

DATASHEET
ELECTRONICS
LPG-350

PHOTEK
ENVISAGE THE FUTURE

LPG-350

Pulsed UV LED for time-resolved detector diagnostics



The LPG can test both the time response of high speed photomultipliers and gating speed of image intensifiers.

The LPG is also available with either a 405 or 650 nm laser, with other wavelengths available on request.

Product Parameters	Minimum	Maximum
Wavelength λ	345 nm	355 nm
Linewidth $\Delta\lambda$	12 nm	12 nm
Output Pulse	10 ns	Duty cycle limited
Jitter (input pulse to output light)	< 1 ns	< 1 ns
Repetition Rate, 10 ns pulse	0 Hz "Single Shot"	1 MHz*
Repetition Rate, 10 us pulse	0 Hz "Single Shot"	4 KHz
Trigger Input	4 V, 50 Ω	5 V, 50 Ω
Power Supply	+11.5 V	+12.6 V
Supply Current @ +12 V	120 mA	500 mA
Synch Pulse Output Impedance	50 Ω	50 Ω

*Note: At 10 ns the frequency is limited to 1 MHz maximum unless the LPG is forced cooled.

Key Attributes

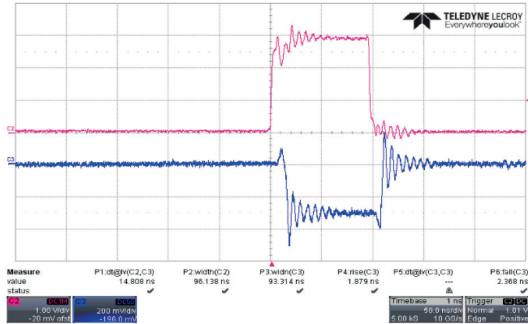
- > Specifically designed for time-resolved diagnostics of high speed optical detectors
- > Simple to use with only a trigger input and synch output connector
- > Pulse width controlled by trigger width

Applications

- > Time resolved imaging applications
- > Saturation measurements on photomultipliers

LPG-350 Pulsed Characteristics

- > Pulsed Width Loss
 - Min 2 ns
 - Max 6 ns
- > Propagation Delay
 - Min 14 ns
 - Max 16 ns
- > O/P Pulse Rise-time
 - Min 1 ns
 - Max 2 ns
- > O/P Pulse Fall-time
 - Min 2 ns
 - Max 3 ns



LPG-350 Connectors

Input Power		
SMB Socket	Centre	+12 V
	Screen	0 V
Trigger Input		
SMA Socket	Centre	TTL Pulse
	Screen	0 V
Current Monitor Output		
SMA Socket	Centre	Offset I/P
	Screen	0 V

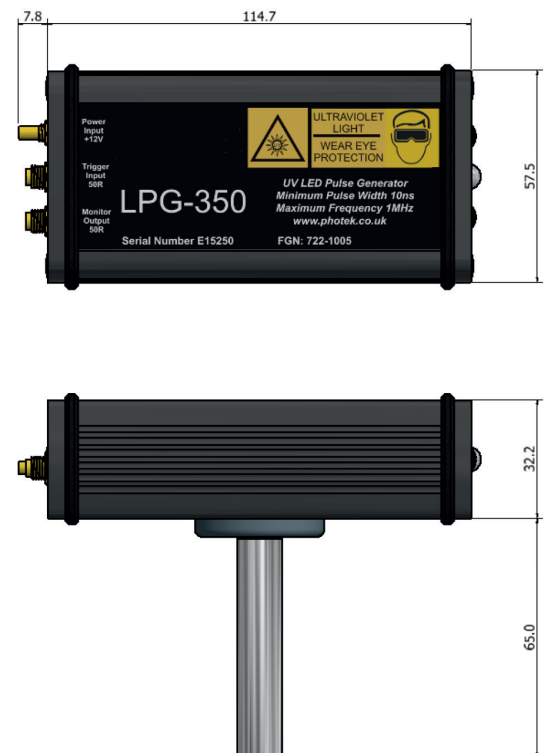
Mechanical	
Height	33 mm (excluding mount post)
Width	58 mm
Length	115 mm
Weight	220g
Mounting Post Length (mm)	63.5 mm (with an M6 stud)
Mounting Post Diameter	12.7 mm
Trigger Input Connector	SMA
Power Supply Connector	SMB
Synch Output Connector	SMA
Min Operating Temperature	0°C
Max Operating Temperature	70°C

Important: UV Safety Glasses should be worn at all times while using this product.

Items Supplied

- 1x **722-1005 - LPG-350**
Pulsed LED 350 nm
- 1x **723-1005 - EPSU-12V ***
Universal a.c. to 12Vd.c. Power Supply
- 1x **ED588**
BNC to SMA Trigger Cable - 2m
- 1x **B3000 or B3001 or B3002**
UK/US/EU IEC
- 1x **UMLPG-350**
LPG-350 User Manual

* EPSU-12V is not supplied if the unit is to be used with any mains powered Photek unit. An appropriate power cable will be supplied to connect the LPG-350 to the mains powered unit.



**DATASHEET**
LPG-350**About Photek**

Photek is a specialist manufacturer of vacuum based tubes and camera systems for photon detection.

Our product range includes; Camera Systems, Image Intensifiers, Photomultiplier Tubes, Streak Tubes plus a range of associated electronics.

We are experts in large area and ultra-high speed imaging and advanced photon counting camera systems.

Our continuing success is built upon continuous innovation and product development, and by harnessing and applying knowledge to find solutions for all of our customers' applications.

Photek is accredited to ISO 9001 and ISO 14001.

**Contact Us**

Our team of specialist engineers and scientists are ready to discuss your application requirements in depth.

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Photek Ltd reserves the right to update and improve this document without prior notice.