



PULSE TUBE CRYOCOOLERS

		4 K Cryocoolers					
		RP-062B2	RP-062B2S	RP-082B2	RP-082B2S	RP-182C2S	RP-222B3S NEW
2nd Stage Capacity	50 Hz	0.5 W @ 4.2 K	0.4 W @ 4.2 K	1.0 W @ 4.2 K	0.9 W @ 4.2 K	1.5 W @ 4.2 K	1.9 W @ 4.2 K
	60 Hz	0.5 W @ 4.2 K	0.4 W @ 4.2 K	1.0 W @ 4.2 K	0.9 W @ 4.2 K	1.5 W @ 4.2 K	2.0 W @ 4.2 K
1st Stage Capacity	50 Hz	30 W @ 65 K	25 W @ 65 K	40 W @ 45 K	35 W @ 45 K	42 W @ 45 K	50 W @ 45 K
	60 Hz	30 W @ 65 K	25 W @ 65 K	40 W @ 45 K	35 W @ 45 K	42 W @ 45 K	55 W @ 45 K
Minimum Temperature ¹		<3.0 K	<3.0 K	<3.0 K	<3.0 K	<2.8 K	<2.8 K
Cooldown Time (min) ¹	50 Hz	<100	<100	<80	<90	<60	<60
	60 Hz	<90	<90	<80	<90	<60	<60
Weight		23.2 kg (51.1 lbs.)	23.5 kg (51.8 lbs.)	25.0 kg (55.1 lbs.)	26.0 kg (57.3 lbs.)	28.0 kg (61.7 lbs.)	30.0 kg (66.1 lbs.)
Water-Cooled Compressor Options							
E-77NL/NH NEW		•	•				
F-70L/H				•	•		
F-100L/H						•	•
Air-Cooled Compressor Options							
FA-70L/H				2	2		

1 Lowest temperature and cooldown time are for reference only.
2 Reduced capacities when operated with FA-70 Compressor.
Specifications subject to change without notice.

SINGLE-STAGE GM CRYOCOOLERS

		4 K Cryocooler	20 K Cryocooler		40 K Cryocoolers		77 K Cryocoolers			
		RJT-100GM-JT	RDK-500B2	CH-160D3LT	RDK-400B	CH-110LT	RD-125D	CH-104	CH-110	CH-160D3
1st Stage Capacity	50 Hz	9.0 W @ 4.2 K	45 W @ 20 K	90 W @ 20 K	54 W @ 40 K	80 W @ 40 K	30 W @ 77 K	34 W @ 77 K	175 W @ 77 K	600 W @ 77 K
	60 Hz	9.0 W @ 4.2 K	50 W @ 20 K	100 W @ 20 K	70 W @ 40 K	95 W @ 40 K	30 W @ 77 K	42 W @ 77 K	200 W @ 77 K	725 W @ 77 K
Minimum Temperature ¹		<4.2 K	<14 K	<17 K	<25 K	<15 K	<30 K	≤40 K	≤40 K	<30 K
Cooldown Time (min) ¹	50 Hz	<13 Hours	<50	<30	<30	<35	<25	<40	<35	<20
	60 Hz	<13 Hours	<45	<30	<30	<30	<25	<30	<30	<20
Weight		57.0 kg (125.7 lbs.)	25.0 kg (55.1 lbs.)	31.8 kg (70.0 lbs.)	16.0 kg (35.3 lbs.)	13.8 kg (30.5 lbs.)	15.0 kg (33.1 lbs.)	7.9 kg (17.5 lbs.)	13.7 kg (30.2 lbs.)	31.8 kg (70.0 lbs.)
Water-Cooled Compressor Options										
F-20L								•		
F-40L/H						2		•	2	
F-70L/H			•	4		•		3	•	4
J117V		•								
E-77NL/NH NEW			•		•					
E-77VL/VH NEW					•					
E-77AL/AH NEW		•								
Air-Cooled Compressor Options										
CNA-11							•			
FA-20L								•		
FA-40L/H									2	
FA-70L/H					•	•			•	

1 Lowest temperature and cooldown time are for reference only.
2 Reduced capacities when operated with F-40 or FA-40 Compressors.
3 Up to two (2) cold heads can be operated with the F-70 Compressor.
4 Requires two (2) F-70 Compressors.
Specifications subject to change without notice.

