# Heraeus



# **Heraeus Noblelight** LHP10H Mark IIM System

# The new LHP10H Mark IIM makes upgrading your Legacy Heraeus microwave system and/or power supply easy!

The LHP10H Mark IIM power supply was designed to replace an existing Heraeus Noblelight P600M or VPS-6 power supply in a retrofit installation. The existing I600-series irradiator and RF detector can be used and do not need to be replaced.

The new LightHammer® LHP10H Mark IIM power supply features...

- State-of-the-art electronics technology
- Power Factor Correction (PFC) of ~99% at full load
- Minimum Total Harmonic Distortion (THD)
- 200–480 VAC, 50/60 Hz universal input voltage
- Higher reliability
- Multiple communications protocols enabled (DeviceNet<sup>™</sup>, Profibus®, Profinet®, EtherNet/IP<sup>™</sup>, Dry Contact)
- Real-time diagnostic capability
- Light weight and compact design

- Improved total cost of ownership
- The irradiator can be mounted vertically using "D" bulbs

LHP10H Mark IIM requires less power than the legacy systems due to much improved efficiency and incorporation of power factor correction circuitry. Therefore, less current is required, and thus lower costs for electricity. Furthermore, with the power supply's completely balanced current draw from the 3-phase, your plant's existing electrical system will see an improved load handling capability. All reasons to upgrade to this new, state-of-the-art technological power supply.

**IMPORTANT NOTE:** When installing the LHP10H Mark IIM into an existing legacy installation, all power supplies in a control group/row must be replaced. Differing power supplies cannot be mixed in a control group. Some PLC remote input commands may need to be reprogrammed.

# Specifications: LHP10H Mark IIM

In many existing installations, interconnecting cables are located in cable trays/raceways; Heraeus Noblelight has created adapter cables so the existing cables do not need to be removed. An adapter cable is supplied to connect the existing irradiator control cable to the LHP10H Mark IIM power supply. An adapter cable is provided to connect the existing P600M RF detector cable to the rear of the LHP10H Mark IIM. The VPS-6 RF detector cable, however, does need to be replaced since this connection is made through the Multi-Row I/O or Customer I/O module and is not directly connected to the power supply. A pigtail input power adapter cable is available to connect the J101 terminal block of the LHP10H Mark IIM to the P101 input power connector used for the existing power supply.

# Power Supply: Model LHP10H Mark IIM

Weight: 25 kg (55 lbs.).

**Dimensions (W x H x L):** 419 mm x 217 mm x 777 mm with connector (16.48" x 8.54" x 30.6" with connector).

Cooling: Internal fans.

**Input Voltages**: 200 V–480 V (auto-ranging), 3-phase, 50/60 Hz. **Max Line Current**: At 380–480 V: 14.2–11.3 at 200–240 V: 27.5–22.6 A. **Mounting position**: Horizontal—unit can be free standing, stacked, or rack mounted.

Line Power at 100%: 10 kVA.

Clearance: Allow 305 mm (12 in.) clearance front and rear of the power

supply for cooling air flow and cable connections.

Safety Interlocks: E-stop external interlocks (customer I/O) RF fault.

Mag Current @ 100% Power: 890 mA/magnetron.

Mag Current Output Accuracy:  $\pm 1\%$ . Power Factor @ 100% power: 99%.

I/O Communications: Master/Slave (dry contact)(S), DeviceNet™ (0),

Profibus® (0), Profinet® (0), EtherNet/IP™ (0).

**Power Level Control:** 4–20 mA, 0–10 vdc, 4-bit binary, front panel. **Front Panel Indicators/Controls:** Power On/Off switch, USB port, display unit with ON/Standby/OFF buttons and Power Level control buttons.

**Output Range:** 35% to 100%.

Audible Noise Level: 65 dBa @ 1 m (at lamp Off/Reset).

3-phase: 50/60 Hz.

Enclosure Rating: IP20 (NEMA 1).
Stacking: 5 units maximum.
Specifications subject to change without notice.

The new power supply is <u>AIMS® (Automated Intelligent Monitoring System)</u> enabled and available with additional hardware and software. This feature provides careful on-board monitoring and analysis of system parameters, which can provide valuable information regarding the system performance and status. The result is improved system uptime and maintenance.

### **LHP10H Mark IIM Power Supply Features & Applicability**

Features		LHP10H
S / W Update		
	USB port	S
Communication		
	Master / Slave (dry contact)	S
	DeviceNet <sup>™</sup> , Profibus®, Profinet®, EtherNet / IP™	0
Monitoring		
	AIMS®	0
Possible replace	nent for Power Supply:	
	P300S, LHP6 (legacy), P150, P155, P160, VPS-4	NA
	P600M*	Α
	VPS-6* (only when configured for 600 W / in.)	Α
	LHP10 (legacy)	NA
For use with Irra	diator – Mounting position: Any orientation	
	I300M series	NA
	16 / 16LH (legacy and Mark II) series	NA
	I6B Mark II	NA
	I250 series	NA
	I600M* series	Α
	LHI10 (legacy and Mark II) series	NA
	LHI10B Mark II	NA
For use with Mod	ular Blower:	
	K6 (legacy), K6 Mark II, K250	NA
	K600 (legacy)	Α
	K600 Mark II	NA

 $\mathbf{S} = \operatorname{standard}$ 

NA = not available/applicable

**0** = optional

A = available

\* = requires adapter cables or new cables

ISO 9001 Certified QMS



#### Germany

## Heraeus Noblelight GmbH Heraeusstraße 12-14

63450 Hanau Phone +49 6181 35 4499 Fax +49 6181 35 9926 hng-uv@heraeus.com

www.heraeus-noblelight.com

#### USA

## Heraeus Noblelight America LLC

910 Clopper Road
Gaithersburg, Maryland
20878-1357
Phone +1 301 527 2660
Fax +1 301 527 2661
info.hna.uvp@heraeus.com
www.heraeus-noblelight.
com/uvamericas

#### Japan

## Heraeus K.K.

Noblelight Division
Sumitomo Fudosan Otowa
Building 1F, 2F, 5F
2-9-3 Otsuka, Bunkyo-ku
112-0012, Tokyo
Phone +81 3 6902 6602
Fax +81 3 6902 6613
info.hkk@heraeus.com
www.heraeus-noblelight.jp

#### China

#### Heraeus Noblelight (Shenyang)

Ltd. Shanghai Branch
2F, 5th Building, No. 406
Guilin Rd, Xuhui District
Shanghai 200233, P.R. China
Hotline +86 400 080 2255
Phone +86 (0) 21 3357 5555
Fax +86 (0) 21 3357 5333
info.hns@heraeus.com

www.heraeus-noblelight.com

#### South Korea

Heraeus Korea Corporation
13F, 156, Gwanggyo-ro,
Yeongtong-gu (Eui-Ddong,
Gwanggyo Business Center)
Suwon-si, Gyeonggi-do
South Korea
Phone +82 31 270 9400
Fax +82 31 8064 1847
info hk@heraeus.com

www.heraeus-noblelight.com