

PULSE TUBE CRYOCOOLERS

Cold Head Model		RP-062B2	RP-062B2S	RP-082B2	RP-082B2S	RP-182B2S
1st Stage Capacity	50 Hz	30 W @ 65 K	25 W @ 65 K	40 W @ 45 K	35 W @ 45 K	36 W @ 48 K
	60 Hz	30 W @ 65 K	25 W @ 65 K	40 W @ 45 K	35 W @ 45 K	36 W @ 48 K
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
	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
Minimum Temperature ¹		<3.0 K	<3.0 K	<3.0 K	<3.0 K	<2.8 K
Cooldown Time (min) ¹	50 Hz	<100	<100	<80	<90	<60
	60 Hz	<90	<90	<80	<90	<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.)
Bakeable Option						
Water-Cooled Compressor Options						
F-50L/H		•	•			
F-70L/H				•	•	
F-100L/H						•
Air-Cooled Compressor Options						
FA-70L/H				•	•	

SPECIALTY CRYOCOOLERS

Cold Head Model		CH-204-N	CH-210-N	CH-210L	RDK-400B	RDK-500B	RD-125D	CH-104	CH-110	CH-110LT
1st Stage Capacity	50 Hz	—	—	75 W @ 60 K	54 W @ 40 K	40 W @ 20 K/ 80 W @ 30 K	30 W @ 77 K	34 W @ 77 K	175 W @ 77 K	80 W @ 40 K
	60 Hz	—	20 W @ 35 K	90 W @ 60 K	70 W @ 40 K	50 W @ 20 K/ 95 W @ 30 K	30 W @ 77 K	42 W @ 77 K	200 W @ 77 K	95 W @ 40 K
2nd Stage Capacity	50 Hz	2.5 W @ ≤10 K	—	9.5 W @ 20 K	—	—	—	—	—	—
	60 Hz	3.0 W @ ≤10 K	3.0 W @ 10 K	11 W @ 20 K	—	—	—	—	—	—
Minimum Temperature ¹		6.5 K	10 K	10 K	<25 K	<14 K	<30 K	≤40 K	≤40 K	<15 K
Cooldown Time (min) ¹	50 Hz	40	—	<60	<30	<70	<30	<40	<30	<35
	60 Hz	35	60	<60	<30	<70	<30	<30	<30	<30
Weight		7.8 kg (17.2 lbs.)	13.8 kg (30.4 lbs.)	12.1 kg (26.7 lbs.)	16.0 kg (35.3 lbs.)	25.0 kg (55.1 lbs.)	15.0 kg (33.1 lbs.)	7.9 kg (17.5 lbs.)	13.7 kg (30.2 lbs.)	13.8 kg (30.5 lbs.)
Bakeable Option		•	•	•				•	•	•
Water-Cooled Compressor Options										
HC-4E		•						•	3	
HC-8E		•						•	3	
F-50L/H					•					
F-70L/H		2	•	•		•		2	•	•
Air-Cooled Compressor Options										
CNA-11							•			
Zephyr [®]		•						•	3	
CSA-71A					•					
FA-70L/H					•				•	•

¹ Lowest temperature and cooldown time are for reference only.
² Up to two (2) cold heads can be operated with the F-70 Compressor.
³ Reduced capacities when operated with Zephyr, HC-4E or HC-8E Compressors.
 Specifications subject to change without notice.
 © SHI Cryogenics Group 2/19

4K CRYOCOOLERS

Cold Head Model		NEW RDK-101D(L)	RDk-305D	RDk-205D	RDk-408D2	RDE-412D4	RDk-415D	NEW RDE-418D4
1st Stage Capacity	50 Hz	3.0 W @ 60 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
	60 Hz	5.0 W @ 60 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
2nd Stage Capacity	50 Hz	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
	60 Hz	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
Minimum Temperature ²		<3.0 K (RDK-101D)/<2.3 K (RDK-101DL)	<3.5 K	<3.5 K	<3.5 K	<3.5 K	<3.5 K	<3.5 K
Cooldown Time (min) ²	50 Hz	<150	<120	<90	<60	<60	<60	<60
	60 Hz	<150	<120	<90	<60	<60	<60	<60
Weight		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.)	20.0 kg (44.1 lbs.)	18.5 kg (40.8 lbs.)	20.0 kg (44.1 lbs.)
Bakeable Option								
Water-Cooled Compressor Options								
HC-4E		•						
CKW-21A				•				
HC-8E								
F-40L/H			•	•		4		
F-50L/H/SH					•	•	•	•
F-70L/H					•		•	•
Air-Cooled Compressor Options								
CNA-11		•						
Zephyr [®]		•						
FA-40L/H			•	•		4		
CSA-71A					•	•	•	•
FA-70L/H					•		•	•

10K CRYOCOOLERS

Cold Head Model		CH-202	CH-204	CH-208R	CH-208L	CH-210	RDk-408S
1st Stage Capacity	50 Hz	7.3 W @ 77 K	13.5 W @ 80 K	65 W @ 77 K	28 W @ 77 K	110 W @ 77 K	35 W @ 45 K
	60 Hz	8.8 W @ 77 K	16.2 W @ 80 K	80 W @ 77 K	35 W @ 77 K	120 W @ 77 K	40 W @ 45 K
2nd Stage Capacity	50 Hz	1.8 W @ 20 K	6.7 W @ 20 K	6.0 W @ 20 K	8.0 W @ 20 K	6.0 W @ 20 K	5.4 W @ 10 K
	60 Hz	2.2 W @ 20 K	7.1 W @ 20 K	7.5 W @ 20 K	10.0 W @ 20 K	7.0 W @ 20 K	6.3 W @ 10 K
Minimum Temperature ²		10 K	10 K	10 K	10 K	10 K	<7 K
Cooldown Time (min) ²	50 Hz	75	35	55	50	35	<60
	60 Hz	65	30	45	40	30	<60
Weight		7.2 kg (16.0 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.)	17.2 kg (37.9 lbs.)
Bakeable Option		•	•	•	•	•	
Water-Cooled Compressor Options							
HC-4E		•	•				
CKW-21A							
HC-8E			•	•	•		
F-40L/H							
F-50L/H/SH							•
F-70L/H				5	•	•	•
Air-Cooled Compressor Options							
CNA-11							
Zephyr [®]		•	•				
FA-40L/H							
CSA-71A							•
FA-70L/H							•

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.

Visit us anytime, worldwide. www.shicryogenics.com