



# DOTCAM HR

Miniature Radiation Tolerant Camera



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Power



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## OVERVIEW

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 100krad (1kGy) total dose and provides good pictures at dose rates up to 30krad/h (300Gy/h).

The system incorporates a 1/3" state-of-the-art sensor providing high quality color pictures - even in low lighting conditions. The Dotcam HR provides an integral white LED lighting ring, 4.0mm f/5.0 lens and is fully immersible to a depth of 60m (200').

## KEY 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.

**SPECIFICATIONS AND PERFORMANCE**

Dotcam HR	
Radiation Tolerance	1kGy (100krad) (1 x 10 <sup>5</sup> rad)
Maximum Radiation Dose Rate	300Gy/h (30krad/h) (3 x 10 <sup>4</sup> rad/h)
Sensor	1/3" 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	> 48dB
Electronic shutter	1/60 second to 12μs (NTSC) 1/50 second to 12.5μs (PAL)
Standard lens	4mm f/5.0 (FOV = 90° diagonal)
Lens for PAL Only	6mm f/2.8 (FOV = 54°)
Power source	DC12V +/- 10%
Current consumption	110mA maximum
Diameter	29mm (1.14")
Length (camera only)	79mm (3.1")
Length (with mated connector)	116mm (4.6")
Length (with connector cover)	123mm (4.8")
Housing	Stainless Steel (SS)
Lighting	6 high brightness LEDs

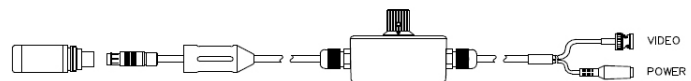
Dotcam HR	
Sealing	IP68, 60m (200' water depth)
Operating Ambient Temperature	0°C to 60°C (32°F to 140°F)

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

DotCam HR Series Part Numbers	
C911CSB03A	NTSC - Higher radiation capable Dotcam with LED lighting, 4-way stainless steel connector
C911CSB04A	NTSC - Higher radiation capable Dotcam with LED lighting, glanded
C911CSA03A	PAL - Higher radiation capable Dotcam with LED lighting, 4-way stainless steel connector
C911CSA04A	PAL - Higher radiation capable Dotcam with LED lighting, glanded

**Lens Options**

Other lenses are available, please contact Mirion Technologies for details.



Dotcam HR Configuration with Variable Lighting Control

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