

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
	<100ns	5	2	Wavelength
	0.5ms	100	25	1064nm
	2ms	150	40	532nm
				355nm
				DIF IN
				DIF OUT
				5
				4
				1.5
				2
				2
				1
Cooling	Convection		Convection	
Fiber Adapters Available (see page 118)	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	

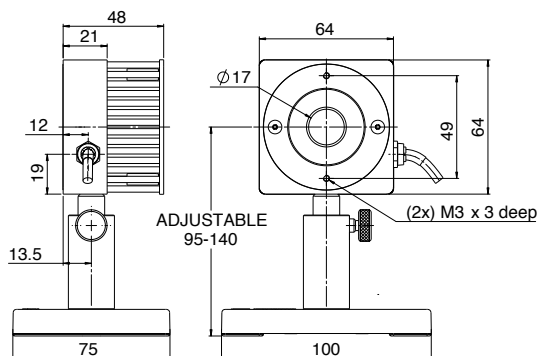
Notes: (a) At 1064nm. For shorter wavelengths derate maximum energy density to:

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

