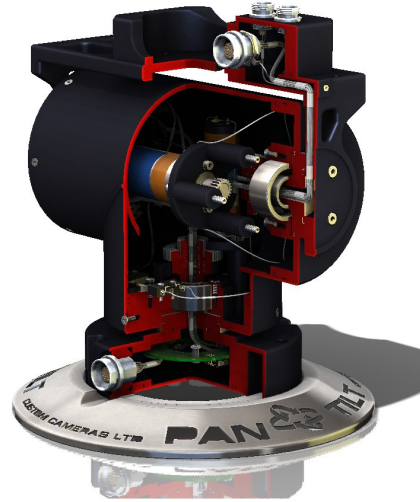


## FEATURES

- Rugged, low backlash, sealed unit.
- Output shafts carried on double row ballraces.
- Adaptors for various cameras.
- Compatible with multiplexed control system.
- Available with vertical and horizontal camera mounts.
- Underwater or IP65 versions available.
- Substantial mounting base.



## DESCRIPTION

This is a rugged radiation-tolerant unit designed primarily for use with the Petrel and Kingfisher series of cameras, though it may also be used with other TV cameras. The unit is normally sealed to IP65, but can also be supplied in underwater form, to IP68 for use down to 50 metres depth. The standard unit contains a demultiplexer/drive board to enable it to be operated from the pulses encoded onto the video signal which are standard in this series of cameras. Alternatively, when used with the Kingfisher series cameras, control signals are decoded within the camera, so that only a drive board is needed to operate the unit. The only additional cabling requirement is a 24V DC supply at approximately 0.5A for the drive motors. These are rugged, high-quality 24V DC motors employing rare-earth magnets and coupled via planetary gear heads to the final output gears, giving very low backlash and preventing back-driving. The output shafts of the unit are carried on double row ball-races for strength and stability. The unit can carry loads of up to 5 Kg, and both pan and tilt speeds are approximately 7°/second.

The input connector is carried on the mounting base of the unit and the connections to the camera and lighting assembly are carried on the “up and over” platform to minimise external cables. Outputs for various lighting assemblies can also be supplied.

The unit contains a voltage regulator providing 12V DC for the camera from a range of input voltages from 12.5 – 22V; it is normally connected so as to act as a link between the incoming multi-core cable and the camera and lighting unit (if fitted).

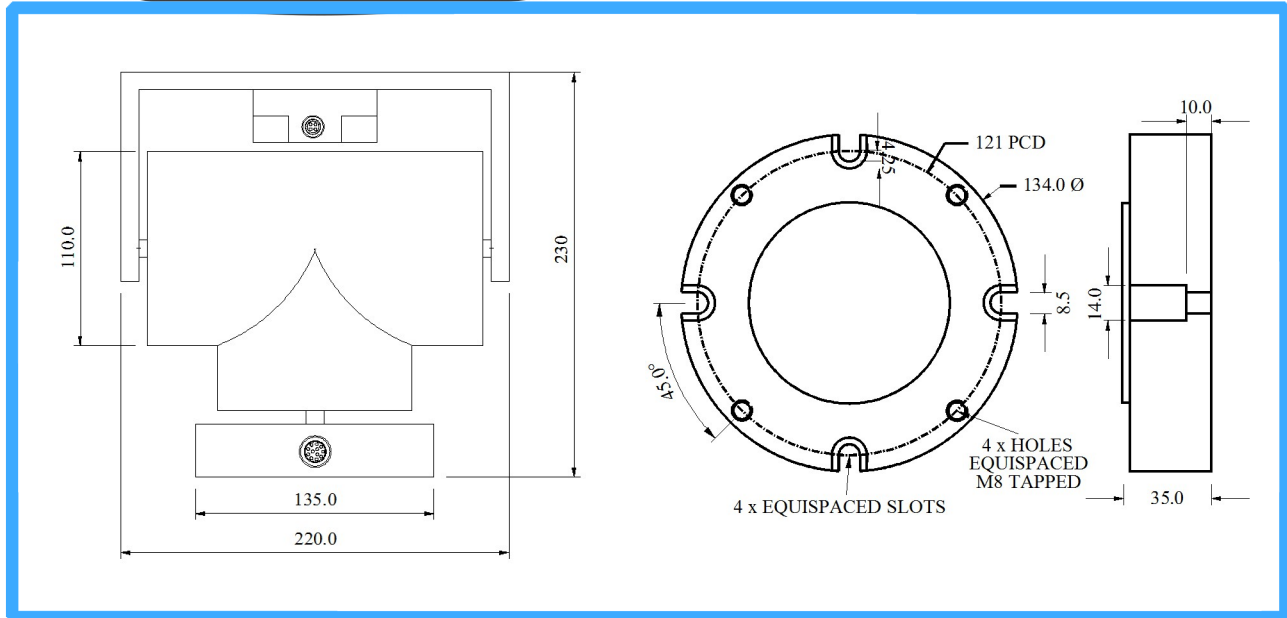
The standard unit is manufactured from black anodised aluminium alloy, but for underwater use, a stainless steel version is available.

The unit is fitted with a substantial mounting base for stability, with both tapped and clearance slots to allow a variety of mounting options. The details of this may be varied to suit customer requirements.

Adjustable stops are provided, accessible from inside the unit.

# CUSTOM CAMERAS LTD

Radiation Tolerant & Scientific Camera Systems  
Product Development & Manufacture



## TECHNICAL DATA

### PERFORMANCE

<b>PAN MOVEMENT:</b>	Approximately 360° with adjustable stops
<b>PAN SPEED:</b>	50 seconds for 360° rotation (7° per second)
<b>TILT MOVEMENT:</b>	±90° with adjustable stops
<b>TILT SPEED:</b>	25 seconds from vertically up to vertically down. (7° per second)

### ENVIRONMENTAL

<b>OPERATING TEMPERATURE:</b>	-10° - 50° C Humidity 85%
<b>RADIATION TOLERANCE:</b>	Total dose > 7 x 10 <sup>5</sup> Gy (Gamma), Dose rate > 10 <sup>4</sup> Gy/Hour
<b>INGRESS PROTECTION:</b>	IP65 or IP68, 50 metres

### DIMENSIONS AND WEIGHT

<b>DIMENSIONS:</b>	Height 230mm (from base to load platform) Width 220mm over platform excluding cables and connectors Mounting base 134mm Ø (can be varied to suit requirement)
<b>WEIGHT:</b>	5Kg
<b>LIFTING CAPACITY:</b>	5 Kg. Max.

### INTERFACING

<b>CONNECTORS:</b>	Underwater Lemo connectors
<b>MECHANICAL FIXINGS:</b>	See drawing above
<b>ELECTRONIC CONTROL:</b>	Remote pulses generated in CCU decoded by internal demultiplex board
<b>SUPPLIES:</b>	Normal: 24V DC @ 250 ma max per channel. Speed control possible by variation of voltage in CCU

**WE RESERVE THE RIGHT TO CHANGE THE ABOVE DATA WITHOUT NOTICE**