IP PTZ and Zoom only camera platform
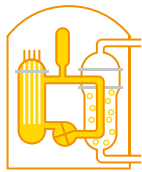
RADCAM®
Sigyn

Designed for fast deployment operations and also multipurpose usage
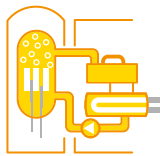
ISEC
MONITORING SYSTEMS

24/7 monitoring in any environment

Universal and flexible supervision solution

Pressure Water Reactor

Boiling Water Reactors

Heavy Water Reactors

Radwaste management

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

- Temporary or permanent Fire-watch
- Radwaste Process and Handling cranes
- Temporary supervision during production cycles
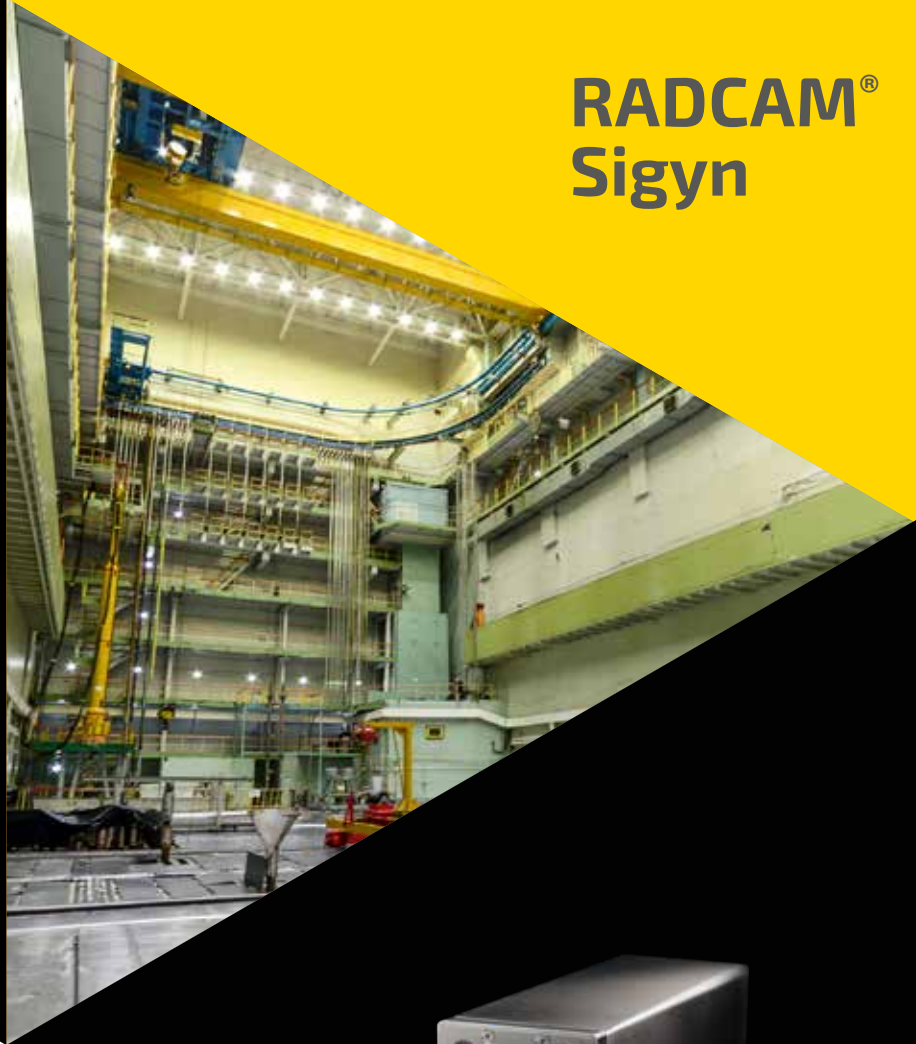- Emergency response
- Outage supervision

Available with a P&T unit or with a Zoom only version, the RADCAM Sigyn is a color sensor digital IP PoE camera system which is designed for fast deployment operations and also multipurpose usage within the reactor containment building and other radioactive areas. With a distributed design, it gives flexibility of positioning and installation.

