S.I. Instruments
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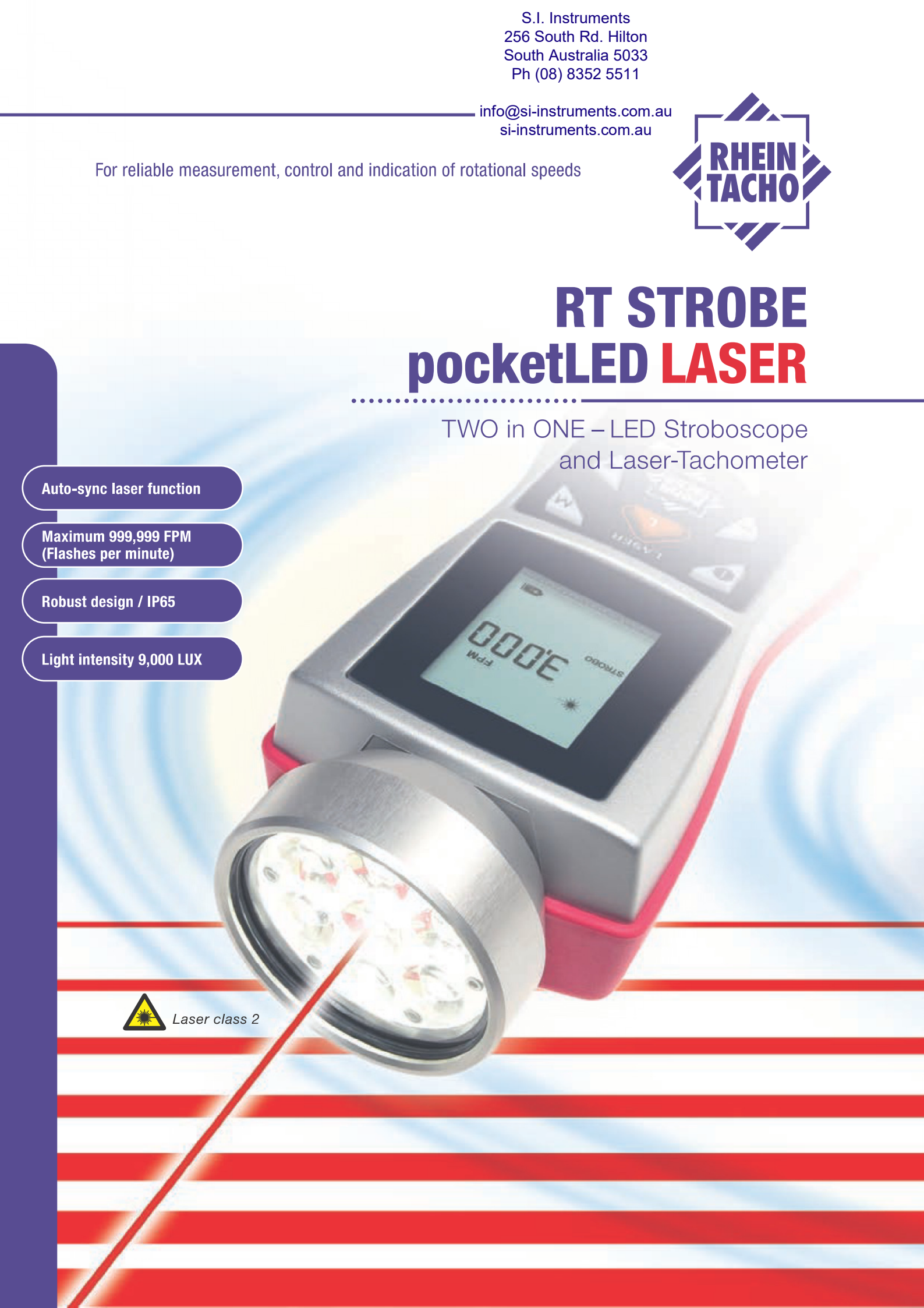
For reliable measurement, control and indication of rotational speeds

RT STROBE pocketLED LASER

TWO in ONE – LED Stroboscope and Laser-Tachometer

- Auto-sync laser function
- Maximum 999,999 FPM (Flashes per minute)
- Robust design / IP65
- Light intensity 9,000 LUX



Laser class 2

Auto-sync laser function

Quartz accuracy flash control

Bringing you the best of both devices

Today's production processes impose very challenging requirements on each form of measurement technology when it comes to maintenance and servicing. Strict quality specifications, more complex manufacturing structures to realize short lead times and the requirement for 100% availability make flexible and high-precision test methods indispensable.

