

For reliable measurement, control and indication of rotational speeds



# RT STROBE qbLED RT STROBE super qbLED

Ultra-efficient hand-held stroboscopes  
for precision measurements

Bright light

Intelligent operation

Integrated li-ion battery



Laser class 2

RT STROBE qbLED  
(Part number A4-3500)

RT STROBE super qbLED  
(Part number A4-3550)



### Intelligent: ultra-efficient portable stroboscopes

The extremely bright, hand-held stroboscopes comprising the *RT STROBE qbLED* range are unrivalled in terms of brightness, operation and technology. These extremely robust and precise hand-held stroboscopes are used to conduct measurements in difficult industrial environments and are specifically designed for maintenance work / commissioning and inspections. They are very easy to use: moving parts are optically “frozen” and thereby made visible to the human eye. In this way, for example, defective components can be identified or suboptimal settings can be corrected during operation.

Time-consuming, inconvenient attaching of stationary inspection systems are now a thing of the past. The convenient, easy-to-use stroboscopes belonging to the qbLED family meet all requirements. Thanks to their comfortable handgrip the stroboscopes, weighing just over 1 kg, are perfect to hold. As is the case with all Rheintacho stroboscopes, threaded holes for the attachment of a stand are found underneath.

### Application example



Contact-free measurement of rotational speed or frequency of moving objects. Use of the laser (Version super qbLED) is possible with or without trigger plug.

Up to 8,000 LUX

Large display with backlight

Integrated lithium-ion batteries with up to 7 hours continuous use

Operation mode:  
Pro and standard (switchable)

### Informative: display with illuminated background

The clear and neatly arranged rear reveals the various controls and settings. For improved readability the display is equipped with background lighting. This makes it significantly easier to read the values, even under unfavourable environmental conditions.





# Innovative...

... auto-sync laser function from RHEINTACHO



Various setting possibilities  
within the pro mode

40 / 118\* high-performance LEDs  
(\*RT STROBE super qbLED)

Auto-sync laser function\*  
(\*RT STROBE super qbLED)

Frequency up to  
300,000 flashes per minute



## Innovative: auto-sync laser function

The *RT STROBE super qbLED* version constitutes a world-first. 118 long-life, high-performance LEDs ensure an exceptional illumination area. It is the first measuring device of its kind to be equipped with an auto-sync laser function. This allows for the synchronisation frequency to be determined very quickly, without manual adjustment or external sensor signals. Furthermore, the additionally generated value guarantees absolute measuring certainty.

In order to make use of the laser function you first need to apply a reflective mark on the object to be measured. Point the stroboscope to the rotating object. The rotational speed is measured with the help of the laser beam's reflection.



Laser class 2

We are known as the specialists for customized solutions for rotational speed measurement. Less well-known is what our success is due to.

Rheintacho is a family-owned company and intends to remain as such. Our company policy is to foster familiarity among our employees: this means an inclusive approach, emphasizing that each employee has an equal part to play in the team as a whole.

Our employees feel at home in this atmosphere of acceptance and trust. A select team in which everyone has high-level technical expertise and a sense of responsibility.

With flat hierarchies, short routes and eye-level communication, we can fully concentrate on our priorities: customer satisfaction, innovation, flexibility, quality, efficiency, growth.

It is our goal to provide the best rotational speed measurement and control product at a competitive price for whatever requirement our customers may have. For this, there are other essential features as well: as much co-operation as possible, reliability and continuity.

Because we do this successfully, we approach our work with pleasure and passion – even under pressure. This is how we intend to continue growing, in a harmonious and sustainable fashion: in terms of employees, sales, innovation and challenges.

Find a challenge for us.





**Various setting possibilities within the pro mode**

**40 / 118\* high-performance LEDs**  
(\*RT STROBE super qbLED)

**Auto-sync laser function\***  
(\*RT STROBE super qbLED)

**Frequency up to 300,000 flashes per minute**

### Individual: switchable between standard and professional modes

All standard settings can be adjusted quickly and easily without any prior in-depth knowledge, so that you can begin your maintenance work immediately. If your requirements are more specialised and very specific measurements, for example, call for a time-delayed flash or a slow motion function, you can activate these settings in the pro mode, which is specially designed for these.

### Scope of application for the RT STROBE qbLED and RT STROBE super qbLED

**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.

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

**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



Part number A4-3500



Part number A4-3550

Stroboscope version qbLED (40 LEDs, without laser) or super qbLED (118 LEDs, with laser).



Besides adjustment of frequency, brightness and phase-shifting the pro mode of the RT STROBE qbLED allows you to change further settings, such as:

**“SLOW” (slow motion):** The “SLOW” function allows the viewer to view movement in slow motion. The speed of the slow motion depends on the flash frequency and corresponds to the value selected.

**Storage function “Memory”:** Selected settings can be stored in five separate storage locations and easily recalled.

**“Pulse divider (DIV)”:** The pulse divider can be used to set a value x, by which the external trigger signal is then divided.

Example: when scanning a cog wheel, an external trigger (e.g. rotational speed sensor) sends out a signal for each cog scanned. With a DIV value of 10, it will only flash once in every 10 signals.

## Technical data

General parameters	qbLED	super qbLED
Number of LEDs	40	118
Frequency range	30 - 300,000 flashes per minute	
Display	LCD, multiline	
Accuracy	$\pm 0.02\%$ ( $\pm 1$ digit / $\pm 0.025\ \mu\text{s}$ )	
Resolution	$\pm 0.1$ (30.0 ... 999.9 FPM)	
	$\pm 1$ (1,000 ... 9,999 FPM)	
	$\pm 10$ (10,000 ... 300,000 FPM)	
External trigger input	3 - 30 V / max. 5 mA (isolated optocoupler) DIN 41524 5-pin standard connector U <sub>out</sub> = 24 VDC, 60 mA	
Certifications	EMV / EMC 2004/108/EG; 2006/95 EG; DIN EN 61010-1:2011; DIN EN 62471:2009; CE; DIN EN 60825-1:2008 (Version super qbLED)	

Flash parameters	qbLED	super qbLED
Light duration	Adjustable	
Light intensity	approx. 1,750 Lux @ 1° / 300 mm (12 inch)	approx. 8,000 Lux @ 1° / 300 mm (12 inch)
Flash colour	approx. 5,000 - 8,000 K	

Power supply	qbLED	super qbLED
Power supply	Integrated lithium-ion batteries	
Continuous use time	approx. 7:00 h @ 0.500° (~875 Lux),	approx. 2:30 h @ 0.500° (~4,000 Lux),
	approx. 4:00 h @ 2,000 Lux (1,140°)	approx. 5:00 h @ 2,000 Lux (0,250°)

Housing	qbLED	super qbLED
Material	Aluminium	
Dimensions	150 x 130 x 112 mm / 6.0 x 5.1 x 4.4 inch	
Weight	approx. 1,050 g	approx. 1,150 g

Ambient conditions	qbLED	super qbLED
Temperature	0 - 40 °C / 32 - 104 °F	
Type of protection	IP30	



Operating instructions, calibration certificate, charger with connector set, trigger plug, reflective tapes (Version super qbLED), handle, case.



[www.rheintacho.com](http://www.rheintacho.com)



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