The RADCAM Sigyn is the first of a new series and is based on ISECs new IP Rad Tolerant camera platform.

- IP camera with PoE designed for nuclear
- Used for temporary or long-term installation
- Lightweight cameras
- Several mounting options available
- Fast deployment, setup in minutes
- TID > 1500 Gy

Sigyn Zoom

8 m

ISEC
MONITORING SYSTEMS

Sigyn PTZ

Netbox

))Ethernet

Network
VMS
Workstations

RADCAM® Sigyn

See the difference with RADCAM® Sigyn

- Radiation tolerant HD camera (720P)
- Power over ethernet connectivity
- Radiation tolerant IP65 control unit
- High level seismic qualification
- Various off the shelf and custom brackets and accessories

Simplicity

- IP ONVIF system
- Common netbox for all camera types
- VMS compatibility

Excellence

- HD camera 720p
- LED lighting
- Lightweight and small footprint

Endurance

- Gamma radiation tolerance
- Modern solid-state sensor
- FME compliant

RADCAM® Sigyn

TECHNICAL SPECIFICATIONS

Camera outstation	Sigyn PTZ	Sigyn Zoom
Sensor	CMOS – HD Resolution 720P (720*1280)	
Minimum Lighting	0.5 Lux @ F1.6	
Optical Zoom	18× with Varifocal zoom lens	
Viewing horizontally	55.2°– 3.2° from wide to tele	
Focus/Iris	Yes, Auto and Manual	
Pan/Tilt	Pan – 350° / Tilt – 180°	No
Lights	4 LED Lights	
Power supply / communication	From RADCAM Sigyn – Netbox	
Size	158 mm (H) × 77 mm (W) × 248 mm (L) 6.22" (H) x 3.03" (W) x 9.76" (L)	76 mm (H) × 77 mm (W) × 265 mm (L) 2.99" (H) x 3.03" (W) x 10.43" (L)
Weight	3.4 kg (7.49 lbs) (incl. standard adaptor)	1.6 kg (3.52 lbs)
Housing	Stainless Steel	
Connector	Fischer Core Series, Push-Pull	
Cable	Special cable to the netbox – Max length 8 m (26 ft) – Diameter 7.8 mm (0.307'')	
IP Class	IP65	
Operating Environment	5 to 60 °C (40 to 140 °F)	
Humidity	0 to 100% RH, non-condensing	
Type of radiation protection	Gamma Radiation protection	
Dose rate	Up to 100 Gy/h (10 kRad/h)	
Integrated dose	>1 kGy (100 krad) for high dose rate (>10 Gy/h / 1 kRad/h) >1,5 kGy (150 krad) for mid to low dose rate (<10 Gy/h / 1 kRad/h)	

Netbox	Unshielded	Shielded
Size	270 mm (H) × 253 mm (W) × 83 mm (D) 10.63" (H) × 9.96" (W) × 3.27" (D)	
Weight	3.5 kg (7.72 lbs)	20 kg (44 lbs)
Housing	Stainless Steel	
Connector	To camera: Fischer Core Series, Push-Pull To network: RJ-45 Bayonet connector	
Power supply / communication	PoE Type 3, Class 6 (60W)	
Video Output	H264, MJPEG	
Framerate	25 fps	
Control protocol	ONVIF compatible	
IP Class	IP65	
Operating Environment	5 to 60 °C (40 to 140 °F)	
Humidity	0 to 100% RH, non-condensing	
Type of radiation protection	Gamma Radiation protection (Shielded only)	
Dose rate	< 1 Gy/h (<100 Rad/h)	Up to 100 Gy/h (10 kRad/h)
Integrated dose	Up to 100 Gy (10 kRad)	>1 kGy (100 krad) for high dose rate (>1 Gy/h / 1 kRad/h) >1,5 kGy (150 krad) for mid to low dose rate (<1 Gy/h / 100 Rad/h)

ISEC
MONITORING SYSTEMS

The innovative, cost-efficient choice in nuclear monitoring systems