



RADIATION TOLERANT CAMERA

# RC911™ Dotcam HR

## Miniature Radiation Tolerant Camera

The Mirion Dotcam HR camera is an innovative camera designed for ease of use, flexibility and with proven reliability and 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 picture quality at dose rates up to 30 krad/h (300 Gy/h).

A one-third inch state-of-the-art sensor provides 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).



### 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.

## DOTCAM HR MINIATURE RADIATION TOLERANT CAMERA

### SPECIFICATIONS AND PERFORMANCE

- Radiation Tolerance: 1 kGy (100 krad) ( $1 \times 10^5$  rad)
- Maximum Radiation Dose Rate: 300 Gy/h (30 krad/h) ( $3 \times 10^4$  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  $\mu$ s (NTSC)
  - 1/50 second to 12.5  $\mu$ s (PAL)
- Standard lens:
  - PAL: 3.9 mm f/2.8
  - NTSC: 3.1 mm f/5.0
- Angle of View (approx. with standard lens):
  - PAL: 63° horizontal, 50° vertical, 75° diagonal
  - NTSC: 76° horizontal, 60° vertical, 88° diagonal
- Power source: DC 12 V  $\pm$ 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.)
- Sealing: IP68, 60 m (200 ft water depth)
- Operating Ambient Temperature: 0° C to 60° C (32° F to 140° F)

### CABLES

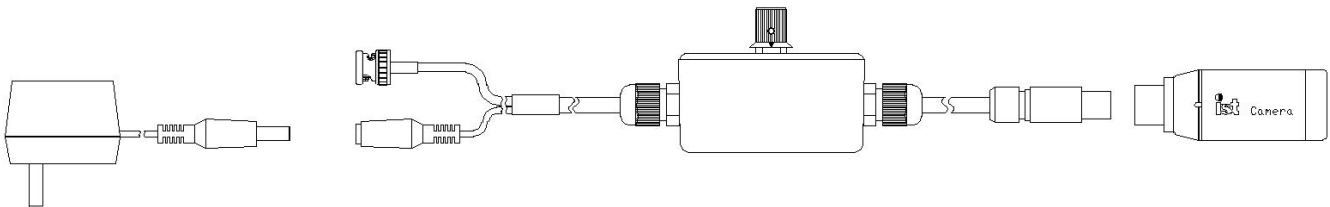
Four Core Radiation Tolerant PE inner insulation and Polyurethane Sheath

- Diameter: 6 mm (.25 in.)
- Length: 30 m (98.4 ft) (standard)

### PART NUMBERS\*\*

- C911CSD03A/S PAL: Dotcam, 3.9 mm lens, stainless steel, 3 pin connector (no cable)
- C911CSD04A/S30M PAL: Dotcam, 3.9 mm lens, stainless steel, glanded with 30 m cable
- C911CSE03A/S NTSC: Dotcam, 3.1 mm lens, stainless steel, 4 pin connector (no cable)
- C911CSE04A/S100 NTSC: Dotcam, 3.1 mm lens, stainless steel, glanded with 100 ft cable
- C911CAB05A/30M: Cable with 3 pin connector, 30 m length
- C911CAB13A/100: Variable lighting controller, 4 pin connector, with 100 ft cable
- C911CAB20A/100: Cable with 4 pin connector, 100 ft length

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



Copyright ©2023 Mirion Technologies, Inc. or its affiliates. All rights reserved. Mirion, the Mirion logo, and other trade names of Mirion products listed herein are registered trademarks or trademarks of Mirion Technologies, Inc. or its affiliates in the United States and other countries. Third party trademarks mentioned are the property of their respective owners.

Specifications may vary according to system configuration. We reserve the right to modify or amend the information herein without prior warning. Please contact your Mirion representative for further information.

Mirion Technologies (IST) Ltd and Mirion Technologies (Imaging), LLC are ISO 9001:2015 certified companies (certificates available on request or at [www.mirion.com](http://www.mirion.com)).

Please note that the products and accessories described in this data sheet may be subject to UK export control or US re-export control. Please check with your authorized representative when enquiring about this product.