

UP SERIES

Thermal Sensor Heads, 10 - 55 mm Ø, 50 µm - 700 W






KEY FEATURES

- 1. FULLY INTEGRABLE THERMOPILE SENSOR HEADS**
OEM Sensors designed to integrate easily into existing systems
- 2. MODULAR CONCEPT**
Increase the power capability of your detector:
5 different cooling modules
- 3. VERY HIGH DAMAGE THRESHOLDS**
Up to 100 kW/cm² in average power density
- 4. CHOICE OF CONNECTORS**
DB-15, BNC, Molex

AVAILABLE MODELS



LEVELS OF INTEGRATION

- 1** 
 - Head Only
 - Thermal Sensor Head (with natural response)
 - Connector
- 2** 
 - Head with PCB & Connector
 - Thermal Sensor Head
 - Amplification - Anticipation - Filtering
 - Connector
- 3** 
 - Head & Display
 - Thermal Sensor Head
 - Connector
 - Display

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UP SERIES



*Also traceable to NRC-CNRC

SPECIFICATIONS

	UP10-H	UP12-H	UP19-H	UP25-H	UP55-H/HD	UP19-W	UP50-W
MAX AVERAGE POWER^a (CONTINUOUS / 1 MINUTE)	2 W / 2 W	70 W / 110 W	200 W / 200 W	350 W / 350 W	700 W / 700 W	50 W / 85 W	50 W / 85 W
EFFECTIVE APERTURE	10 mm Ø	12 mm Ø	19 mm Ø	25 mm Ø	55 mm Ø	17 mm Ø	50 mm Ø
MEASUREMENT CAPABILITY							
Spectral Range	0.19 – 20 µm	0.19 – 20 µm	0.19 – 20 µm	0.19 – 20 µm	0.19 – 20 µm	0.19 – 10 µm	0.19 – 10 µm
Available Cooling Modules (Max. Power)							
Standalone (S)	2 W	10 W	15 W	40 W	40 W	15 W	40 W
Heatsink (H)	---	20 W	30 W	100 W	100 W	30 W	50 W
Large Heatsink (L)	---	---	50 W	---	---	50 W	---
Fan (F)	---	---	110 W	250 W	300 W	50 W	50 W
Water (W)	---	70 W	150 W	350 W	500 W	50 W	50 W
Water (W)	---	---	200 W	---	700 W (HD)	---	---
Noise Equivalent Power	0.05 mW ^b	1 mW	1-3 mW	3-10 mW	5-45 mW	1 mW	5 mW
Rise Time (nominal)	2.7 sec	1.6 sec	2.8-4.5 sec	5-7.9 sec	11-18 sec	5 sec	16 sec
Sensitivity (typ into 10 MΩ load)	2 mV/W	0.53 mV/W	0.23-0.65 mV/W	0.1-0.23 mV/W	0.03-0.12 mV/W	0.65 mV/W	0.12 mV/W
Maximum Average Power Density ^b	36 kW/cm ²	36 kW/cm ²	36-45 kW/cm ²	45 kW/cm ²	45 kW/cm ²	100 kW/cm ²	100 kW/cm ²
PHYSICAL CHARACTERISTICS							
Effective Aperture	10 mm Ø	12 mm Ø	19 mm Ø	25 mm Ø	55 mm Ø	17 mm Ø	50 mm Ø
Absorber	H5	H5	H5/H9	H9/H12	H9/H12/HD	W5	W9
Dimensions ^c	50H x 50W x 20.6D mm	38H x 38W x 14D mm	50H x 50W x 20.6D mm	89H x 89W x 32D mm	89H x 89W x 32D mm	50H x 50W x 20.6D mm	89H x 89W x 32D mm
Weight ^c	160 g	130 g	160 g	680 g	620 g	160 g	620 g
ORDERING INFORMATION							
Standalone	UP10K-2S-H5-L-DO	UP12E-10S-H5-DO	UP19K-15S-H5-DO	UP25N-40S-H9-DO	UP55N-40S-H9-DO	UP19K-15S-W5-DO	UP50N-40S-W9-DO
Heatsink	---	UP12E-20H-H5-DO	UP19K-30H-H5-DO	UP25N-100H-H9-DO	UP55N-100H-H9-DO	UP19K-30H-W5-DO	UP50N-50H-W9-DO
Large Heatsink	---	---	UP19K-50L-H5-DO	---	---	UP19K-50L-W5-DO	---
Fan-Cooled	---	---	UP19K-110F-H9-DO	UP25N-250F-H12-DO	UP55N-300F-H12-DO	UP19K-50F-W5-DO	UP50N-50F-W9-DO
Water-Cooled	---	UP12E-70W-H5-DO	UP19K-150W-H5-DO	UP25M-350W-H12-DO	UP55M-500W-H12-DO	UP19K-50W-W5-DO	UP50M-50W-W9-DO
	---	---	UP19K-200W-H9-DO	---	UP55M-700W-HD-DO	---	---

Specifications are subject to change without notice

- a. For model with the most efficient cooling module available.
b. 0.2 mW with anticipation.
c. At 1064 nm, 10 W CW.
d. For standalone version. Ask gentec-E0 for dimensions of other versions.