

UP55-HD

55 mm Ø, 45 mW - 2500 W



600 W


2.5 kW

700 W

KEY FEATURES

- > **HIGH DENSITY ABSORBER**
The HD absorber is the strongest on the market for use at high powers, presenting both high average power handling and high power density capabilities
- > **UP55G-600F-HD - NO NEED FOR WATER COOLING**
Unique on the market, measure 600 W of continuous power **WITHOUT THE NEED FOR WATER COOLING**. Just plug the fan and you are ready to go!
- > **UP55M-700W-HD - FAST AND COMPACT**
A very compact detector that measures up to 700 W of continuous power.
- > **UP55C-2.5KW-HD - PERFORMANCE AND SPEED AT A LOW PRICE**
Measures both very low and very high powers (up to 2500W) with a fast response time. A compact and versatile detector that is more affordable than any other high power solution on the market.

OUTPUT OPTIONS

- > **SMART DB15 CONNECTOR**
Contains all the calibration data
- > **integra ALL-IN-ONE-METER**
Connects directly to a PC
Two models available:
 - USB output (-INT)
 - RS-232 output (-IDR)
- > **BLU WIRELESS METER** 
Connects via Bluetooth® to a smartphone, tablet or PC

COMPATIBLE DISPLAYS & PC INTERFACES



MIRO ALTITUDE

MAESTRO

TUNER

UNO

U-LINK and P-LINK

S-LINK and M-LINK

ACCESSORIES



Stand with steel post

Extension cables
(4, 15, 20 or 25 m)

Fiber adaptors and connectors
(FC, SC or SMA)

3-Port fiber cylinder with
adaptors and plug

12V power supply

Pelican carrying case

UP55-HD

Specifications



*Also traceable to NRC-CNRC



| | UP55Ci-600F-HD-DO | UPSSM-700W-HD-DO | UPSSC-2.SKW-HD-DO |
|---|-------------------|--------------------------------------|--|
| MAX AVERAGE POWER (CONTINUOUS/1 MINUTE) | 600W /600W | 700W ^a /700W ^a | 2500W ^a /2500W ^a |
| EFFECTIVE APERTURE | 55mm</, | 55mm</, | 55mm</, |
| COOLING METHOD | Fan-cooled | Water-cooled | Water-cooled |

MEASUREMENT CAPABILITY

| | | | |
|---|--------------|--------------|--------------|
| Spectral range | 0.19-20 μm | 0.19-20 μm | 0.19-20 μm |
| Calibrated spectral range ^b | 0.248-2.1 μm | 0.248-2.1 μm | 0.248-2.1 μm |
| Noise equivalent power ^c | 45mW | 45mW | 200mW |
| Rise time (nominal) ^d | 2,85 | 2.85 | 3.5 s |
| Calibration uncertainty ^e | ±2.5% | ±2.5% | ±2.5% |
| Repeatability | ±0.5% | ±0.5% | ±0.5% |
| Energy mode | | | |
| Maximum measurable energy ^f | 200J | 200J | --- |
| Noise equivalent energy ^f | 0.25J | 0.25J | --- |
| Minimum repetition period | 12s | 12s | --- |
| Maximum pulse width | 430 ms | 430ms | --- |
| Accuracy with energy calibration option | ±5% | ±5% | --- |

PARAMETER THRESHOLDS

| | | | |
|-------------------------------|----------------------|-----------------------|-----------------------|
| Maximum average power density | | | |
| 1064 nm, 10 W, CW | 45kW/cm ² | 45 kW/cm ² | 45 kW/cm ² |
| 1064 nm, 500 W, CW | 8kW/cm ² | 8kW/cm ² | 9kW/cm ² |
| 1064 nm, 2500 W, CW | --- | --- | 6kW/cm ² |
| 10.6 μm, 500 W, CW | --- | --- | 4.5kW/cm ² |
| 10.6 μm, 1500 W, CW | --- | --- | 3.5kW/cm ² |
| 10.6 μm, 2500 W, CW | --- | --- | 3.0kW/cm ² |
| Maximum energy density | | | |
| 1064 nm, 360 μs, 5 Hz | 9J/cm ² | 9J/cm ² | 9J/cm ² |
| 1064 nm, 7 ns, 10 Hz | 1J/cm ² | 1J/cm ² | 1J/cm ² |
| 532 nm, 7 ns, 10 Hz | 0.6J/cm ² | 0.6J/cm ² | 0.6J/cm ² |
| 266 nm, 7 ns, 10 Hz | 0.3J/cm ² | 0.3J/cm ² | 0.3J/cm ² |

PHYSICAL CHARACTERISTICS

| | | | |
|----------------------------------|-----------------------|--------------------|----------------------|
| Effective aperture | 55mm</, | 55mm</, | 55mm</, |
| Absorber (high damage threshold) | HD | HD | HD |
| Dimensions | 120H x 120W x 135D mm | 89H x 89W x 40D mm | 116H x 116W x 37D mm |
| Weight (head only) | 2.75 kg | 0.90 kg | 3.3 kg |

ORDERING INFORMATION

| | | | |
|--------------------------|--------------------------------|--------------------------------|--------------------------------|
| Available output options | DB15, USB, RS-232 or Bluetooth | DB15, USB, RS-232 or Bluetooth | DB15, USB, RS-232 or Bluetooth |
| Compatible stand | STAND-5-443-C | STAND-5-443-C | STAND-5-443-C |
| Product page | | | |

- a. Calibrations at 21 to 2.5 μm and 10.6 μm are available on special request
- b. Nominal value, actual value depends on electrical noise in the measurement system.
- c. With anticipation.
- d. Including linearity with power.
- e. For 360 μs pulses. Higher pulse energy possible for long pulses (ms), less for short pulses (ns).
- f. Minimum cooling flow: 1.5l/m (UP55M-700W-HD) or 3l/m (UPSSC-2.SKW-HD), water temperature Q2 °C, 1/8 NPT compression fittings for 1/4 inch semi-rigid tube. Contact Gentec-EO for clean deionized water cooling module option.

Specifications are subject to change without notice
T 418.657.8003 | info@gentec-eo.com