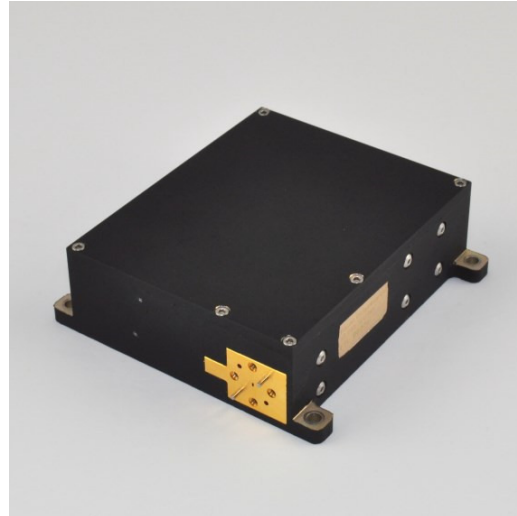


**Datasheet**
**Description**

Passive mm-wave (PMMW) imaging provides the unique capability to create high resolution images in low visibility conditions (e.g. through clothing, clouds or fog) and is therefore suitable for such applications as concealed weapon detection and aircraft landing. Passive imagers operate by detecting naturally emitted thermal (black body) radiation from an object. Products available up to 325GHz.


**Features**

- High performance radiometric sensor at 183GHz

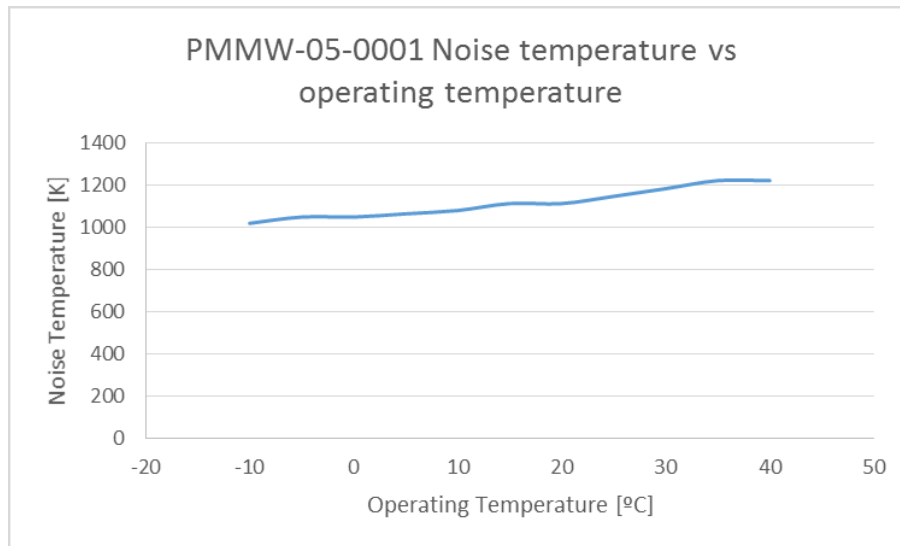
**Applications**

- Atmospheric research
- Meteorology
- Radio propagation studies
- Instrumentation
- Imaging

