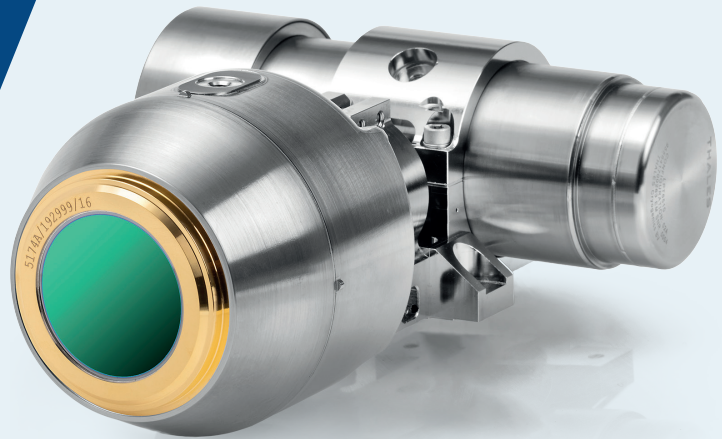


CRYASSY Access

Compact cryogenic assembly developed for Earth observation space applications.



CRYASSY Access is a cryogenic assembly comprising a Pulse-Tube LPT6510 and a cryostat, enabling the integration of one or more infrared detectors.

CRYASSY Access is a modular IDCA (Integrated Dewar Cooler Assembly) detector subassembly. The cryogenic assembly has been designed to accommodate a wide range of infrared detectors up to 2K² format at 15 μm pitch.

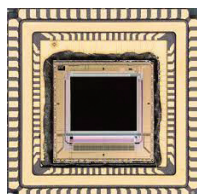
CRYASSY Access has been designed for small satellites, enabling Earth observation from SWIR to LWIR. With its modular focal plane, it can address a wide range of applications, from multispectral to broadband hyperspectral instruments.

CRYASSY Access simplifies the design of cryogenic infrared instruments with its integrated design and unique mechanical interface.

Some examples of compatible detectors:



LYNRED Cobra

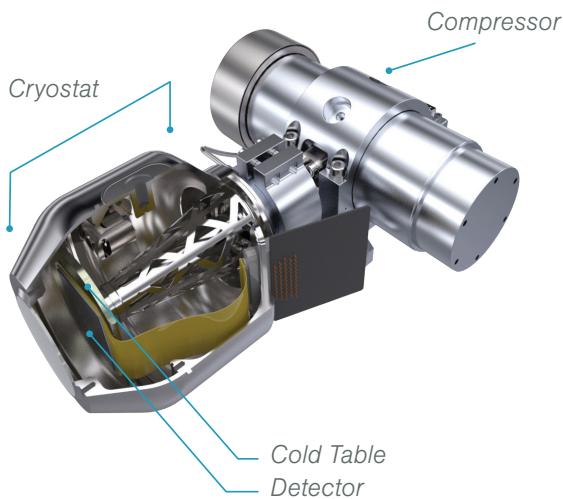


Courtesy of Leonardo image



LYNRED NGP

»»» Simplified design



- ▶ **Infrared from SWIR to LWIR.**
- ▶ **Adjustable draw and opening.**
- ▶ **Multispectral and hyperspectral observation.**
- ▶ **Numerous compatible welded and vacuum-sealed detectors.**

»»» Application fields

| | |
|-------------------------------|---|
| Environment | Mapping of greenhouse gases, point sources of gas, biodiversity, water content of vegetation, fire detection. |
| Geosciences | Mineral mapping, mineral exploration. |
| Agriculture | Soil health, crop infestation detection. |
| Insurance/Finance | Natural disasters, crop forecasting. |
| Urban | Urban climate, air quality. |
| Security & Defense | Vehicle tracking, proximity detection, bathymetry, trafficability, activity measurement (military bases) target analysis. |

»»» Technical datas

| | |
|--|--|
| <p>Mechanical characteristics</p> <ul style="list-style-type: none"> ▶ Total mass: 3.6 kg ▶ Footprint: 181 x 104 x 264 mm ▶ Low vibration level | <p>Electrical data</p> <ul style="list-style-type: none"> ▶ Maximum cryocooler electrical power: 72 W ▶ Electrical interface: micro-D jusqu'à 2 x 100 pins |
| <p>Thermal characteristics</p> <ul style="list-style-type: none"> ▶ Available cooling capacity: 1.2 W @ 57 K @ -12°C ▶ Control stability: 10 mK ▶ Service life: 10 years ▶ Operating T° range: -30°C ; 50°C ▶ Non-operating T° range: - 40°C ; 70°C ▶ Ionizing radiation: 30 krad | <p>Sensor interface</p> <ul style="list-style-type: none"> ▶ Molybdenum cold table, Ø max. 68 mm ▶ Sensors up to 2000 x 2000 pixels, 15 µm ▶ Customizable opening and pull |