

LN₂, CLOSED CYCLE and TEC DEWAR ASSEMBLY PRICE LIST

(Effective June 15, 2011)

Each Dewar assembly comes with one mother-daughter board set with interconnecting cables. The assembly does not include the FPA. Other daughter boards may be used in the same cold clamp assembly provided their LCCC package is the same thickness as the initial package for which the Dewar was configured.

Dewar configurations are available for infrared focal plane arrays from most major suppliers. Custom configurations are also available.

LN₂ POUR FILL and TEC DEWAR ASSEMBLIES (Lid must be purchased separately.)

Part Number	Description	Unit Price
DWR-LN2	Standard LN ₂ pour fill dewar assembly.	\$ 8,295.00
DWR-LN2-124LCCC	LN ₂ pour fill Dewar with 100 or 124 pin LCCC and 4 DB25 Hermetic feedthroughs.	\$ 11,710.00
DWR-LN2-SMA	LN ₂ pour fill Dewar assembly with 20 SMA Hermetic feedthroughs.	\$ 16,100.00
DWR-TEC	Dewar with thermo-electric cooler for uncooled FPA. Includes TEC controller, four soldered DB25 hermetic connectors and cryosorb.	\$ 13,085.00
DWR-OPT-2L	Option for two-liter Dewar shell.	\$ 1,000.00
DWR-OPT-LN2-STF	Option for stiffened LN ₂ Dewar shell.	\$ 1,500.00
DWR-OPT-LN2-DB37	Option for DB37 connector configuration for DWR-LN2-124LCCC.	\$ 1,800.00
DWR-OPT-LN2-HTR	Option for temperature controlled heater. Includes temperature sensor and heater interface cable to Lakeshore 331. (Option for new Dewar, call for pricing for existing Dewar)	\$ 760.00

Twenty-two stainless steel coax lines or less are standard. Each additional line is \$32.00.

LN₂ POUR FILL and TEC DEWAR LIDS

Part Number	Description	Unit Price
DWR-FL-W1.0AR	3u-12u 1" diameter O-ring sealed window.	\$ 985.00
DWR-FL-W1.01-5AR	1u-5u 1" diameter O-ring sealed window.	\$ 985.00
DWR-FL-W2.0AR	3u-12u 2" diameter O-ring sealed window.	\$ 1,325.00
DWR-FL-W1.0CSTMR	Customer supplies 1" diameter window.	\$ 710.00
DWR-FL-W2.0CSTMR	Customer supplies 2" diameter window.	\$ 820.00
DWR-FL-W1.0AR-124	Dewar lid with plate, 1" window for 124 pin LCCC.	\$ 1,710.00
DWR-FL-W2.0AR-124	Dewar lid with plate, 2" window for 124 pin LCCC.	\$ 2,040.00
	<i>Custom Dewar lid.</i>	Call

CLOSED CYCLE DEWAR ASSEMBLY (Lid must be purchased separately.)

Part Number	Description	Unit Price
DWR-CC	Standard closed cycle dewar, soldered connectors and cryosorb.	\$ 17,800.00
DWR-CC-124LCCC	Standard closed cycle dewar, soldered connectors and cryosorb for 100 or 124 pin LCCC.	\$ 26,400.00
DWR-CC-LG5	Large format closed cycle dewar, soldered connectors and cryosorb for 100 and 124 pin and custom LCCC.	\$ 31,350.00
DWR-OPT-LG5-DB37	Option for DB37 connector configuration for DWR-CC-LG5	\$ 1,800.00

Constantan/Kapton tape cable is used for closed cycle dewar assembly. Assembly includes expander adapter and heat sink, but excludes cryocooler.

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CLOSED CYCLE DEWAR LIDS

Part Number	Description	Unit Price
CC-FL-W1.0AR	3-12u 1" diameter O-ring sealed window.	\$ 2,710.00
CC-FL-W2.0AR	3-12u 2" diameter O-ring sealed window.	\$ 3,810.00
CC-FL-LG5	3-12u 2" diameter O-ring sealed window for DWR-CC-LG5.	\$ 5,445.00
	<i>Custom Dewar lid.</i>	Call

ADDITIONAL DAUGHTER BOARDS Additional daughter boards may be used in the same cold clamp assembly provided their LCCC package is the same thickness as the initial package for which the dewar was configured.

Part Number	Description	Unit Price
DWR-OPT-DBACUST	Option for custom daughter board design (up to 4 layers).	\$ 1,500.00
DBA-68	Daughter board with 68 pin LCCC.	\$ 1,195.00
DBA-84	Daughter board with 84 pin LCCC.	\$ 1,195.00
DBA-100	Daughter board with 100 pin LCCC.	\$ 1,295.00
DBA-124	Daughter board with 124 pin LCCC.	\$ 1,595.00
DBA-TUB	Daughter board for 62 pin TUB	\$ 1,195.00
	<i>Daughter board with custom socket.</i>	Call

ADDITIONAL INTERFACE CABLES

Part Number	Description	Unit Price
COAX-STD	Stainless micro-coax internal lines.	\$ 32.00
CBLE-STD	Standard cable set. Maximum of 22 coax lines.	\$ 700.00
CBLE-CUST	<i>Custom cable set.</i>	Call
CBLE-FLEX	Manganin/Kapton internal flexible lines.	\$ 385.00

