

## 1.1.2.4 Low - Medium Power Thermal Sensors - Apertures to 17mm

### 100mW to 150W

#### Features

- High repetition rate pulsed lasers for material processing
- Air and fan cooled
- CW to 100W, intermittent to 150W

30(150)A-SV-17



F100(150)A-SV-17



Model	30(150)A-SV-17	F100(150)A-SV-17
Use	High repetition rate pulsed lasers for material processing	High repetition rate pulsed lasers for material processing
Absorber Type	SV	SV
Spectral Range $\mu\text{m}$	0.19 - 11	0.19 - 11
Aperture mm	$\text{Ø}17.5\text{mm}$	$\text{Ø}17\text{mm}$
Power Mode		
Power Range	100mW - 150W	100mW - 150W
Maximum Intermittent Power W	150W for 1.5min, 100W for 2.2min, 30W continuous	150W for 3min, 100W continuous
Power Scales	150W / 30W / 3W	150W / 30W / 3W
Power Noise Level	5mW	5mW
CW Maximum Power Density $\text{kW}/\text{cm}^2$	60 at 150W intermittent	60 at 150W intermittent 60 at 100W continuous
Pulsed Maximum Average Power Density $\text{kW}/\text{cm}^2$ <sup>(b)</sup>	100 at 25W for ns pulses 20 at 20W for ps pulses	100 at 25W for ns pulses 20 at 20W for ps pulses
Response Time with Meter (0-95%) typ. s	1.7	1.7
Calibration Uncertainty $\pm\%$	1.9	1.9
Power Accuracy $\pm\%$	3	3
Linearity with Power $\pm\%$	1	1
Energy Mode		
Energy Range	50mJ - 300J	100mJ - 300J
Energy Scales	300J / 30J / 3J	300J / 30J / 3J
Minimum Energy mJ	50	100
Maximum Energy Density $\text{J}/\text{cm}^2$	Pulse width <sup>(a)</sup>	Pulse width <sup>(a)</sup>
	<100ns	<100ns
	0.5ms	0.5ms
	2ms	2ms
	1	1
	20	20
	50	50
Cooling	Convection	Fan
Fiber Adapters Available (see page 126)	ST, FC, SMA, SC	ST, FC, SMA, SC
Weight kg	0.3	0.3
Compliance	CE, UKCA, China RoHS	CE, UKCA, China RoHS
Version		
Part number	7Z02724	7Z07158

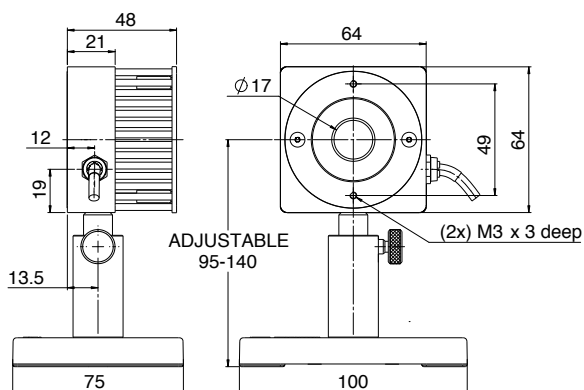
Notes:

(a) At 1064nm. For shorter wavelengths derate maximum energy density to:

355nm 50% of above values  
266nm 50% of above values  
193nm 10% of above values

(b) For repetition rates  $\geq 100\text{kHz}$

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