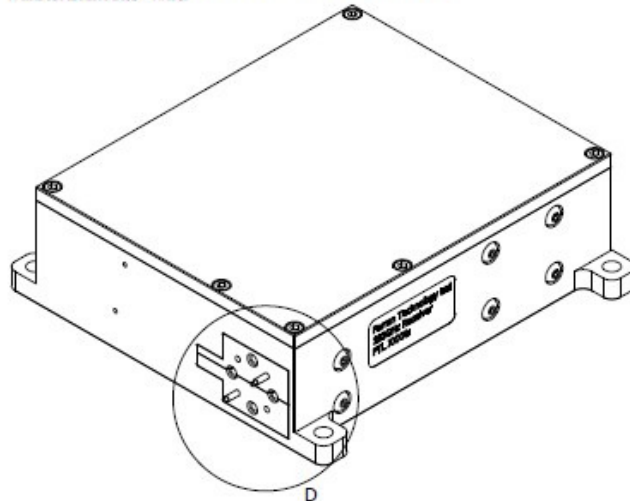
Specification	Unit	Value
Operating Frequency	GHz	183.3
RF Bandwidth	GHz	16 ( $\pm 8$ )
LO Source Frequency	GHz	91.65
Noise Temperature	K	< 1200 @ +25°C
System Gain	dB	30
Gain Flatness	dB/GHz	1.5
LO Leakage	dBc	< - 50
DRO Frequency Accuracy @ 25°C	MHz	$\pm 0.5$
DRO Frequency Stability	$\pm \text{ppm}/^\circ\text{C}$	2
RF Port	-	WR-05, UG-387/UM
IF Port	-	SMA Female
Power Requirements	-	+12 V @ 170 mA, +5 V @ 700 mA
Weight	kg	<0.6
Dimensions	mm	110 x 90 x 35
Coating Emissivity	-	0.9
Coating Solar Absorption	-	>95

**Datasheet**

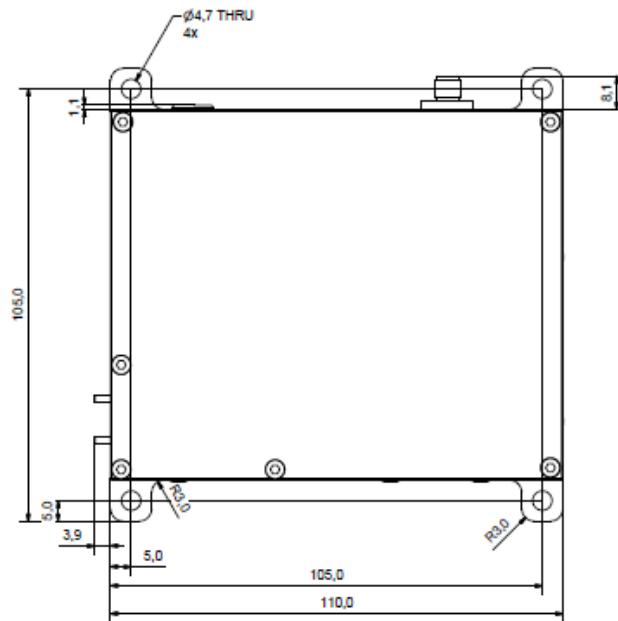
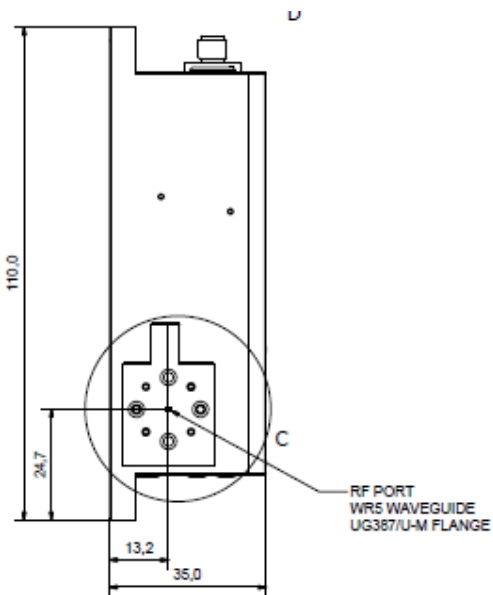
Note 1: Different centre frequency and IF bandwidth available.  
Contact factory for information.



NOTES:  
1. THE RECEIVER ENCLOSURE IS MANUFACTURED FROM ALUMINIUM ALLOY.  
2. THE ENCLOSURE FINISH IS ALOCHROME 1200 / AEROGLAZE MATT BLACK.  
3. RADIOMETER MASS < 0.6KG.



**Figure 1. PMMW-05-0001 angle view.**

**Datasheet**

**Figure 2. PMMW-05-0001 top view.**

**Figure 3. PMMW-05-0001 front view.**

Note 2:

**Datasheet**

Farran Technology reserves the right to change, without notice, the characteristic data and other specifications applied to this product. The product may be subject to Irish export restrictions.