

UP SERIES

Thermal Sensor Heads, 12 - 55 mm Ø, 1 mW - 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



UP12-H

(12 mm Ø-Up to 110 W)



UP19-H

(19 mm Ø-Up to 200 W)



UP25-H

(25 mm Ø-Up to 350 W)



UP55-H/HD

(55 mm Ø-Up to 700 W)



UP19-W

(18 mm Ø-100 kW/cm²)



UP50-W

(50 mm Ø-100 kW/cm²)

LEVELS OF INTEGRATION



Head Only

- Thermal Sensor Head (with natural response)
- Connector



Head with PCB & Connector

- Thermal Sensor Head
- Amplification - Anticipation - Filtering
- Connector



Head & Display

- Thermal Sensor Head
- Connector
- Display

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MONITORS
ENERGY DETECTORS
POWER DETECTORS
HIGH POWER DETECTORS
PHOTO DETECTORS
THZ DETECTORS
OEM DETECTORS
SPECIAL PRODUCTS
BEAM DIAGNOSTICS

UP SERIES

SPECIFICATIONS



*Also traceable to NRC-CNRC

NEW

MODELS	UP12-H	UP19-H	UP25-H	UP55-H/HD	UP19-W	UP50-W
MAX AVERAGE POWER (CONTINUOUS / 1 MINUTE)	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	12 mm \emptyset	19 mm \emptyset	25 mm \emptyset	55 mm \emptyset	17 mm \emptyset	50 mm \emptyset

MEASUREMENT CAPABILITY

Spectral Range	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)	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	1 mW	1-3 mW	3-10 mW	5-45 mW	1 mW	5 mW
Rise Time (nominal)	1.6 sec	2.8-4.5 sec	5-7.9 sec	11-18 sec	5 sec	16 sec
Sensitivity (typ into 10 M Ω load)	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	36-45 kW/cm ²	45 kW/cm ²	45 kW/cm ²	100 kW/cm ²	100 kW/cm ²

PHYSICAL CHARACTERISTICS

Effective Aperture	12 mm \emptyset	19 mm \emptyset	25 mm \emptyset	55 mm \emptyset	17 mm \emptyset	50 mm \emptyset
Absorber	H5	H5/H9	H9/H12	H9/H12/HD	W5	W9
Dimensions ^c	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	130 g	160 g	680 g	620 g	160 g	620 g

ORDERING INFORMATION

Full Product Name (Standalone)	UP12E-10S-H5-DO	UP19K-15S-H5-DO	UP25N-40S-H9-DO	UP55N-40S-H9-DO	UP19K-15S-W5-DO	UP50N-40S-W9-DO
Product Number	200383	200142	200195	200215	200282	200803
Full Product Name (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
Product Number	200385	200143	200199	200219	200284	200897
Full Product Name (Large Heatsink)	–	UP19K-50L-H5-DO	–	–	UP19K-50L-W5-DO	–
Product Number	–	200164	–	–	200331	–
Full Product Name (Fan)	–	UP19K-110F-H9-DO	UP25N-250F-H12-DO	UP55N-300F-H12-DO	UP19K-50F-W5-DO	UP50N-50F-W9-DO
Product Number	–	200994	201151	201157	200334	200894
Full Product Name (Water)	UP12E-70W-H5-DO	UP19K-150W-H5-DO	UP25M-350W-H12-DO	UP55M-500W-H12-DO	UP19K-50W-W5-DO	UP50M-50W-W9-DO
Product Number	200389	200194	201893	201882	200300	201887
Full Product Name (Water)	–	UP19K-200W-H9-DO	–	UP55M-700W-HD-DO	–	–
Product Number	–	200582	–	201908	–	–

* Other Sizes Available Upon Request

a. For model with the most efficient cooling module available.

b. At 1064 nm, 10 W CW.

c. For standalone version. Ask gentec-E0 for dimensions of other versions.

Specifications are subject to change without notice