

Cryogenic Evaluation Kit Components

The cryogenic evaluation kit includes all of the key components that are required to implement cooled testing on an Oxygen®-based FPA. If this configuration does not meet your exact requirements, custom configurations can be ordered on request.

Component	Description
Oxygen Compact Electronics Evaluation Kit	Support Board and FPGA system. Connects to host PC with USB and Camera Link cables.
Large LN2 pour-fill Dewar cryostat	Dewar cryostat with four DB37 hermetic feedthrough connectors. Includes heater and 1.6" aperture. The unit includes a daughter board that accommodates an 84 pin LCC packaged Oxygen-based FPA.
2" Germanium window	Suitable for MWIR and LWIR FPAs. Other window options available on request.
Oxygen DROIC Chip-on-board (COB) module	This module can be connected to the Oxygen compact electronics eval kit support board to bring up the system quickly with the DROIC for warm testing.
Cables	Cables to connect Support Board to Host PC and Support Board to the Dewar cryostat are supplied with kit.
Configuration file	Excel file contains configuration data that can be adjusted on the PC host and transmitted across USB interface to the Oxygen internal registers.

Availability and Contact Information

Part number: RD0092-Do8x-CK00

Available to order now

Contact sales for pricing information:
products@senseeker.com

Flexibility and Customization

Optional components are also available to order from Senseeker to enable customization of configuration and incremental features. A Germanium window is supplied with the kit that is suitable for MWIR and LWIR. Other window types are available that may be better suited for the detector wavelength of your FPA.

The Oxygen Cryogenic Evaluation Kit has been configured to support the most popular cold test solution options for Oxygen RD0092 based FPAs. Other options are available to meet your specific requirements. Senseeker also offers closed-cycle cryostats and thermoelectric units. You can 'configure your own' options using the Cryostat Configuration Questionnaire on the Senseeker website at: <https://senseeker.com/store.htm>

The electronic Support Board connects to a host PC that contains a commercial frame grabber card. The PC and the frame grabber are not supplied with the kit and should be purchased separately (Senseeker has had good experience with the EPIX PIXCI 80b frame grabber for this purpose).

The Oxygen Cryogenic Evaluation kit is supplied in a robust Pelican case so that the equipment can be transported safely. For example, the Dewar cryostat may be conveyed for reconfiguration by Senseeker in to support a different or new type of FPA in the future. Window and aperture sizes may also be changed as necessary to support different optics, as may the lens mounting mechanism.

