

## 1.1.2.3 Low Power Thermal Sensors

### 10mW to 50W

#### Features

- Convection air cooled
- Broadband absorbers
- 16mm to 26mm apertures
- Fast response time



Model	10A	30A-BB-18	L30A-10MM	50(150)A-BB-26
Use	Low power	General purpose	Thin profile	General purpose
Absorber Type	Broadband	Broadband	Broadband	Broadband
Spectral Range $\mu\text{m}$	0.19 - 20	0.19 - 20	0.15 - 20	0.19 - 20
Aperture mm	$\varnothing$ 16mm	$\varnothing$ 17.5mm	$\varnothing$ 26mm	$\varnothing$ 26mm
Power Mode				
Power Range	10mW - 10W	10mW - 30W	80mW - 30W	40mW - 150W
Maximum Power Intermittent	NA	NA	8W free standing, 30W heat sunk	150W for 1.5min, 100W for 2.2min, 50W continuous
Power Scales	10W / 5W / 0.5W	30W / 5W / 0.5W	30W / 3W	150W / 50W / 5W
Power Noise Level	0.2mW	0.5mW	4mW	2mW
Maximum Average Power Density $\text{kW}/\text{cm}^2$	28	20 at 30W 28 at 10W	20 at 30W 28 at 10W	12 at 150W 17 at 50W
Response Time with Display (0-95%) typ s	0.8	0.8	1.5	1.5
Calibration Uncertainty $\pm\%$	1.9	1.9	1.9	1.9
Power Accuracy $\pm\%$	3	3	3	3
Linearity with Power $\pm\%$	1	1	1	1.5
Energy Mode				
Energy Range	6mJ - 2J	6mJ - 30J	20mJ - 60J	20mJ - 100J
Energy Scales	2J / 200mJ	30J / 3J / 300mJ	60J / 20J / 2J / 200mJ	100J / 30J / 3J / 300mJ
Minimum Energy mJ	6	6	20	20
Maximum Energy Density $\text{J}/\text{cm}^2$				
<100ns	0.3	0.3	0.3	0.3
0.5ms	2	2	5	5
2ms	2	2	10	10
10ms	2	2	30	30
Cooling	convection	convection	convection / conduction	convection
Fiber Adapters Available (see page 93)	ST, FC, SMA, SC	ST, FC, SMA, SC	NA	ST, FC, SMA, SC
Weight Kg	0.2	0.3	0.1	0.3
Compliance	CE, UKCA, China RoHS	CE, UKCA, China RoHS	CE, UKCA, China RoHS	CE, UKCA, China RoHS
Version	V1.1			
Part Number: Standard Sensor	<b>7Z02637</b>	<b>7Z02692</b>	<b>7Z02273</b>	<b>7Z02696</b>
BeamTrack Sensor: Beam Position & Size (p.51/55)	<b>7Z07904</b>			<b>7Z07900</b>

