For reliable measurement, control and indication of rotational speeds



## **RT STROBE pocket LED**

The ultra high-performance, hand-held stroboscope. Superfast. Superbright. Superlight. Supertight.

# Next Generation 4.800 LUX

#### quartz accuracy flash control

#### water proof and dust proof housing (IP65)

#### multiline display

FPM

#### Genuine one-handed operation. Just like your mobile phone.

With very few exceptions, the settings shown on the multiline display can be operated using just your thumb. Measure or control the movement of rotating and oscillating objects at the touch of a button. Or create "static images" for quality assurance or the observation of processes with rapid cycles. For this use in particular, the *RT STROBE pocket LED T* with trigger input and output is highly recommended.

*RT STROBE pocket LED T* with trigger input and output is the perfect device for all applications controlled by an external trigger signal.



#### ergonomic one-handed operation

#### Scope of application for the »RT STROBE pocket LED«



**Textile industry** > Setting up and monitoring processes in all areas of production and finishing.

**Paper production** > Setting up and quality monitoring of systems in operation.

**R&D** > Testing and controlling the behaviour of materials, adhesives, composite systems etc. at high speeds, e.g. in the development of washing machines.

**Acoustics** > Testing and monitoring resonance and oscillation behaviour.

**General machinery** > Setting up, monitoring and quality assurance, as well as diagnosis of systems in operation.

pocketieo

**Metal foil production** > Visualisation of surface damage.

max. 300,000 flashes per minute

#### extensive variety of settings

#### protective holster

#### Significantly faster. Significantly brighter.

With up to 300,000 flashes per minute, the *RT STROBE pocket LED* is one of the best-performing devices in its class. In terms of light intensity, this device is second to none among portable LED stroboscopes world-wide. The quartz accuracy of the control function ensures absolute flash precision. The objectives of "maximum light yield" and "homogenous surface illumination" were ideally implemented in the development of the optical assembly. Cutting-edge, ultra-high performance LEDs and intelligent control electronics play a key role in achieving this.

#### Significantly tighter.

The ergonomically and functionally optimized housing with integrated protective holster fulfils the requirements of protection class IP65. This means the RT STROBE pocket LED is extremely well protected against dust and water jets.

You can find further information at www.rheintacho.com.



**General production machinery** > Monitoring and testing of high-speed processes.

**Printing industry** > Monitoring printing results, even in poor lighting conditions.

**Automotive industry** > Visualisation of the oscillation of vehicle components at different rotational speeds.

**General** > Contact-free measurement of rotational speed or frequency of moving objects. Ideal illumination tool for high-speed video recordings.



RHEINTACHO is a well-known specialist for customised rotational speed measuring solutions. Less well-known are the principles behind our success.

RHEINTACHO is a family-run company and wishes to stay that way. We cultivate a family atmosphere throughout the company, adopting an integrative approach in which each employee is equally involved.

Within this atmosphere of tolerance and trust, our highly qualified employees feel comfortable and adopt responsibility for the company as a whole.

A flat hierarchical system, direct contact, communication on an equal footing – a company structure which allows us to focus fully on our priorities: customer satisfaction, innovation, flexibility, quality, efficiency, growth.

Our aim is to meet our customers' every need by consistently producing the best possible rotational speed measurement product at a competitive price. Since this also means providing an excellent all-round service we place great emphasis on optimising levels of cooperation, reliability and continuity.

The success of this approach is reflected in the pleasure we find in our work even when the pressure is on. We are a growing company, but we prefer to grow at a natural pace rather than at all costs. In this spirit, our staff numbers, turnover and innovative productivity, as well as the challenges we face, are steadily growing.

The future is bright for RHEINTACHO.

#### max. 300,000 flashes per minute

#### extensive variety of settings

#### protective holster

#### Measurement, control, observation. In the palm of your hand.

Connect your *RT STROBE pocket LED T* with the device or plant to be monitored via a trigger cable. Switching from internal to external triggering displays the units 1/min or Hz rather than FPM. A wide variety of options for influencing the input signal before the flash is activated enables you to ensure that the flash will be activated in exactly the right position.

The trigger interface is designed as a combined input and output interface. The trigger output allows you to set a flash frequency in the stroboscope and transmit it as a trigger signal to an external device or machine.

