



OSPREY-C MEDIUM WAVE INFRARED DETECTOR

SELEX Galileo designs, develops and manufactures Infrared (IR) detectors at its dedicated facility in Southampton, UK. With a reputation for providing customers with the best in high performance and cost-effective technology for IR camera systems, SELEX Galileo offers a unique level of expertise.

The Osprey-C Medium Wave Infrared (MWIR) detector is a compact lightweight 384 x 288 Mercury Cadmium Telluride (MCT) Integrated Detector Cooler Assembly (IDCA). The Osprey-C MWIR detector is designed for high performance, low cost imaging in the 3 - 5 μ m waveband.

Using the SELEX Galileo MCT process, the Osprey-C MWIR detector provides the highest environmental integrity along with the superior performance of focal plane detectors.

MAIN FEATURES

- Snapshot operation
- Simple to use
- Medium Wave (MW) 3 - 5 μ m
- Small element pitch enables miniaturisation of the Dewar assembly and optics
- High electro-optic performance with low crosstalk, automatic anti-blooming at the pixel level and excellent sensitivity
- Higher operating temperature than InSb
 - Longer cooler life
 - Less in-service support
 - Lower through-life cost

KEY BENEFITS

- Low cost
- Light weight
- Compact



Detector production and test facilities

TECHNICAL SPECIFICATIONS

Format

Array	384 x 288 pixels
Pixel Pitch	20um
Active Area	7.68 x 5.76mm

Typical Performance

NETD (median)	17mK
Pixel Operability	>99.97%

Interface Parameters

Modes	Snapshot
Configuration Control	Single serial interface
Output Voltage Range	1.8V
Charge Capacity	1 x 10 ⁷ electrons
Number of Outputs	4
Pixel Rate	Up to 10MHz per output
Intrinsic MUX noise	50uV rms max
Array Operating Temperature	90 to 120K
Nominal Operating Voltage	7V
Minimum Pins for Operation	18
Number of Input Clocks	1
Window Material	Germanium
Window Thickness	1.25mm
Cold Filter Material	Silicon
Cold Filter Thickness	0.4mm

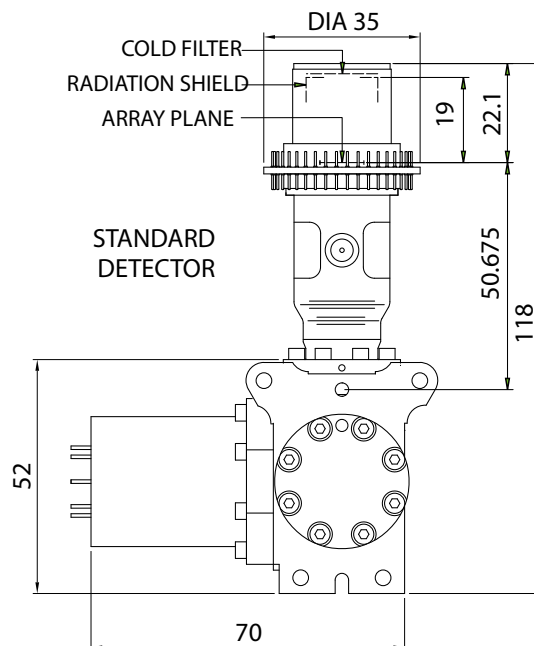
IDCA 5W

Weight	350g
Power Consumption	5W steady state
Cooling Engine	Rotary Stirling engine
Operating Temperature Range	-40 °C to +70 °C

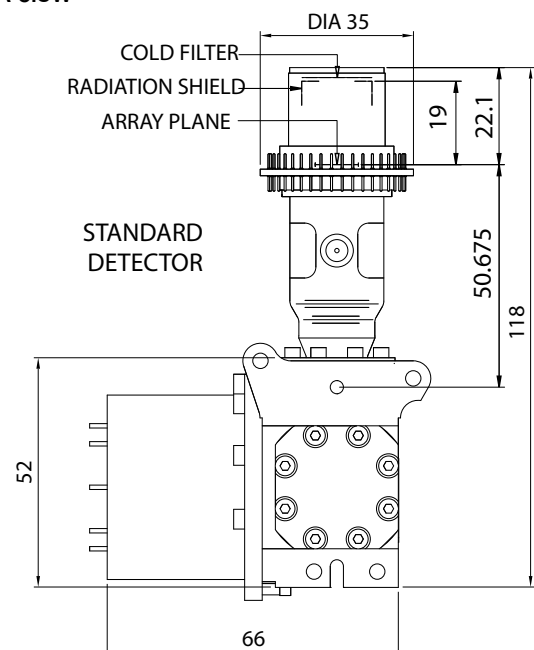
IDCA 6.5W

Weight	500g
Power Consumption	6.5W steady state
Cooling Engine	Rotary Stirling engine
Operating Temperature Range	-40 °C to +70 °C

IDCA 5W



IDCA 6.5W



All dimensions in millimetres

For more information please email Infrared.sales@selexgalileo.com

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