



## Refocusing couplers for Dewar devices

meant for the coupling of IR-fiber optical cables with SMA termination to MCT/ InSb detector installed inside LN-cooled Dewar with side window

- ❑ The simplest lens coupler is a standard or customized construction which is fixed on the side window of LN-cooled Dewar and adjustable in 3 dimensions - X-Y for the lens & Z - for connector position.
- ❑ Advanced version of the coupler is based on pre-aligned parabolic mirrors to eliminate chromatic aberrations and includes purging option to avoid atmospheric disturbance in spectral details of the object
- ❑ Both couplers have SMA-adaptor for infrared fiber optical cable with SMA-termination
- ❑ Two types of infrared cables can be provided for different spectral range detectors and lasers

## SPECIFICATION OF DEWAR COUPLERS\*

Coupler Type	Lens coupler	Mirror coupler
Optic elements	ZnSe lens 3-5 or 8-12 $\mu$ m AR-coating	Two parabolic mirrors
Dimensions	Diameter 55 mm Length 40 mm	150*120*100mm, space for Dewar and pre-amplifier included
Alignment options	Angular translation stage $\pm 2.5^\circ$ in both orthogonal axes; Z-translation stage $\pm 5$ mm	X-Y alignment of the mirror inside the coupler, Z-translation of the Dewar.
Other options		Purging is possible