Printed CE Declaration of Conformity available on request. The technical data are also available in PDF format at www.rheintacho.com.

## Next Generation 4.800 LUX



RT STROBE pocket LED @ 3° @ 300 mm @ 6.000 FPM

Before leaving our factory, all our devices are submitted to a quality and performance test. The test certificate enclosed with each device certifies that the light emission and flash precision of the device comply fully with the RHEINTACHO quality guidelines. The certificate is based on a measuring procedure which RHEINTACHO has specially developed for the objective assessment of these relevant stroboscope performance parameters.



**General production machinery** > Monitoring and testing of high-speed processes.

**Printing industry** > Monitoring printing results, even in poor lighting conditions.

**Automotive industry** > Visualisation of the oscillation of vehicle components at different rotational speeds.

**General** > Contact-free measurement of rotational speed or frequency of moving objects. Ideal illumination tool for high-speed video recordings.

Scope of delivery



Stroboscope RT STROBE pocket LED, operating manual, certificate, batteries and case. Scope of delivery for the device version with trigger input/output also includes: cable with plug for trigger signal.



## Adjust the settings of the RT STROBE pocket LED precisely to your own requirements.

#### You can determine:

- > the flash frequency and duration independently of each other
- > the duration of the flash, both absolute and relative (Shorter flash duration = sharper image; longer flash duration = stronger illumination)
- > a delay period between the internal trigger signal and the flash
- > a phase shift between the internal trigger signal and the flash
- > whether you want to increase, halve, double or lower the currently selected value

### Additional functions of the RT STROBE pocket LED T with combined trigger input/output:

- > adjustment of the phase shift in degrees between external trigger signal and flash
- > adjustment of the delay period in milliseconds between external trigger signal and flash
- > definition of the polarity of the trigger signal
- > determination of the intervals at which the flash should be triggered by the pulse input using a pulse divider

#### Accessories (optional)



Tripod adapter, tripod, calibration certificate, belt pouch.

#### **Technical Data**

General data	
Protection class	IP65
Frequency range	30 - 300,000 FPM (flashes per minute)
Display	LCD, multiple lines
Accuracy	+/- 0,02 % (+/- 0,025 μs)
Resolution	+/- 0.1 (30 999 FPM) +/- 1 (1,000 300,000 FPM)
Certificates	CE
Flash parameter	
Flash duration	Adjustable
Light emission	4800 Lux @ 6000 FPM / 11,9 inch
Flash colour	Approx. 6,500 K
Power supply	
Power supply	3 x AA size disposable batteries or 3 x NiMH, rechargeable batteries
Continuous use time	NiMH-Rechargeable batteries ca. 11 h @ 6,000 FPM
dependent on setting	disposable batteries: approx. 5 h @ 6,000 FPM
Housing	
Material	Aluminium / ABS, Heavy duty design
Dimensions	7,5 x 3,2 x 2,4 inch / 191 x 82 x 60 mm
Weight	Approx. 400 g (including batteries)
Ambient conditions	
Ambient temp.	0° 45° C / 32° 113° F
Humidity Protection code	IP65
Additional information for RT STROBE pocket LED with trigger input and output	
Trigger input	
Principle	Optocoupler, voltage-free
Low level	< 1 V
Level	3 32 V, NPN + PNP
Minimum pulse	length 50 μs
Reverse voltage protection	Yes
Trigger output	
Principle	Short-circuit and overvoltage proof transistor
	output to the optocoupler control, non-isolated
Level	NPN, max. 32 V
Pulse length	Adjustable
Maximum current	50 mA
Reverse voltage protection	Yes



#### **RHEINTACHO Messtechnik GmbH**

Waltershofener Straße 1 79111 Freiburg • Germany Telefon +49 (0)761 45 13 0 Telefax +49 (0)761 44 52 74 info@rheintacho.de www.rheintacho.de

#### **RHEINTACHO UK**

Unit 17, Enterprise Court, Pit Lane, Micklefield, Leeds, LS25 4BU • U.K. Telefon +44 (0)113 287 4411 Telefax +44 (0)113 287 4422 sales@foundrometers.co.uk www.foundrometers.co.uk

Subject to technical alterations N0001.626A · September 2013