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TWO-STAGE GM CRYOCOOLERS

		2 K Cryocooler	4 K Cryocoolers									6.5 K Cryocooler	10 K Cryocoolers					
		RDC-02K	RDK-101D	RDK-101DL	RDK-305D2	RDK-205D	RDK-408D2	RDE-412D4	RDK-415D2	RDE-418D4	CH-204-N	CH-204	CH-208R	CH-208L	CH-210	CH-210L	CH-210-N	RDK-408S
2nd Stage	50 Hz	0.02 W @ 2.3 K	0.16 W @ 4.2 K ¹	0.16 W @ 4.2 K ¹	0.4 W @ 4.2 K	0.5 W @ 4.2 K	1.0 W @ 4.2 K	1.25 W @ 4.2 K	1.5 W @ 4.2 K	1.8 W @ 4.2 K	2.5 W @ ≤10 K	6.7 W @ 20 K	6.0 W @ 20 K	8.0 W @ 20 K	6.0 W @ 20 K	9.5 W @ 20 K	—	5.4 W @ 10 K
	60 Hz	0.02 W @ 2.3 K	0.2 W @ 4.2 K ¹	0.2 W @ 4.2 K ¹	0.4 W @ 4.2 K	0.5 W @ 4.2 K	1.0 W @ 4.2 K	1.25 W @ 4.2 K	1.5 W @ 4.2 K	2.0 W @ 4.2 K	3.0 W @ ≤10 K	7.1 W @ 20 K	7.5 W @ 20 K	10.0 W @ 20 K	7.0 W @ 20 K	11 W @ 20 K	3.0 W @ 10 K	6.3 W @ 10 K
1st Stage Capacity	50 Hz	1.0 W @ 60 K	3.0 W @ 45 K	3.0 W @ 45 K	15 W @ 40 K	3.0 W @ 50 K	40 W @ 43 K	53 W @ 43 K	35 W @ 50 K	42 W @ 50 K	—	13.5 W @ 80 K	65 W @ 77 K	28 W @ 77 K	110 W @ 77 K	75 W @ 60 K	—	30 W @ 45 K
	60 Hz	3.0 W @ 60 K	5.0 W @ 45 K	5.0 W @ 45 K	20 W @ 40 K	4.0 W @ 50 K	50 W @ 43 K	60 W @ 43 K	45 W @ 50 K	50 W @ 50 K	—	16.2 W @ 80 K	80 W @ 77 K	35 W @ 77 K	120 W @ 77 K	90 W @ 60 K	20 W @ 35 K	35 W @ 45 K
Minimum Temperature ²		<2.2 K	<3.0 K	<2.3 K	<3.5 K	<3.5 K	<3.5 K	<3.5 K	<3.5 K	<3.5 K	6.5 K	10 K	10 K	10 K	10 K	10 K	10 K	<7 K
Cooldown Time (min) ²	50 Hz	<90	<150	<150	<120	<90	<60	<60	<60	<60	40	35	55	50	60	<60	—	<60
	60 Hz	<65	<150	<150	<120	<90	<60	<60	<60	<60	35	30	45	40	50	<60	60	<60
Weight		6.9 kg (15.2 lbs.)	7.2 kg (15.9 lbs.) ³	7.2 kg (15.9 lbs.) ³	16.0 kg (35.3 lbs.)	14.0 kg (30.9 lbs.)	18.0 kg (39.7 lbs.)	18.5 kg (40.8 lbs.)	18.5 kg (40.8 lbs.)	20.0 kg (44.1 lbs.)	7.8 kg (17.2 lbs.)	7.8 kg (17.2 lbs.)	11.6 kg (25.6 lbs.)	11.8 kg (26.0 lbs.)	13.8 kg (30.4 lbs.)	12.1 kg (26.7 lbs.)	13.8 kg (30.4 lbs.)	17.2 kg (37.9 lbs.)
Bakeable Option											•	•	•	•	•	•	•	
Water-Cooled Compressor Options																		
F-20L			•	•							•	•						
F-40L/H					•	•		4					•	•				
E-77NL/NH 							•	•	•	•								•
E-77SL/SH 								•		•								
E-77VL/VH 							•	•	•	•								•
E-77AL/AH 								•		•								
F-70L/H							•	•	•	•	5	5	•	•	•	•	•	
Air-Cooled Compressor Options																		
CNA-11		•	•	•														
FA-20L			•	•							•	•						
FA-40L/H					•	•		4										
FA-50L/H							•	•	•	•								•
FA-50SL/SH								•		•								
FA-70L/H							•		•									•
Hybrid Compressor Options																		
EC-77NL/NH 								•		•								

1 With CNA-11 compressor, 2nd stage capacity is 0.1 W @ 4.2 K (50/60 Hz). 1st stage capacity is 3.0/5.0 W @ 60 K (50/60 Hz).

2 Lowest temperature and cooldown time are for reference only.

3 Cold Head only. Drive unit weighs 1.0 kg (2.2 lbs.)

4 Reduced capacities when operated with F-40 or FA-40 Compressors.

5 Up to two (2) cold heads can be operated with the F-70 Compressor.

Specifications subject to change without notice.