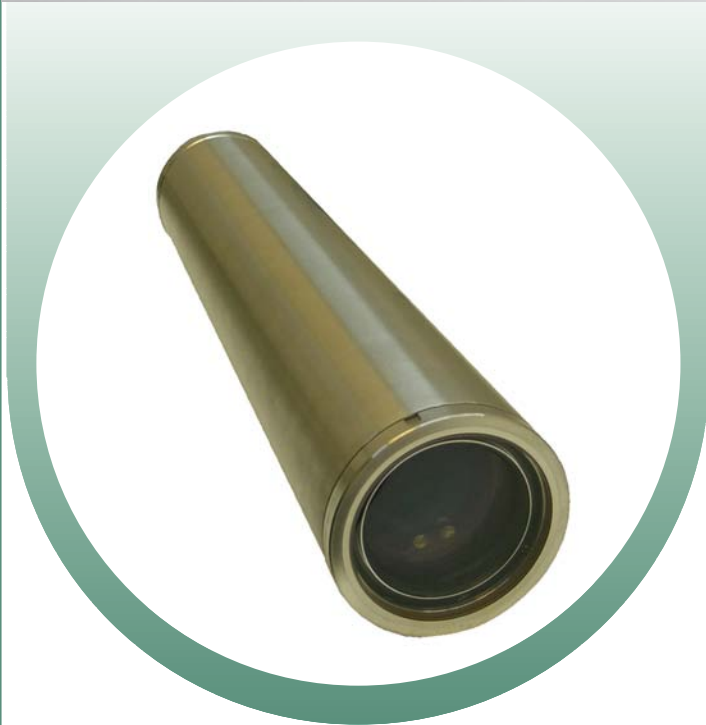


# RTC-3

## CVS RADIATION TOLERANT CAMERA



**Radiation tolerant - >106 rad /hr  
>7 x 10<sup>7</sup> rad total dose**

**Single Unit Camera with 6x Total Zoom**

**High Image Quality and Reliability**

**Internal LED light ring w/independent  
left/right controls**



*Interchangeable with the SC-18 color zoom camera, the RTC-3 maximizes the versatility of the CVS - Convertible Viewing System...or can also be used by itself*

The RTC-3, Radiation Tolerant Camera, was specifically developed for close-up inspection in high radiation areas, and is one of two interchangeable cameras on the Convertible Viewing System (CVS). Enhanced Chalnicon tube technology incorporated into the design of the RTC-3 allows the camera to provide a higher level of temperature and radiation tolerance than any other camera of its type in the industry.

The RTC-3 features a 3:1, non-browning zoom lens with an additional Analog 2x zoom. An internal LED light ring is built into the face of the camera. For increased versatility, the RTC-3 can be equipped with removable bracketry to mount additional external lighting.

Another exciting feature of the RTC-3 is its simple construction. All of the camera electronics are housed in a single unit allowing for easy set up, operation and maintenance. The camera no longer requires tuning to each controller and is also highly immune to outside noise.

As part of the CVS, the RTC-3 is completely interchangeable with the system's color zoom camera, the SC-18. The RTC-3 can also be used by itself, with or without the external lights, or it can be mounted to the PT-5, Miniature Pan & Tilt

# CVS Radiation Tolerant Camera

## ELECTRICAL

Horizontal Resolution: 600 TV Lines  
Faceplate Sensitivity: 0.62 lux  
Scene Illumination: 38.9 lux for full image quality  
Sensor Type: 2/3" Enhanced Chalnicon  
Signal to Noise: > 52dB  
Power Input: 12 VDC, 600 mA (max)  
-12 VDC, 300 mA (max)  
Synchronization: 525 line / 60 Hz - EIA  
Video Output: 1.0 V peak to peak  
Controller: ROS CVS III controller (part number: 45-03369-01)

## OPTICAL

Optical Zoom: 3:1 (8 mm to 24 mm focal length)  
Analog Zoom: 2X (6X with optical zoom)  
Iris Range: f/2.8 - f/16  
Field of View in Water: 41.7° (H) x 32.7° (V) @ full wide angle  
15.3° (H) x 11.6° (V) @ full zoom  
Field of View in Air: 57.6° (H) x 44.8° (V) @ full wide angle  
20.8° (H) x 15.7° (V) @ full zoom  
Internal LED Illuminators: Two sets of 9 white LED lamps  
Each set with dimming capability

## MECHANICAL

Housing Material: 316 stainless steel  
Length (w/o connector): 11.17 in (283.72 mm)  
Diameter: 2.88 in (73.15 mm)  
Viewing Port: Dynasil™ non-browning with acrylic protective cover  
Standard Connectors: Flexible penetrator to MHDG-16-CCR connector

## ENVIRONMENTAL

Depth Rating: 70 m (230 ft)  
Operating Temperature: 0°C to +50°C (32°F to 122°F)  
Storage Temperature: -20°C to +60°C (-4°F to 140°F)  
Radiation Tolerance: >10<sup>6</sup> rad (10<sup>4</sup> Gy) / Hr (max dose rate)  
>7 x 10<sup>7</sup> rad (7 x 10<sup>5</sup> Gy) (max accumulated dose)



5618 Copley Drive  
San Diego, CA 92111 \* USA  
(858) 565-8500 (PHONE) \* (858) 565-8808 (FAX)  
(804) 754-3936 East Coast Office (PHONE)  
www.rosys.com \* sales@rosys.com