

## QUOTATION

Reference No: Qi21.2117.8 it 5Pa  
 Date: 23/12/2021

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Payment Terms: 30 days after technical testing  
 Quote Validity: 60 Days  
 Shipment: 14-16 Weeks  
 After Drawing Approval  
 VAT (IVA): Not included

Item	Qty.	Description	Model #	Price
1	1	<b>Closed Cycle Cryostat, Model CS210SE-GMX-3AL</b> Bare Cryocooler Minimum Temperature: < 3.0 K (Sample temperature depends on experimental heat loads) Cryocooler Maximum Temperature: 355 K Expander weight: 7.1 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 Cryostat Cooldown Time: 80 minutes Bolt On Stainless Steel Instrumentation Skirt with: Three instrumentation feedthroughs for 10 pin or 19 pin connectors. High Conductance NW-25 flange for evacuation. ISO-160 Flange with Claw Clamps Cryocooler operable in any orientation (tip-down for best performance)	CS210SE-HV	
2	1	<b>Helium Compressor, Water cooled</b> Voltage specification: 380-415V, 3 Ph, 50 Hz	ARS-10HW	
3	1	<b>Helium hoses, 1 set of two, 3/4" 18m [60 ft]</b>	HH-STD-75-60	
4	1	<b>Bare Copper (Nonmagnetic) Closed Radiation shield</b> No holes Bare Copper (OFHC) Construction Accommodates samples up to 125mm diameter by 198mm long	RSG-3 CUSTOM Ref. 218007	
5	1	<b>Aluminum (Nonmagnetic) Closed Vacuum Shroud for 210 Series Cryocoolers</b> Welded Aluminum Construction Large Sample space	GMX-3-AL CUSTOM Ref. 218007	
6	1	<b>Instrumentation for sample temperature control</b> 10 Pin hermetic feedthrough. 1x 50 Ohm Durable metallized thermofoil heater. 1x Curve Matched Silicon Diode sensor installed at the cooler tip for temperature control. (LS-DT-670B-SD) 1x Calibrated Silicon Diode sensor installed with 6" free length for accurate sample temperature measurement. (DT-670-SD-1.4L)	CI-STD-1-50	

7	1	<b>DC Wiring Package</b> 1x 32-pin feedthrough 24x low-heat load Phosphor Bronze Wires, 36 AWG, Kapton Insulated, thermalized to 1st and 2nd stage of cryocooler with 8" free length	CUSTOM W-INST-2-36 FT-STD-PN32-1	
8	1	<b>RF Wiring Package</b> 16x SMA Feedthroughs with outer shields grounded to cryostat 16x High frequency coaxial cables (FM-F086) with SMA connections, installed in cryostat with cables <u>thermalized to 1st stage only</u> on bulkhead	CUSTOM P-M12-TEE FT-SMA-BH-8-G Ref. 193132	
9	1	<b>16x High frequency coaxial cables (FM-F086) with SMA connections, ships loose (uninstalled from cryostat) for future connection from stage 1 to 2</b> <u>Note: connecting these wires will add further heat load to 2nd stage and base temperature is not guaranteed</u>	CUSTOM	
10	1	<b>Custom Sample Holder with Electrical Isolation and SMA Thermalization</b> Horizontal Circular Sample Plate, Ø115mm x 15mm thick Custom hole pattern (dimensions TBD by customer) Custom electrical isolation spacer, Kapton or similar Custom grounding wire added to DC feedthrough 16x removable SMA bulkheads installed for future RF cable connection Four #4-40 bolt pattern for mounting to cold tip <u>Note: connecting this item will add further heat load to 2nd stage and base temperature is not guaranteed</u>	CUSTOM	
11	1	<b>Table Top Stand, Vertical</b> Extruded Aluminum with mounting fork for 210 cryostats	CUSTOM	
12	1	<b>Temperature Controller</b> integrated with the cryostat: Interconnecting cable to cryostat is supplied. Dual Channel Sensor Input Dual heater control loops with 75 Watts heater power IEEE-488 and USB PID control zones with autotuning	LS-335	
13	1	<b>Installation Kit and Technical Manuals</b>		
14	1	<b>Export Packing</b> (rugged wood case) <u>Note: Cryostat Base Temperature will be &lt;4.0K at the cold tip with the equipment included as written above (RF cables thermalized to 1st stage only) and no other heat loads applied. Additional options and customizations may further increase base temperature.</u>		

**Total Price Cryostat, Delivered Duty Paid € 74.995**

*In the case of a your welcome order, please send it to:*

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