

## Microphone MCR

### FEATURES

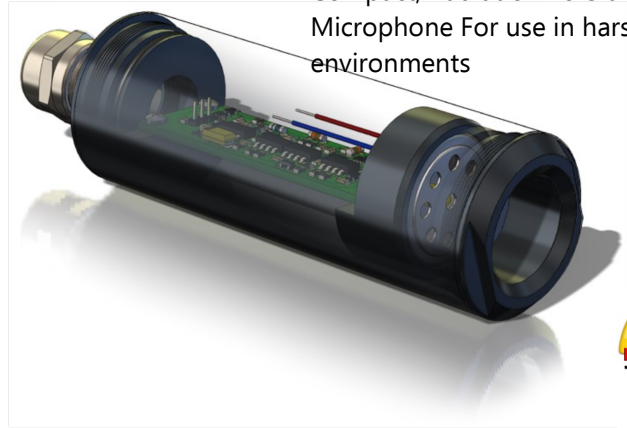
- **Robust housing machined from aluminium tube.**
- **Radiation Tolerant.**
- **Mounts easily to PT700 & PT550 Pan & Tilt Units.**
- **Loops through Pan & Tilt Unit for Simplicity.**
- **Broad Frequency Response.**
- **Internal Pre-Amplifier.**
- **Sealed to IP65.**

### DESCRIPTION

The MCR1 is a rugged radiation-tolerant microphone unit intended for industrial use, particularly in remote handling operations involving television cameras.

It is based on a piezo-electric crystal element and contains a radiation-tolerant pre-amplifier to give a low impedance output suitable for driving long cables and to give an approximately flat frequency response over an adequate range for its intended use.

The case is manufactured from anodized aluminium or stainless steel and sealed to IP65; the front of the element is protected by a conductive film which protects it from dust and moisture and also screens it from electrical interference.



Compact, Radiation Tolerant Microphone For use in harsh environments



### TECHNICAL DATA

#### PERFORMANCE

<b>PRE-AMPLIFIER SUPPLY:</b>	11 – 16V @ 14mA approx. (Unit has internal regulator)
<b>OUTPUT VOLTAGE:</b>	500mV pk-pk (Ambient Sound level 85dB @ 1KHz)
<b>FREQUENCY RESPONSE:</b>	100Hz – 5.5KHz ( $\pm 6$ dB)
<b>OUTPUT IMPEDANCE:</b>	100 $\Omega$

#### ENVIRONMENTAL

<b>OPERATING TEMPERATURE:</b>	0 - 60° C
<b>RADIATION TOLERANCE:</b>	Total dose > 10 <sup>6</sup> Gy (Gamma), Dose rate > 10 <sup>4</sup> Gy/Hour
<b>INGRESS PROTECTION:</b>	IP65

#### DIMENSIONS AND WEIGHT

<b>DIMENSIONS:</b>	34mm $\varnothing$ x 102mm long
<b>WEIGHT:</b>	Approx. 130g

#### INTERCONNECTION

<b>MCR1:</b>	Sealed gland with integral cable to 4 way Fischer plug
<b>MCR2/3:</b>	7 pole Lemo socket input, sealed gland to 7 pole Lemo plug for Petrel series camera pass-through

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