



D70 CAMERA

SOLUTIONS:
CCTV, Fuel Inspection

- 100 MegaRad radiation tolerance
- Superior high-resolution video quality throughout the whole screen
- Non-browning zoom optics
- Heavy-duty design with proven reliability
- Option for use independently or as part of a networked system

Economical solution for remote monitoring

Nuclear remote monitoring application is never straight forward – an off-the-shelf network switching system simply does not provide a “nuclear” level of performance. Let Diakont use our years of operating experience to guide you to a video system that works for you. We offer a large array of customization choices to ensure that you get the best value for your investment.

Ease of operation

Complete networked systems include cameras with pan/tilts and lights, operator stations, remote operator stations, and master control station with archive recording. The user-friendly interface allows access throughout the system, within established workgroups (i.e. Fuel Handling, HP, etc). Cameras can be fitted with guidance, lighting, remote radiation level measurement, audio (in-air only), and remote temperature measurement sensors.



Camera control station

Proven D70 reliability

Diakont’s networked video systems are built around the D70 Camera, utilized throughout the nuclear industry for decades. Large-scale Diakont CCTV systems are installed at over 3 dozen plants and high-radiation facilities worldwide.

Monitoring applications:

- PWR containment, throughout the operating cycle
- BWR reactor building, drywell, and wetwell, throughout the operating cycle
- Resin recycling systems
- Reprocessing and hot cell activities
- Cask loading activities



D70 camera system

USA

Diakont Advanced Technologies
3821-C Calle Fortunada
San Diego, CA 92123 USA
+1-858-551-5551 phone
sales@diakont.us.com

RUSSIA

ZAO Diakont
Uchitelskaya St. 2
St. Petersburg, Russia 195274
+7-812-324-6637 phone
sales@diakont.com



System electronics cabinet

Technical specifications

Camera Tube	2/3" E-Chalnicon
Resolution	600+ H-TVL
Signal/Noise Ratio	≥50 dB
Sensitivity	24 lux (16 or 32 lux with optional lenses)
Zoom	10x (20x optional)
Focal Length	15-72 mm (14-141 mm optional)
Field of View (diagonal, in water)	9° - 43°
Minimum Focal Distance	50 mm
Iris	Auto / Remote; F/2.2 to 16
Pan Range	+/-180°
Tilt Speed	Up to 6°/s
Pan/Tilt Interconnection	Slip rings
Drive Protection	Friction clutches
Cumulative Dose	10 ⁸ Rads
Maximum Dose Rate	3*10 ⁵ Rads/hr
Environment	Water, air
Maximum Operating Temperature (water/air)	70°C / 50°C
Lights	2x20 W (alternate options available)
Housing	Stainless Steel
Width	314 mm
Height	327 mm
Depth	379 mm
Protection	IP 68, 40 m submersible

USA

Diakont Advanced Technologies
3821-C Calle Fortunada
San Diego, CA 92123 USA
+1-858-551-5551 phone
sales@diakont.us.com

RUSSIA

ZAO Diakont
Uchitelskaya St. 2
St. Petersburg, Russia 195274
+7-812-324-6637 phone
sales@diakont.com