



FEATURES

- Compact Casing
- Radiation Tolerant
- Non-browning Zoom Lens
- Remotely Controlled

IST-REES R941

Compact Nuclear Zoom Camera

The IST-Rees R941 compact zoom camera from Mirion Technologies has been developed to provide a radiation tolerant zoom facility in a compact 55mm diameter case. The zoom facility comprises a non-browning 8 to 24mm, f/2.8 to f/16 zoom lens with all the optical functions (i.e. focus, zoom, iris and macro) fully motorized to allow complete remote control via the R90 Mk 3 Camera Control Unit. Housed in a stainless steel case the R941 cameras incorporate a zoom lens that can focus and track from 50mm to infinity.

The R941 camera is designed to be used in conjunction with IST-Rees R90 Series Mk 3 Camera Control Units. Fully compatible with international video standards, R90 MK 3 Control Units can be integrated or locked to external sources, image processors or machine vision systems. A range of portable or rack mounted versions are available with local control, or remote control over twisted pair or video coaxial cables.

APPLICATIONS

- Fuel Inspection
- Search and Retrieval
- Reactor Inspection
- Robotics and Manipulator Surveillance

imaging systems

A Mirion Technologies Division

Featuring:





SPECIFICATIONS AND PERFORMANCE

GENERAL	
R941CMF03A	
Length	269mm (10.6")
Diameter	55mm (2.16")
Weight (approximate)	1.8kg (4lbs.)

SYSTEM PERFORMANCE	
Resolution	600 TV lines per picture height (center zone)
Sensitivity	30 lux scene illumination (1 volt composite video signal, chalnicon, 80% average scene reflectivity, tungsten illumination 2856K)

ENVIRONMENTAL		
Operating Temperature	-25° to 55° C	(-13° to 130°F)
Storage	-25° to 60° C	(-13° to 140°F)
Depth Rating	50 metres	(165')
Radiation Tolerance	2 MGy (H ₂ O) [⁶⁰ Co]	(2 x 10 ⁸ rads) Total dose
	>30 kGy/hour	(>3 x10 ⁶ rads/hour) Vidicon
	1 kGy/hour	(1 x 10 ⁵ rads/ hour) Chalnicon

OPTICS		
Iris Range	f/2.8 to f16	
Viewing Angles in Air	Zoom Out	Zoom In
Horizontal	57.6°	20.8°
Vertical	44.8°	15.7°
Focus Range	Tracking 50mm (1.96") to infinity 0mm to infinity (using macro and fully zoomed out)	
Cable Length	100 meters (328')	

SPECIFICATION NOTES

1. A "good" picture is defined as one where the illumination available is sufficient for the camera to produce a 1 volt composite video signal with a fully open aperture.
2. A "usable" picture can usually be obtained, dependent on the scene viewed and environmental factors etc., when the illumination available is only one third that required to achieve a 1 volt composite video signal at full aperture.
3. Mirion Technologies should be consulted for very critical viewing requirements, or in cases where there are important lighting, resolution, environmental or viewing angle considerations.
4. In applications where there are severe space constraints care should be taken to allow for the size of the camera cable mating connector and if necessary, the bend radius of the connecting camera cable. Please refer to the Rees R90 series cables and connectors data sheets.
5. Mirion Technologies should be consulted if longer cable lengths are required.

1

© Copyright 2008. All rights reserved for trademark and registered trademark information.

The above specifications may vary according to system configuration. Mirion Technologies Incorporated reserves the right to amend or change the information on this sheet without prior warning.

12/08



MIRION
TECHNOLOGIES

200 IST Center
Horseheads, NY 14845
USA
T +1.607.562.4300
+1.800.432.1478
F +1.607.562.4392

Station Road
Alton, Hampshire
GU34 2PZ, UK
T 01420.541600
F 01420.541700

Kaiser-Konrad-Str 93a
D 53225 Bonn
Deutschland
T 0228.625088
F 0228.626300

