

## Noblelight Flash System - 6kW

High peak power pulses from UV to IR

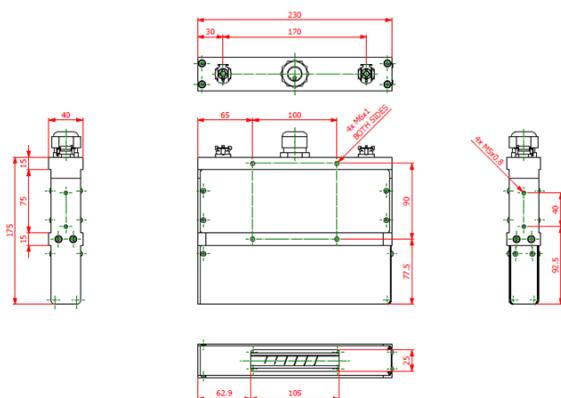
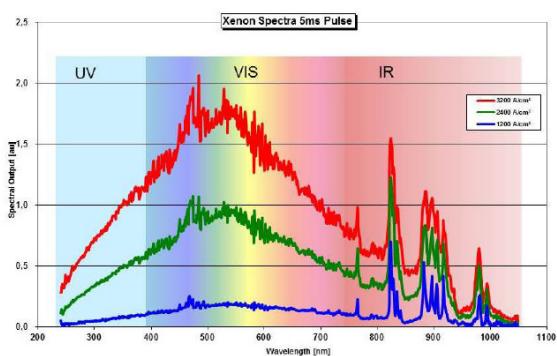
### Features

- UV to IR spectrum
- High peak power pulses – Megawatt/cm<sup>2</sup> (MW)
- Short pulse durations – microsecond (us)
- Fast repetition rates – kilohertz (kHz)
- Instant On / Off cycle
- No temperature build up – high temperature processing on low temperature substrates
- Integrated energy monitor
- Easy lamp replacement
- Integrated QRC© reflector for optimum energy delivery
- High throughput

- Stackable optical modules allow larger exposure areas
- Flexible operating software
- Ease of integration into external systems
- Non-toxic (no Hg)

### Application Areas

- Rapid Thermal Processing (RTP)
- Flash Lamp Annealing (FLA)
- Photovoltaic cell / module testing
- Curing, sintering and heating
- Disinfection
- Semiconductor processing



## Technical Data

### Dimensions

- Cabinet (LxWxH) 1000x420x735mm
- Weight (power supply) 165kg

### Optical module

- LxWxH (230x40x175mm), weight 5kg
- Flash lamp (80 or 100mm arc)
- QRC® coated flow tube

### Power supply specification

- Pulse length 0.010 – 20 ms
- Pulse frequency 0.1 – 5000Hz
- Pulse voltage 100 – 400V DC
- Pulse current, max. 800A
- Pulse Peak power, max. 320kW @ 800A, 400V DC
- Pulse energy, max. 2000 J
- Average power, max. 6kW
- Simmer current, adjustable 2, 4, 6, 8 A
- Ignition voltage 1500V DC, 15 kV at ignition wire

### Integrated system control with following functions

- Storage of up to 15 sets of parameters
- Multiple interfaces
- Pulse energy control, constant pulse energy over the complete flash lamp life time
- Ramping up and down
- Burst pulse control
- Pulse counter with various functions

### Installation Requirements

- 3 phase line power 3 x 400 V + 10 %, 3P+E, 50 Hz
- (200/208/230/380/400/480V adjustable)
- Power consumption 4 kVA (max)
- Required fuse protection 400V, 6A (208V, 11A)

### External Water

- Water flow, load-dependent 1 - 10 l/min.
- Water inlet max. 20°C / 8 bar
- Pressure drop to outlet min. 4 bar
- Cooling power max. 3.0 kW

### Ambient Conditions

- Temperature 10-35 C
- Relative humidity max. 80%, non-condensing

### Effect on the Environment

- Heat dissipation ca. 0.4kW
- Noise level, without pulsing 60 dBA at 1m distance
- Electro-magnetic compatibility EN6100-6-4, EN6100-6-2

South Korea

Heraeus Korea Corp

13F, 156, Gwanggyo-ro

(Eui-dong, Gwanggyo business center)

Yeongtong-gu, Suwon-shi, Gyeonggi-do, 16506

Phone +82-31-270-9446

Fax +82-31-8064-1847

hng-hk@heraeus.com

We reserve the right to change pictures and technical data of this brochure.