

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

### 50mW to 150W

#### Features

- Special purpose HE absorber
- For concentrated beams and pulses
- Convection air cooled
- CW to 30 or 50W, intermittent to 150W
- Ø17mm aperture



Model	30(150)A-HE-17			30(150)A-HE-DIF-17		
Use	High energy pulsed lasers			Concentrated beam high energy pulsed lasers - has removable diffuser		
Absorber Type	HE			HE		
Spectral Range $\mu\text{m}$	0.19 - 0.625, 1.064, 2.1, 2.94			0.19 - 3 except for 0.625 - 0.9 <sup>(b)</sup>		
Aperture mm	Ø17mm			Ø17mm		
Power Mode						
Power Range	50mW - 150W			50mW - 150W		
Maximum Intermittent Power W	150W for 1.5min, 100W for 2.2min, 30W continuous			150W for 1.5min, 100W for 2.2min, 30W continuous		
Power Scales	150W / 30W / 3W			150W / 30W / 3W		
Power Noise Level	3mW			3mW		
CW Maximum Power Density kW/cm <sup>2</sup>	0.5			0.5		
Pulsed Maximum Average Power Density kW/cm <sup>2</sup> <sup>(c)</sup>	NA			NA		
Response Time with Meter (0-95%) typ. s	3.8			3.8		
Calibration Uncertainty $\pm\%$	1.9			1.9		
Power Accuracy $\pm\%$	3			5 <sup>(b)</sup>		
Linearity with Power $\pm\%$	1.5			1.5		
Energy Mode						
Energy Range	60mJ - 200J			60mJ - 200J		
Energy Scales	200J / 30J / 3J			200J / 30J / 3J		
Minimum Energy mJ	60			60		
Maximum Energy Density J/cm <sup>2</sup>	Pulse width <sup>(a)</sup>	Single	10-50Hz	Pulse width <100ns, 10 - 50Hz		
	<100ns	5	2	Wavelength	DIF IN	DIF OUT
	0.5ms	100	25	1064nm	5	2
	2ms	150	40	532nm	4	2
				355nm	1.5	1
Cooling	Convection			Convection		
Fiber Adapters Available (see page 126)	ST, FC, SMA, SC			NA		
Weight kg	0.3			0.4		
Compliance	CE, UKCA, China RoHS			CE, UKCA, China RoHS		
Version						
Part number	7Z02722			7Z02729		

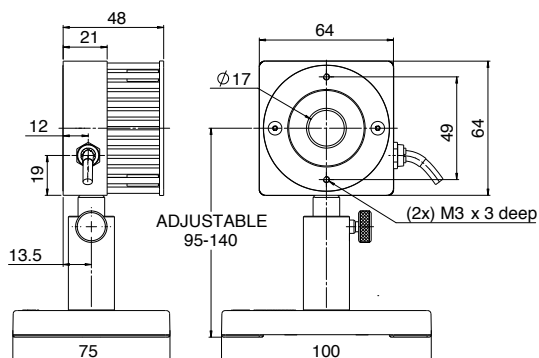
Notes: (a) At 1064nm. For shorter wavelengths derate maximum energy density to:

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

(b) With diffuser in, sensor is only calibrated for 1064nm, 532nm and 355nm wavelengths

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

30(150)A-HE-17



30(150)A-HE-DIF-17

