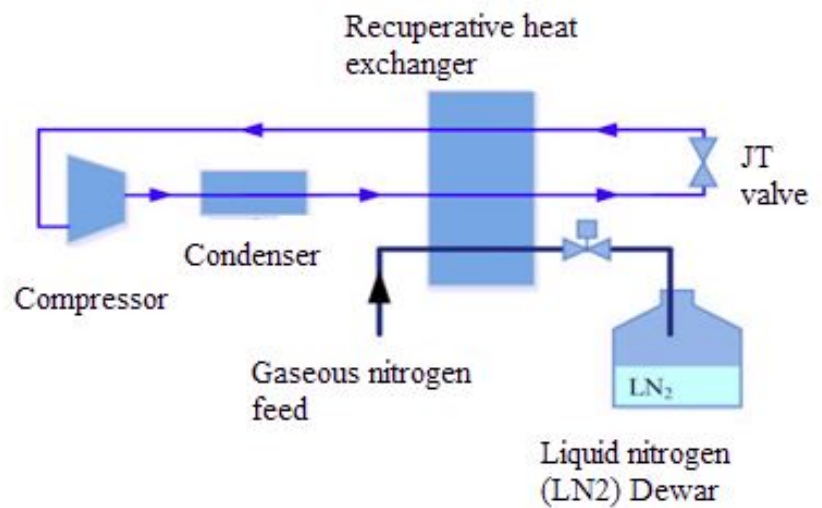


Q1.3 – Small-Scale Nitrogen Liquefier Series



Features:

Quantum Technology Corporation offers a wide range of small-scale Nitrogen Liquefiers with liquefaction capacities between 10 and 1000 liters/day or larger. Our liquefiers use advanced Mixed Refrigerants (MR) in a Joule – Thomson (JT) refrigerator system, driven by a single compressor. Compared with traditional cold-heads and Stirling cryocoolers, the MR-JT systems have higher liquefaction efficiency and improved reliability, due to the use of quasi-standard refrigeration equipment.



TECHNICAL PARAMETERS SMALLER UNITS

	Q1.3 - LN20	Q1.3 - LN50	Q1.3 - LN120
Production Rate (liters per day)	20	50	120
Electrical Rating	220-220-230/240 VAC, 1 Ph, 50 Hz 208-240 VAC, 1Ph, 60 HZ		380/415VAC, 3Ph, 50 Hz 460-480VAC, 3 Ph, 60 Hz
Power Consumption @50 HZ	1.2 kW	3kW	7kW
Dimensions (WxLxH, mm)	560x750x1500	900x900x1500	750x960x1950
Weight (kg/lbs)	110/243	220/486	310/685
Cooling Water Flow Rate (m3/h) at max 25°C	0.5	1.6	3
Ambient temperature range (°C)	5-40		
Noise level at 1 meter (dB)	<65		
Nitrogen Requirement			
Flow Rate (m3/hr)	1.5	3	6
Purity	99%		
Dew Point (°C)	<-70		
Pressure (barg)	>8		

TECHNICAL PARAMETERS LARGER UNITS

	Q1.3 - LN240	Q1.3 - LN500	Q1.3 - LN1000
Production Rate (liters per day)	240	500	1000
Electrical Rating	380/415VAC, 3Ph, 50 Hz 460-480VAC, 3 Ph, 60 Hz		
Power Consumption @50 HZ	10	18	32
Dimensions (WxLxH, mm)	1400x1000x2000	1500x1200x2000	1600x1400x2000
Weight (kg/lbs)	500/1100	720/1600	800/1770
Cooling Water Flow Rate (m3/h) at max 25°C	5	8	10
Ambient temperature range (°C)	5-40		
Noise level at 1 meter (dB)	<65		
Nitrogen Requirement			
Flow Rate (m3/hr)	12	25	50
Purity	99%		
Dew Point (°C)	<-70		
Pressure (barg)	>8		