1.1.2.6 High Power Water Cooled Thermal Sensors and Power Pucks

100W to 30kW

Features

- Highest powers
- Water cooled
- Up to 30kW
- φ74mm apertures

30K-W

Model	**30K-W**
Use	**Highest powers to 30kW**
Absorber Type	Beam deflector + broadband absorber
Spectral Range µm	0.8 – 2, 10.6µm (a)
Aperture mm	φ74mm
Power Range	100W – 30kW
Power Scales	30kW / 6kW / 600W
Power Noise Level	1W
Backscattered Power	Approximately 4%
Maximum Average Power Density kW/cm²	10kW/cm² anywhere in the beam (c)
Response Time with Display (0-95%) typ. s	7s
Power Accuracy +/-%	5 (a)
Linearity with Power +/-%	2
Cooling	Water (b)
Minimum Water Flow Rate at Full Power	25 liter/min
Water Pressure Requirements	Pressure drop across sensor ~0.2MPa. Pressure drop across 8 meters of ½" tubing with 9.5mm ID is ~0.3MPa
Water Connectors	Quick connector for ½" OD, 3/8" ID nylon tubing
Cable Length	10 meters
Weight Kg	19
Version	V1
Part number	**7Z02746**
Notes: (a)	Calibrated for 1.07µm
Notes: (b)	Water inlet temperature range 15-20°C. Water temperature rate of change <1°C/min.
Notes: (c)	For beam centered within ¼ of beam diameter. IMPROPERLY CENTERED BEAM CAN CAUSE DAMAGE TO SENSOR. Maximum tilt angle ±5 degrees.

30K-W