1.1.2.6 Medium-High Power Fan Cooled Thermal Sensors

500mW to 500W

FL500A /
FL500A-LP1

Features

- High powers and energies, large apertures
- Fan cooled
- Up to 500W
- Ø65mm apertures

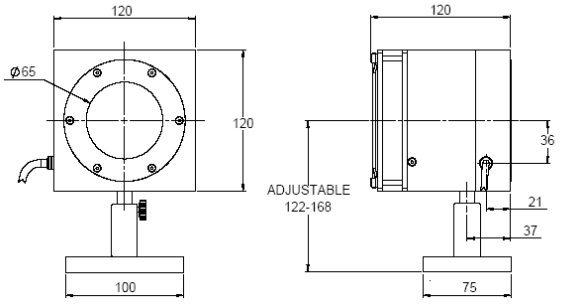
Model	FL500A	FL500A-LP1
Use	Very large aperture	High power densities and long pulses
Absorber Type	Broadband	LP1
Spectral Range µm	0.19 - 20	0.35 – 2.2
Aperture mm	Ø65mm	Ø65mm
Power Mode		
Power Range [(a)]	500mW - 500W	500mW - 500W
Maximum Intermittent Power	NA	NA
Power Scales	500W / 50W	500W / 50W
Power Noise Level [(a)]	25mW	25mW
Maximum Average Power Density KW/cm²	7 at 500W 12 at 150W	16 at 500W 39 at 150W
Response Time with Display (0-95%) typ. s	2.8	2.8
Power Accuracy +/-%	3	3 [(b)]
Linearity with Power +/-%	1.5	1.5
Energy Mode		
Energy Range	100mJ - 600J	100mJ - 600J
Energy Scales	600J / 60J / 6J	600J / 60J / 6J
Minimum Energy mJ [(a)]	100	100
Maximum Energy Density J/cm²		
<100ns	0.3	0.05
1µs	1	0.3
0.5ms	5	15
2ms	10	40
10ms	30	200
Cooling	fan	fan
Fiber Adapters Available (see page 55)	NA	NA
Weight Kg	2.7	2.7
Version		
Part Number: Standard Sensor	7Z02648	7Z02667S
BeamTrack Sensor: Beam, Position & Size (p.51)		

Notes: (a) For lower powers up to 50W it is recommended to work with the fan off and then the noise level is ~3 times lower. It is also recommended to measure energy with the fan off.

Notes: (b) 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 this LP1 sensor is used with those meters, accuracy will be ±3% for 532nm, 808nm, 1064nm and 2100nm and ±6% for other wavelengths in the spectral range 400 – 1100nm.

END OF LIFE

FL500A / FL500A-LP1



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