COLOUR PETREL IRC400 Series

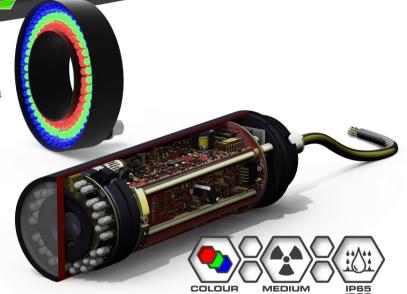
Integral Television Camera With Medium Radiation Tolerance,

Minimum External Connections and

Colour Pictures.

FEATURES

- Uses a standard IRC400 Petrel Camera
- High Resolution Colour (600 TV Lines)
- Radiation Tolerance 700kGy
- S-Video & Composite Video
- Simple Power In, Video Out Operation
- Standard illuminator works up to 5 Metres from subject matter
- Special illuminators can be specifically designed to meet customer requirements.



DESCRIPTION

The Petrel radiation-tolerant colour system uses a special Control Unit in conjunction with a high-powered LED illuminator to provide colour pictures from a monochrome Camera, with 700kGy radiation tolerance. The Camera system functions best in relatively low levels of ambient light so that the main illumination source is the built-in illuminator. Good results have also been obtained in bright room lighting conditions of up to 850 lux.

The scene to be recorded is exposed to alternate pulses of red, green and blue light; the data is then written to video memory & then recompiled into a full colour video signal as S-Video or Composite Video.

To assist in the initial deployment of the Camera, the light controls are switchable so that a Mono mode may be selected and a standard monochrome image is then available for locating the scene of interest. This mode of operation also makes it easier to focus the lens. The pulsing colour mode can then be selected to allow detailed examination and recording of the scene in full colour.

The user can expect straight forward access to controls for Lens, Lighting, Gain and Macro Focus. If the Camera system is paired with one of our Pan & Tilt units, those controls will also be available on the front panel.

Alternative Control Units offer highly portable and rugged Peli™ Storm case form factors, with integrated high-resolution displays, and built in recording to on-board storage. USB export options are also available.

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TECHNICAL DATA

PERFORMANCE

VIDEO SIGNAL: PAL, 625 lines or NTSC, 525 lines

Monochrome, composite colour and S-Video, Standard 1V including sync.

SIGNAL/NOISE RATIO: >40dB (Un-weighted)

RESOLUTION: Monochrome Up to 700 TV lines (Centre)

S-Video >600 TV lines

Composite colour >450 TV lines

SENSITIVITY: >20 lux - Full picture quality with an F1.4 lens - Chalnicon/Newvicon

>2 lux - At the limit of Automatic Gain Control - Chalnicon/Newvicon

>200 lux - Full picture quality with an F1.4 lens - Vidicon >20 lux - At the limit of Automatic Gain Control - Vidicon

OPTICAL INTERFACE: See Petrel data sheet.

STANDARD LENS OPTIONS: See Petrel data sheet.

WORKING DISTANCE: Up to 2 metre in bright room lighting (* 850 lux)
Up to 5 metres in subdued lighting (<10 lux)

ENVIRONMENTAL

(TUBE TYPE DEPENDANT)

OPERATING TEMPERATURE: | 0 to +50°C

RADIATION TOLERANCE: Total dose 700kGy (Gamma), Dose rate 10kGy/Hour

INGRESS PROTECTION: IP65 or IP68, 50 metres (Depending on housing supplied)

DIMENSIONS AND WEIGHT

CAMERA: See Petrel data sheet.

LIGHTING UNIT: 110mm Ø, Weight 400g. (63mm Ø Camera)

137mm Ø, Weight 600g. (85mm Ø Camera)

CONTROL UNIT: 2U 19" Rack mount, 280mmD

Portable Peli[™] Storm case, 600mmW x 450mmD x 350mmH

INTERCONNECTION

CAMERA: See Petrel data sheet.

LIGHTING UNIT: 4 pole Fischer with small diameter cable (Common oV + R, G and B supplies)

CONTROL UNIT: 7 pole Lemo Camera connector

4 pole Fischer Lighting connector

Composite Video output (75 Ohm BNC socket) Mono Video output (75 Ohm BNC socket)

S-Video output 4 pole mini din socket

SUPPLIES

CAMERA: 12V DC @ approximately 650mA (11-14V acceptable)

Regulator required for over 14V

CONTROL UNIT: Mains 100/115/230V 50/60 Hz

WE RESERVE THE RIGHT TO CHANGE THE ABOVE DATA WITHOUT NOTICE

