

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

50mW to 150W

Features

- Special purpose SV and HE absorbers
- 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 μm	0.19 - 0.625, 1.064, 2.1, 2.94			0.19 - 3 except for 0.625 - 0.9 ^(b)				
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 ²	0.5			0.5				
Pulsed Maximum Average Power Density kW/cm ² ^(c)	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 ^(b)				
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 ²	Pulse width ^(a)	Single	10-50Hz	Pulse width <100ns, 10 - 50Hz	Wavelength		DIF IN	DIF OUT
		<100ns	5		2	1064nm	5	2
		0.5ms	100		25	532nm	4	2
		2ms	150		40	355nm	1.5	1
Cooling	Convection			Convection				
Fiber Adapters Available (see page 119)	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				

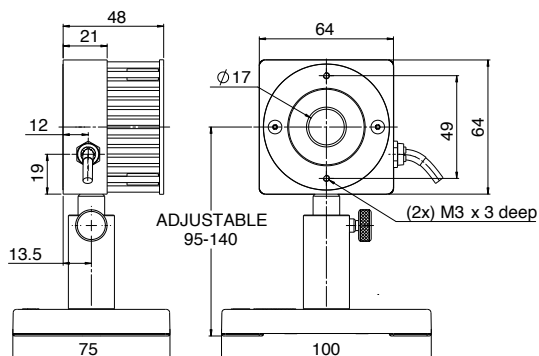
Notes: (a) At 1064nm. For shorter wavelengths derate maximum energy density to:

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

