

MCT CRYOGENIC RECEIVERS



These units are high performance, cryogenically operated HgCdTe photodetector/amplifier modules. The unit should be at LN2 temperature before turning on power to the amplifier. A funnel is provided to assist in the filling of the dewar, which is best accomplished by gradually filling and topping off over a several minute period. The amplifier has a dual gain function controlled by a switch on the backplate. The HI (up) position is x10 above the LO (down) position. Output is thru a BNC-type cable, and power is connected thru a shielded multi-wire cable terminated in a 9-pin Dsub connector or solder leads.

Part No.	Active Area	Operating Wavelength	Responsivity V/W @ pk [typ HI Gain]	Bandwidth	Detectivity [cm-Hz ^{1/2} /W]	Power Requirement	Package
MCT10-0025-E-LN	.25mm sq.	2 – 12 ⁺	10 ⁷	5Hz–50kHz STD	> 5 x 10 ¹⁰	+, -9 to 15 VDC, 60mA	LN Dewar
MCT10-005-E-LN	0.5mm sq.	2 – 12 ⁺	10 ⁶	5Hz–50kHz STD	> 5 x 10 ¹⁰	+, -9 to 15 VDC, 60mA	LN Dewar
MCT10-010-E-LN	1.0mm sq.	2 – 12 ⁺	10 ⁶	5Hz–50kHz STD	> 5 x 10 ¹⁰	+, -9 to 15 VDC, 60mA	LN Dewar
MCT10-020-E-LN	2.0mm sq.	2 – 12 ⁺	10 ⁵	5Hz–50kHz STD	> 5 x 10 ¹⁰	+, -9 to 15 VDC, 60mA	LN Dewar
MCT14-0025-E-LN	.25mm sq.	2 – 15 ⁺	10 ⁷	5Hz–50kHz STD	> 4 x 10 ¹⁰	+, -9 to 15 VDC, 60mA	LN Dewar
MCT14-005-E-LN	0.5mm sq.	2 – 15 ⁺	10 ⁶	5Hz–50kHz STD	> 4 x 10 ¹⁰	+, -9 to 15 VDC, 60mA	LN Dewar
MCT14-010-E-LN	1.0mm sq.	2 – 15 ⁺	10 ⁶	5Hz–50kHz STD	> 4 x 10 ¹⁰	+, -9 to 15 VDC, 60mA	LN Dewar
MCT14-020-E-LN	2.0mm sq.	2 – 15 ⁺	10 ⁵	5Hz–50kHz STD	> 4 x 10 ¹⁰	+, -9 to 15 VDC, 60mA	LN Dewar
MCT20-005-E-LN	0.5mm sq.	2 – 20 ⁺	10 ⁵	5Hz–50kHz STD	> 1.0 x 10 ¹⁰	+, -9 to 15 VDC, 60mA	LN Dewar
MCT20-010-E-LN	1.0mm sq.	2 – 20 ⁺	10 ⁵	5Hz–50kHz STD	> 0.5 x 10 ¹⁰	+, -9 to 15 VDC, 60mA	LN Dewar

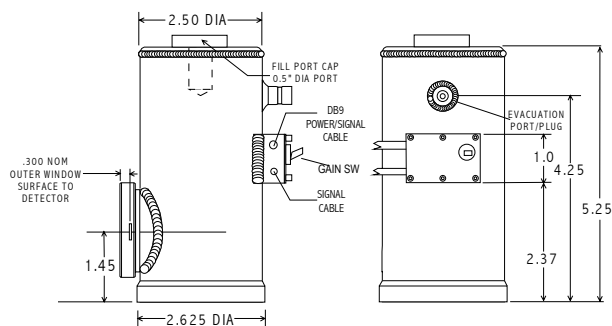
Available Options Include:

- User specified FOV (60° STD) - Cold filters for sensitivity enhancement - Custom Geometries (linear arrays).

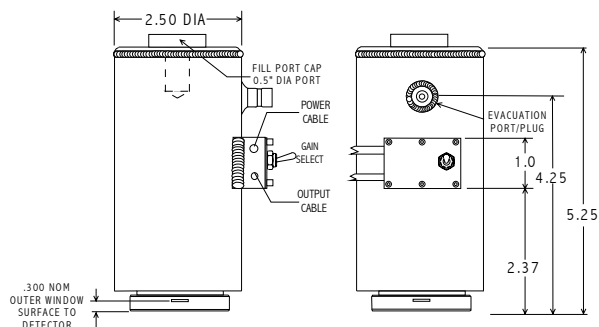
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DEWAR OPTIONS

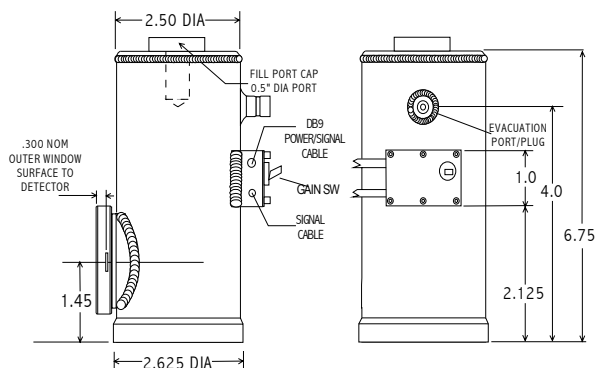
LN4



LN5



LN6



LN7

