

1.1.2.7 High Power Thermal Sensors

1.1.2.7.2 High Power Water Cooled Thermal Sensors

1000W-LP1-34

5W to 1000W

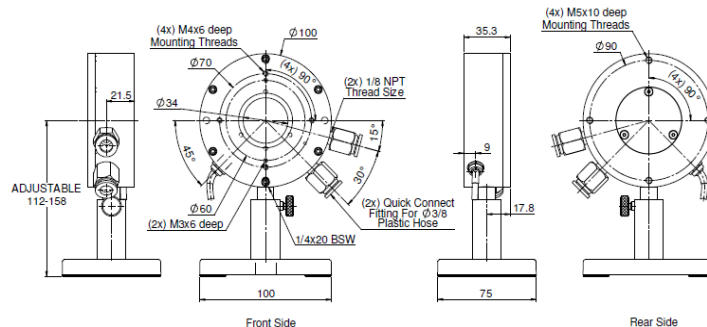
Features

- High powers
- Water cooled
- Up to 1000W
- Ø34mm aperture



Model	1000W-LP1-34
Use	High power densities and long pulses
Absorber Type	LP1
Spectral Range μm	0.35 – 2.2, 10.6
Aperture mm	Ø34mm
Power Mode	
Power Range	5W - 1000W
Power Scales	1000W / 200W
Power Noise Level	200mW
Maximum Average Power Density kW/cm ²	14 at 500W 7 at 1000W
Response Time with Display (0-95%) typ. s	2.5
Power Accuracy +/-%	3 ^(a, c)
Linearity with Power +/-%	2
Energy Mode	
Energy Range	400mJ - 300J
Energy Scales	300J / 30J
Minimum Energy mJ	400mJ
Maximum Energy Density J/cm ²	
<100ns	0.05
1 μs	0.3
0.5ms	20
2ms	50
10ms	200
Cooling	water
Minimum Water Flow Rate at Full Power	10 liter/min ^(b)
Fiber Adapters	Consult Ophir representative
Accessories for High Power Sensors	See pages 67, 68 & 69
Weight Kg	0.8
Version	
Part Number: Standard Sensor	7Z02758S
BeamTrack Sensor: Beam Position & Size (p.75)	
Notes: (a)	Calibrated for ~0.8 μm , 1.064 μm and 10.6 μm
Notes: (b)	Water temperature range 18-30°C. Water temperature rate of change <1°C/min. Pressure drop across sensor 0.03MPa.
Notes: (c)	LP1 sensors have relatively large spectral variation in absorption and have a calibrated spectral curve at all wavelengths in their spectral range to the above specified accuracy. Nova, Orion and LaserStar meters do not support this feature and when used with those meters, accuracy will be the stated accuracy for 1.06 μm , 10.6 μm , 0.8 μm and an additional $\pm 3\%$ for other wavelengths in the spectral range 600 – 1100nm.

1000W-LP1-34



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