



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



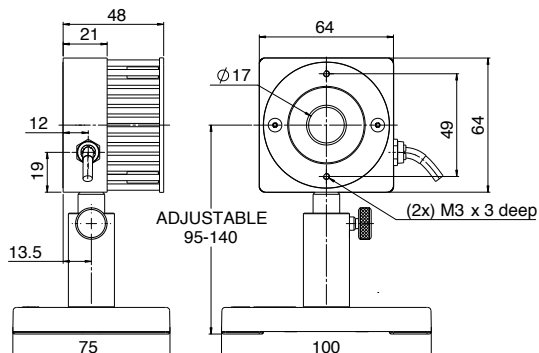
Model	30(150)A-HE-17	30(150)A-HE-DIF-17
Use	High energy pulsed lasers	Concentrated beam high energy pulsed lasers - has removable diffuser
Absorber Type	HE	HE
Spectral Range μm	0.19 - 0.625, 1.064, 2.1, 2.94	0.19 - 3 except for 0.625 - 0.9 ^(b)
Aperture mm	Ø17mm	Ø17mm
Power Mode		
Power Range	50mW - 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)	Pulse width <100ns, 10 - 50Hz
	Single	10-50Hz
	<100ns	5
	0.5ms	100
	2ms	150
		Wavelength
		1064nm
		532nm
		355nm
		DIF IN
		DIF OUT
		5
		4
		1.5
		2
		2
		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