DEWAR ACCESSORIES

Part Number	Description	Unit Price
DWR-FLTWHL	Four-position cold filter wheel for DWR-LN2.	\$ 3,515.00
DWR-CS1.0-STD	1" diameter standard cold shield.	\$ 350.00
DWR-CS1.6-STD	1.6" dia. standard cold shield (includes 1" cold filter holder)	\$ 650.00
DWR-CS2.0-STD	2" dia. standard cold shield (includes 1" cold filter holder)	\$ 650.00
DWR-CS-124	Cold shield and cryosorb assembly for DWR-CC-124.	\$ 1,650.00
DWR-CS-CUST	<i>Custom cold shield.</i>	\$150.00+NRC
DWR-CN	DB25 replacement connector.	\$ 275.00
DWR-APFLAT	Flat aperature 1" outer diameter.	\$ 30.00
DWR-APBLANK	Aperature blank, 1.0", 1.6" or 2.0" outer diameter.	\$ 125.00
DWR-APCUST	<i>Custom aperture.</i>	Call
DWR-HS-CUST	<i>Custom heat sink.</i>	Call
DWR-LENMT-CUST	<i>Custom lens mount assembly.</i>	Call

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COLD CLAMP ASSEMBLY

Part Number	Description	Unit Price
DWR-CLDCLP-STD	Cold clamp, dewar mount pedestal, mother board, daughter board, optics mounting posts, cold shield and one cold aperture. Twenty two 8.75" long pre-tinned stainless coax lines with pin inserts on one end.	\$ 4,560.00
DWR-CLDCLP-TUB	"Tub-style" FPA substrate carrier.	\$ 8,960.00
DWR-CLDCLP-BOT	Cold clamp bottom. <i>Specify 68, 84, or 100-pin carrier.</i>	\$ 910.00
DWR-CLDCLP-TOP	Cold clamp top. <i>Specify 68, 84, or 100-pin carrier.</i>	\$ 910.00

ENGINEERING SUPPORT LABOR

Part Number	Description	Unit Price
CIR-ELABOR	Engineering labor for NRE or technical support.	\$ 150.00/Hr.

DISCLAIMER

AS WITH ANY GENERAL PURPOSE TEST SYSTEM, THE SETUP FOR OPERATING AN FPA OR OTHER DEVICE IS VERY SPECIFIC FOR THAT DEVICE. IMPROPER SETUP AND OPERATIONS CAN DAMAGE AND EVEN DESTROY THE DEVICE BEING TESTED. IT IS IMPERATIVE AND CUSTOMARY FOR THE USER TO VERIFY PROPER SIGNAL LEVEL AND CONNECTIONS BEFORE INSTALLING A REAL DEVICE. MOST USERS VERIFY SYSTEM SETUP USING AN EXPENDABLE PART SO THAT IF AN IMPROPER SETUP IS USED A GOOD PART WILL NOT BE DAMAGED. THE USER UNDERSTANDS IN USING THIS EQUIPMENT THAT THEY ARE SOLEY LIABLE FOR ANY DAMAGE THAT MAY RESULT TO THE DEVICE BEING TESTED OR OPERATED.

LIMITED WARRANTY

WARRANTY OF EQUIPMENT EXCLUDES THE DEVICE BEING TESTED OR OPERATED.

SE-IR CORPORATION WARRANTS ITS PRODUCTS TO OPERATE IN ACCORDANCE WITH ITS SPECIFICATIONS FOR A PERIOD OF 1 YEAR FROM DATE OF RECEIPT. THIS WARRANTY EXTENDS ONLY TO THE PARTS MANUFACTURED OR FABRICATED BY SE-IR CORPORATION OR C. B. INC. SOFTWARE PROVIDED WITH THE CAMIRA SYSTEM IS COVERED UNDER THE TERMS OF THE SOFTWARE LICENSE AGREEMENT. PARTS PROVIDED BY CUSTOMERS OR OTHER MANUFACTURERS ARE SOLELY THE RESPONSIBILITY OF THE RESPECTIVE SUPPLIER; THIS INCLUDES BUT IS NOT LIMITED TO LENS AND FILTER ASSEMBLIES. LIABILITY IS LIMITED SOLELY TO THE REPAIR OF DEFECTIVE EQUIPMENT MANUFACTURED OR FABRICATED BY SE-IR CORPORATION OR C. B. INC. IN NO EVENT SHALL SE-IR CORPORATION OR C. B. INC. BE LIABLE FOR OTHER DAMAGES RESULTING FROM THE MALFUNCTION OR DEFECTIVE OPERATION OF THE EQUIPMENT INCLUDING BUT NOT LIMITED TO DAMAGE TO THE DEVICE BEING TESTED OR OPERATED. IN ANY EVENT SE-IR CORPORATION'S TOTAL LIABILITY SHALL NOT EXCEED THE PURCHASE PRICE OF THE SYSTEM. NO WARRANTY OF EQUIPMENT IS PROVIDED FOR ANY EQUIPMENT NOT PAID FOR IN FULL.

Warranty 1-year parts and labor does not include normal wear and tear, abuse or modifications made by customer.
 Terms are net 30 days on approved credit. All orders are F.O.B. Goleta, CA unless quoted otherwise.
 SE-IR Corporation reserves the right to change prices or configuration at any time without notice.