



C981 COMPACT

System Camera



Nuclear
Power



Homeland
Security
& Defense



Industrial and
Manufacturing



Healthcare



Labs and
Education

OVERVIEW

The C981^{compact} camera range builds on the success of the standard C981 but offers a low radiation tolerant pan, tilt and zoom camera with a smaller sized envelope. Ideal for locating in areas where space is at a premium, we have combined the camera and pan and tilt into an integral unit and provided three positions for additional lights and microphone. The color CCD compact can be configured into multi camera configurations, or a single camera system can be supplied.

Mirion is the world's most experienced supplier of large turnkey television surveillance systems to the nuclear industry.

KEY FEATURES

- High performance colour picture
- Pan, tilt, zoom, video and power over three twisted pairs
- One 19" sub-rack to control up to 8 cameras
- 8 channel lighting and microphone sub-racks
- RS-485 control of sub-racks
- Change camera outstation without adjustment
- Software protocol and hardware can address up to 128 channels of cameras and lighting
- Simple cable

APPLICATIONS

- Process monitoring
- Safe guard surveillance
- In-containment viewing
- Waste management
- Guidance and posting

SPECIFICATIONS AND PERFORMANCE

Camera Outstation	
Housing Material	Stainless steel
Operating Temperature in Air	0 to 40°C (32 to 104°F)
Operating Temperature in Water	0 to 50°C (32 to 122°F)
Radiation Tolerance	100 Gy [⁶⁰ Co] (H ₂ O) 10 ⁴ Rad [⁶⁰ Co] (H ₂ O)
Operating Dose Rate	100 Gy/hour (10 ⁴ Rad/hr)
Sealing	IP68 (IEC529) 60 m water depth (W.W. Fischer stainless steel connector type SE105Z069-27) IP66 (IEC529) fully washable (LEMO stainless steel remote handling cable connector type FZJ3N318TLMY)
Maximum Operating Depth	20 m (66 ft)
Maximum Submersion Depth	60 m (197 ft)
Cable Connection	18-way remote handling LEMO or 12-way Fischer
Pan and Tilt	Speed: 6° per second Travel: ±180° (adjustable)
Size with Pan and Tilt	221 mm (H) x 162 mm (W) x v160 mm (D) (8.8" x 6.5 x 6.3")
Weight	3.2 kg (7 lbs) without lights or microphone

Camera Channel Performance	
Horizontal Resolution	460 tvl per picture height (optical)
Illumination	1 lux
Signal to Noise Ratio	48dB (weighted)

Optics	
Zoom Lens	18x optical (4.1-73.8mm) 4x digital
Iris	Auto F1.4
Electronic Shutter	Auto: 1/60 to 1/10,000 sec NTSC 1/50 to 1/10,000 sec PAL

8 Channel Camera System Sub-rack	
Nominal Power Supply Input	100–120/200–240 V (auto-ranging); 50/60 Hz
Operation Range	85–132/170–264 V (auto-ranging); 47–440 Hz
Power Requirement	150 VA for a fully populated 8-channel CCU
Outstation Cable Length	300 m (984') maximum CCU to camera (consult Mirion)
Operating Ambient Temperatures	Fully populated, convection cooling: 0 to 40 °C (32 to 104 °F). Up to 6 channels, convection cooling: 0 to 50°C (32 to 122°F) Fully populated, forced air cooling at 500 litres (132 gallons)/minute: 0 to 50 °C (32 to 122 °F)
Relative Humidity	20%-75% non-condensing
Size	134 mm (H) x 483 mm (W) x 300 mm (D) (5.3" x 19" x 11.8") (excluding handles and connectors)
Weight	7 kg (15.4 lbs)

CCU Connector Types	
AC Power	IEC 320 plug (fitted with T4A fuse)
Camera Inputs (8 off)	15-way D type socket
Video Outputs (8 off)	75R BNC
Genlock Input	75R BNC (with 75R termination switch)
Sync Pulse Output	75R BNC
Serial Control Input	9-way D type plug
Serial Control Loop Through	9-way D type socket

Optional Accessories	
Camera Attachments	Camera allows for up to 3 attachment positions for a combination of microphone and lights
Lights for Underwater	Up to 200 W using 100 W lamps
Lights in Air	Up to 150 W using sealed 50 W lamps or 75 W vented lamps
Lighting Sub-rack	8 Channel
Microphone	For in-air use only
Microphone Sub-rack	8 Channel

> UK - FARNBOROUGH

Mirion Technologies (IST) Ltd
2 Columbus Drive, Farnborough, Hampshire, GU14 0NZ
T: +44 1252 375137 | F: +44 1252 391890 | E: MirionUK@mirion.com

> FRANCE - LAMANON

Mirion Technologies (MGPI) SA
Route d'Eyguières, FR - 13113 Lamanon
T: +33 490 595959 | F: +33 490 595518 | E: rees.sales@mirion.com

> GERMANY - BONN

Mirion Technologies
Kaiser-Konrad-Str 93a, D53225, Bonn
T: +49 228 625088 | F: +49 228 626 300 | E: rees.sales@mirion.com

> CHINA - BEIJING

Mirion Technologies
15/F, Office Building A, Parkview Green, 9 Dongdaqiao Road, Chaoyang District, Beijing 100020
T: 0086 139 1163 6957 | E: away@mirion.com

> USA - NEW YORK

Mirion Technologies (Imaging) LLC
315 Daniel Zenker Drive, 200 IST Center, Horseheads, NY 14845
T: +1 607 562 4369 | T: +1 800 432 1478 | F: +1 607 562 4392
E: isdnuclearusa@mirion.com

For additional information, please contact your Mirion Technologies representative; for any country not listed, email rees.sales@mirion.com.

Copyright © 2017 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 9001:2008 certified companies (certificates available on request or at 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.