

Data sheet

Item	Qty.	Description	Model #
Closed Cycle Cryostat < 3K			
1	1	Closed Cycle Cryostat, Model CS210SE-FMX-12 Cryocooler Minimum Temperature: < 3 K (Sample temperature depends on experimental heat loads) Cryocooler Maximum Temperature: 355 K Expander weight: 13.1 Kg. (Light weight for easy manipulation). Cryostat Cooling Power: 1st Stage (for radiation load and fast cooldown) : 60 Watts at 77K. 2nd Stage (for experimental heat load): 1.1 Watts at 4.2 K Bolt On Stainless Steel Instrumentation Skirt with: Two instrumentation feedthroughs for 10-Pin or 19 pin connectors. High Conductance NW-25 flange for evacuation. ISO-160 Flange with Claw Clamps	CS210SE-HV 23-A036
2	1	Helium Compressor, Water cooled Rugged construction with low water flow rate. Voltage specification with Transformer: 380-415V, 3Ph, 50 Hz	ARS-10HW
3	1	Helium hoses, 1 set. 3/4" [19 mm] by 20' [6 m] Superflex	HE-STD-75-20
4	1	Electric Cord, 21ft	
5	1	Narrow Gap Optical Shroud for 204 Series Cryocoolers (Dwg 239311-A) Machined Aluminum Construction with Pop-Off Optical Block 1.97" [50mm] Width 2x window ports, 180° apart. 1.0" [25mm] Clear View #/F 1.25 Compact 50mm width for Magnet Application	FMX-12 23-A036 152273, 198056, 239311-A
6	1	Optical Radiation Shield for DE-204 series Cryocoolers (For Modified GMX-12) 2x holes 180deg apart, with <u>Sapphire cold windows</u> Aluminum Construction	RSF-12 23-A036
7	3	High Purity Quartz (SiO2) Window for Optical Measurements 1.5" [38 mm] Dia. 2mm thick 1" Clear view	W-X12-HPQ-1

8	2	Calibrated Cernox Sensor - 1.4K to 325K	CX-1030-SDHT-1.4L
9	1	Cryogenic Accessory Kit Instrumentation Skirt O-rings 1 Oz Vacuum Grease 1 Oz Cryocon Grease Indium Foil 4" x 4" x 0.005" [102 mm x 102 mm x 0.127 mm] Indium Wire 1mm dia 25cm long Additional window mounting hardware	KT-ACS-210-X1
10	1	10-Pin Instrumentation feedthrough	FT-STD-PN10-1
11	1	Instrumentation for sample temperature control in high Magnetic Fields 10-Pin hermetic feedthrough. 1x 50 Ohm Durable metallized thermfoil heater. 1x Calibrated Cernox sensor installed at the cooler tip for temperature control. (CX-1030-SD-1.4L) 1x Calibrated Cernox sensor installed with 4" [102 mm] free length for accurate sample temperature measurement. (CX-1030-SD-1.4L)	CI-MAG-2-50
12	1	Temperature Controller integrated with the cryostat: Interconnecting cable to cryostat is supplied. Dual Channel Sensor Input Dual heater control loops IEEE-488 and USB PID control zones. Autotune 75 Watts heater power	LS-335
13	1	Vacuum Shroud: FMX-1SS, 5 Optical Ports	CUSTOM SKRB250230.1
14	1	Radiation Shield , FMX-1 (to fit inside the Vacuum Shroud FMX-1SS)	Modified, PN239313
15	5	High Purity Quartz (SiO2) Window for Optical Measurements 1.62" [41 mm] Dia. 2mm thick 1.25" [32 mm] Clear view	W-X1-HPQ
16	1	Narrow Gap Optical Shroud for 202 Series Cryocoolers (Customer to provide information on previous order for 202 System) Dwg 152030 Machined Aluminum Construction 1.42" [41mm] Width 2x window ports, 180° apart. 1.0" [25mm] Clear View #/F 1.25	DMX-12

17	1	Optical Radiation Shield for 202 series Cryocoolers 2x holes 1800deg apart Aluminum Construction	RSD-12
18	3	High Purity Quartz (SiO₂) Window for Optical Measurements 1.5" [38 mm] Dia. 2mm thick 1" Clear view	W-X12-HPQ-1
19	2	8-pin Transmission Sample holder 8x pins for measurement wire anchoring 0.39" [10 mm] Clear view 0.5" Dia 1mm Thick Sapphire Window Nickel Plated OFHC Copper 1/4-28 Threaded Stud Attachment	SHOE-1B
20	2	8-pin Sample holder 8x pins for measurement wire anchoring Nickel Plated OFHC Copper 1/4-28 Threaded Stud Attachment	SHE-1B
21	2	Flat Plate Sample Holder for Side windows 0.75" x 1" sample area 1/4-28 Threaded Stud Attachment	SHNO-1B
22	2	Pogo Pins Sample Holder Optical Electrical Characterization	SHE-PP-12
19	1	24 Month Warranty	
20	1	Installation Kit and Technical Manuals	
21	1	Export Packagin (rugged wood case)	

Vacuum system			
01	1	Leybold Turbolab Core Turbo Vacuum Pumping System. DN-63: 90 L/s Ultimate pressure: 8x10 ⁻⁸ mbar Two stage rotory pump. Backup. UHV vacuum gauge Vacuum manifold Vacuum valve, high conductance Vacuum hose, 1 m long, stainless bellows	VPS-3a
02	1	Floor stand for the 210 series Cold heads Supports the cryocooler off of the optical table. Used often with the GMX-20 Ultra-Low Vibration Interface	STND-GMX-20-1

