MIRION TECHNOLOGIES

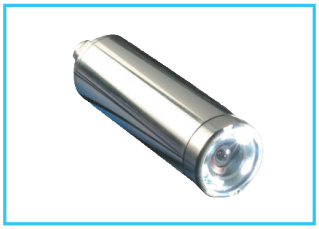
RADIATION TOLERANT CAMERA

Dotcam HR

Miniature Radiation Tolerant Camera

FEATURES

- Higher radiation resistance
- High resolution color
- White LED lighting
- Variable lighting option
- Stainless steel housing
- Small in size
- Fully submersible camera/cable
- Simple cable



For applications with no, or moderate radiation, please see our information on the standard Dotcam.

DESCRIPTION

The Mirion Dotcam HR is an innovative camera designed as an extremely easy-to-use, flexible device combining service proven reliability with higher radiation resistance. The Dotcam HR is a color video camera offering excellent reproducibility with low lag and high burn resistance and is not subject to distortion from magnetic fields.

The versatility of the camera comes from its ease of deployment and small footprint; ideal for many on-site tasks demanding higher radiation tolerances. The Dotcam HR proves itself in the most demanding situations by providing dose tolerances up to 100 krad (1 kGy) total dose and provides good pictures at dose rates up to 30 krad/h (300 Gy/h).

The system incorporates a 1/3 in. state-of-the-art sensor providing high quality color pictures - even in low lighting conditions. The Dotcam HR includes an integral white LED lighting ring and is fully submersible to a depth of 60 m (200 ft).

SPECIFICATIONS AND PERFORMANCE

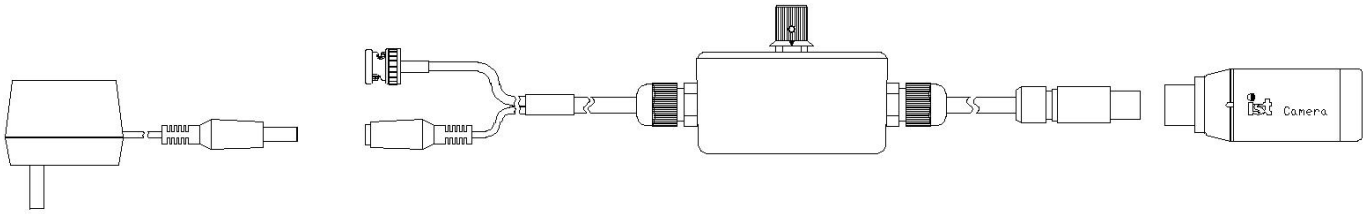
Dotcam HR	
Radiation Tolerance	1 kGy (100 krad) (1 x 10^5 rad)
Maximum Radiation Dose Rate	300 Gy/h (30 krad/h) (3 x 10^4 rad/h)
Sensor	1/3 in. image sensor
Resolution	400 TV lines (NTSC) 450 TV lines (PAL)
Min. illumination	1.0 lux f/2.0 (without LED lighting)
Signal to noise ratio	> 48 dB
Electronic shutter	1/60 second to 12 µs (NTSC) 1/50 second to 12.5 µs (PAL)
Standard lens	PAL: 6mm f/2.8 NTSC: 3.1mm f/5.0
Angle of View (approx. with standard lens)	PAL: 44° horizontal, 33° vertical, 53° diagonal NTSC: 76° horizontal, 60° vertical, 88° diagonal
Power source	DC 12 V ±10% Optional wall transformer included with glanded cameras and cable options
Current consumption	110 mA maximum
Diameter	29 mm (1.14 in.)
Length (camera only)	79 mm (3.1 in.)
Length (with mated connector)	116 mm (4.6 in.)

Dotcam HR	
Sealing	IP68, 60 m (200 ft water depth)
Operating Ambient Temperature	0 °C to 60 °C (32 °F to 140 °F)

Cables	
4 Core Radiation Tolerant PE inner insulation and Polyurethane Sheath	
Diameter	6 mm (.25 in.)
Length	30 m (98.4 ft) (standard)

Part Numbers**	
C911CSD03A/S PAL	Dotcam, 6mm lens, stainless steel, 3 pin connector (no cable)
C911CSD04A/S30M PAL	Dotcam, 6mm lens, stainless steel, glanded with 30m cable
C911CSE03A/S NTSC	Dotcam, 3.1mm lens, stainless steel, 4 pin connector (no cable)
C911CSE04A/S100 NTSC	Dotcam, 3.1mm lens, stainless steel, glanded with 100ft cable
C911CAB05A/30M	Cable with 3 pin connector, 30m length
C911CAB13A/100	Variable lighting controller, 4 pin connector, with 100ft cable
C911CAB20A/100	Cable with 4pin connector, 100ft length

*** Other lens and cable options are available; please contact Mirion Technologies for details.*



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