

## 1.1.2.5 Medium Power Large Aperture Thermal Sensors – Apertures to 120mm

### 1W to 500W

#### Features

- Very large aperture
- Pulsed absorber
- Up to 500W
- Ø120mm aperture

L100(500)A-PF-120



|  |  |                        |
|--|--|------------------------|
| <b>Model</b>   | <b>L100(500)A-PF-120</b>   |                        |
| <b>Use</b>   | <b>High peak power, high energy measurements</b>   |                        |
| Absorber Type  | PF volume absorber   |                        |
| Spectral Range $\mu\text{m}$                         | 0.15 – 20  |                        |
| Aperture mm  | Ø120mm   |                        |
| Power Mode   |  |                        |
| Power Range  | 1W – 500W  |                        |
| Maximum Intermittent Power                           | 500W for 2min, 100W continuous,<br>500W continuous if heat sinked on rear  |                        |
| Power Scales   | 500W / 50W   |                        |
| Power Noise Level                                    | 50mW   |                        |
| Maximum Average Power Density $\text{W}/\text{cm}^2$ | 2000   |                        |
| Response Time with Meter (0-95%) typ. s              | 7  |                        |
| Calibration Uncertainty $\pm\%$                      | 1.9  |                        |
| Power Accuracy $\pm\%$                               | 4 <sup>(a)</sup>   |                        |
| Linearity with Power $\pm\%$                         | 2  |                        |
| Energy Mode  |  |                        |
| Energy Range   | 6J – 6000J   |                        |
| Energy Scales  | 6kJ / 600J / 60J   |                        |
| Minimum Energy                                       | 6J   |                        |
| Maximum Energy Density $\text{J}/\text{cm}^2$        | Single   | 10-50Hz <sup>(b)</sup> |
| <100ns   | 3 <sup>(c)</sup>   | 1.5                    |
| 1 $\mu\text{s}$                                      | 3 <sup>(c)</sup>   | 1.5                    |
| 0.5ms  | 7  | 7                      |
| 2ms  | 15   | 15                     |
| 10ms   | 40   | 40                     |
| 1s   | 3000   | NA                     |
| Cooling  | Convection or conduction   |                        |
| Fiber Adapters                                       | Consult Ophir representative   |                        |
| Accessories for High Power Sensors                   | See pages 99-102   |                        |
| Weight kg  | 4.4  |                        |
| Compliance   | CE, UKCA, China RoHS   |                        |
| Version  |  |                        |
| <b>Part number</b>                                   | <b>7Z02765</b>   |                        |
| Notes: (a)   | Calibrated for 0.25 – 2 $\mu\text{m}$  |                        |
| Notes: (b)   | For 10-50Hz derate as follows:<br>1064nm not derated<br>532nm not derated<br>355nm 70% of stated value<br>266nm 15% of stated value<br>193nm 10% of stated value |                        |
| Notes: (c)   | Damage threshold 1.5J/cm <sup>2</sup> for wavelengths <500nm   |                        |

\* For drawings please see page 69B

## L100(500)A-PF-120

