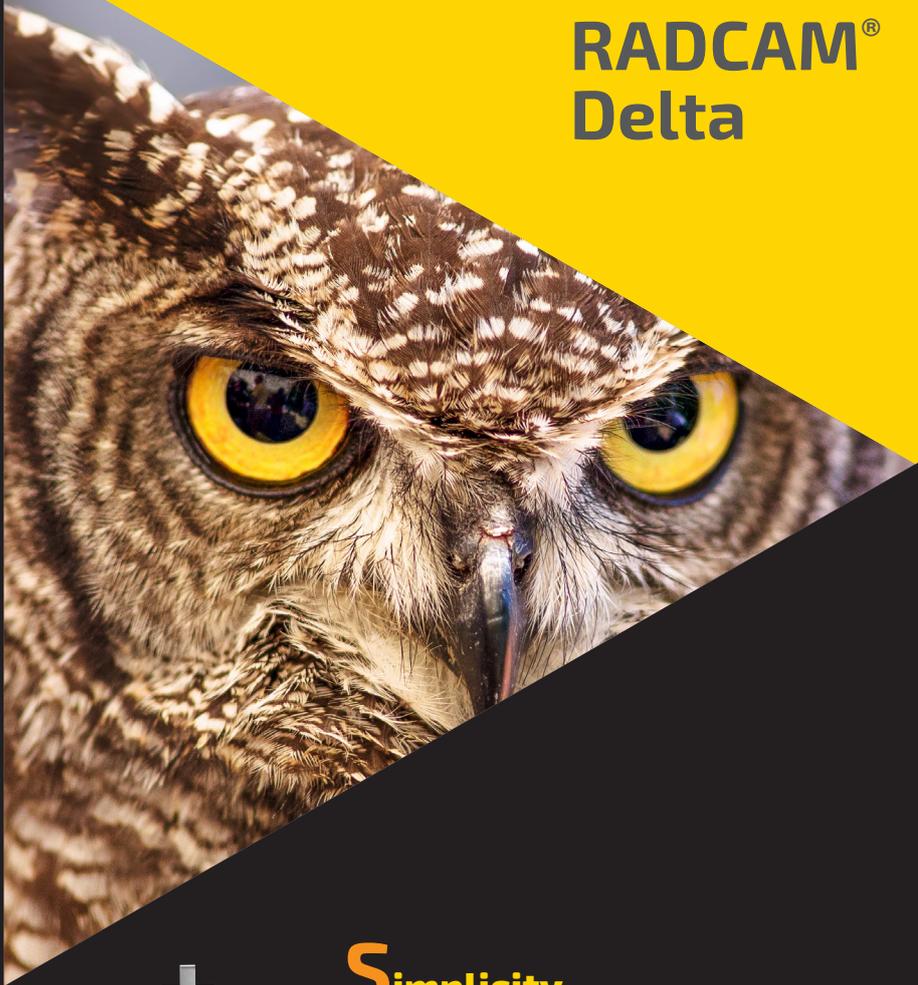
Equipment operation & monitoring



System & environment surveillance



Identify & monitor leaks



Key features RADCAM[®] Delta

- Crisp and clear color imaging
- Fixed, small and lightweight
- Versatile with 3x optical zoom
- TID > 2000 Gy
- Dose rate: 200 Gy/h
- Pure analog design and construction
- Simple Cabling Coax + Power supply + RS-485
- IP65 housing
- Radiation exposure Sensors
- Can control external lights or devices



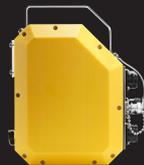
Simplicity

- Compact design
- Seamless IP integration
- Ease of use



Excellence

- Colour Resolution & image quality
- Optical Zoom
- Self-diagnostic and predictive maintenance program



Endurance

- Gamma protection
- High temperature
- Seismically proven

RADCAM[®] Delta

TECHNICAL SPECIFICATIONS

Camera

Sensor resolution	768 × 576 pixels
Image sensor size	1/3"
Image sensor	CMOS
Min illumination/ light sensitivity	0.7 lux at F1.6, 1/50s and 50 IRE

Video

Max video resolution	PAL or NTSC
Max frames per second	50

Zoom lens

Focal length	3 – 9 mm
Angle of view	Wide: 113,7°×61,1° Tele: 38,0°×21.4°
Aperture (F)	1,3
Iris	Auto/manual
Focus	Manual
Optical zoom	3x

Radiation

Gamma Radiation Tolerance (min)	2000 Gray
Gamma Radiation Dose Rate (min)	200 Gray/h
Internal radiation damage sensors	Yes

Communication interface

Data communication protocol	RS-485 / Pelco D protocol
Video communication	Balanced video (2-wire)
Connector (x1)	3-pin connector (IP66)

Video

Video communication	Video coax
Connector (x1)	BNC

AUX control

Output relay (NO and NC)	Max 230VAC/1A
Connector (x1)	3-pin connector (IP65)

Mains connector

Voltage	230V AC
Power	6VA
Connector (x1)	3-pin connector (IP65)

General

Size (mm)	H: 222 L: 177 W: 106
Weight	6 kg
Operational temperature	5 – 60°C
Humidity	1 – 100%, non condensing
Vibration	2 – 9 Hz 1.5 mm, 9 – 200 Hz acc. 5 m/s ²
Pressure	5 Bar (75 psi) above normal atm. pressure
IP rating	IP65



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The innovative,
cost-efficient choice
in nuclear monitoring
systems