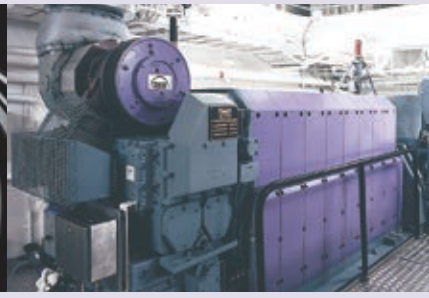
The new *RT STROBE pocketLED LASER* is the further development of the current portable stroboscopes *RT STROBE pocketLED*. This portable stroboscope was extended by the innovative auto-sync laser function as well as by the additional application possibilities of a laser-tachometer.

Ergonomic one-handed operation

Connect your *RT STROBE pocketLED LASER* with the device or plant to be monitored via a trigger cable. 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.

Scope of application for the RT STROBE pocketLED LASER



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.

Various setting possibilities

Protective holster

Much faster. Much brighter. Multifunctional.

Within the stroboscope mode, the portable multifunction device flashes with up to 999,999 flashes per minute and belongs to the best-performing devices of its class. The quartz accuracy ensures absolute flash precision. 6 extremely bright LEDs ensure an exceptional illumination area.

By means of a reflective laser beam, The *RT STROBE pocketLED LASER* offers the possibility to determine the flash rate almost automatically and thus let moving parts appear optically “frozen”. If you only want to measure the revolutions, you can also use the stroboscope as a laser tachometer with disabled flash function.

The ergonomically and functionally optimized housing with integrated protective holster fulfils the requirements of protection class IP65. This means the *RT STROBE pocketLED LASER* is extremely well protected against dust and water jets and thus perfectly suitable for use in rough industrial environments.

YouTube XING 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.

RHEIN TACHO

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

Protective holster

Innovative: Auto-sync laser function

Laser class 2

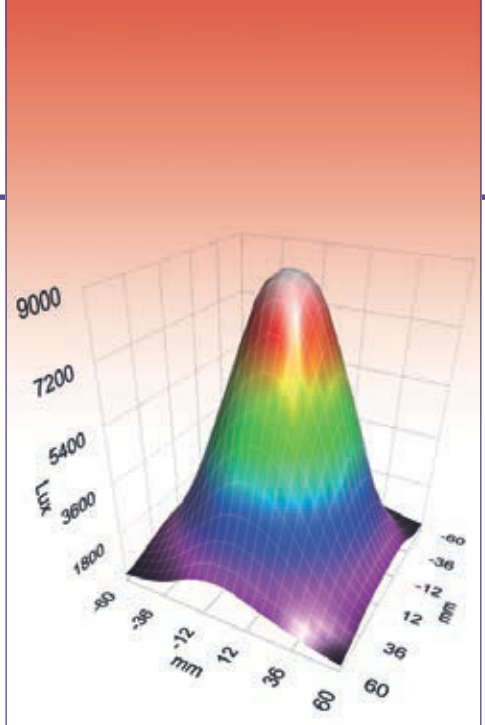
The *RT STROBE pocketLED LASER* constitutes a world-first. 6 long-life, high-performance LEDs ensure an exceptional illumination area. It is the first measuring device of its kind to be equipped with an auto-sync laser function. This allows for the synchronisation frequency to be determined very quickly, without manual adjustment or external sensor signals. Furthermore, the additionally generated value guarantees absolute measuring certainty.

Measuring, inspecting and monitoring.

The function of the laser makes the application a child's play:

- Affix a reflective tape
- Switch on and activate the laser
- Direct the device at the reflective tape
- That's it!

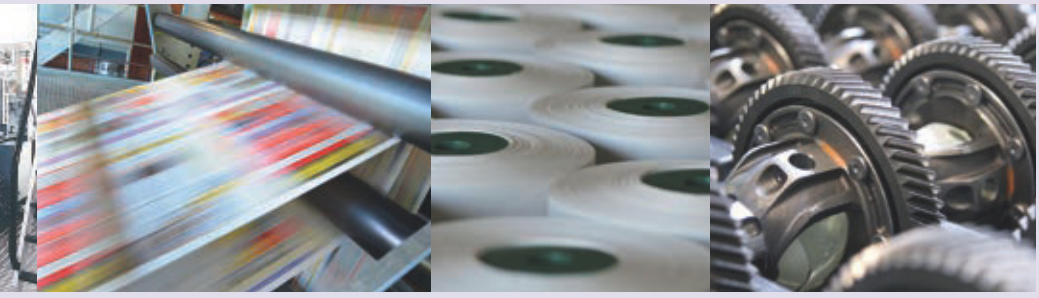
The auto-sync laser function synchronizes the flash frequency of the stroboscope via the reflective tape with the machine process. Tedious adjustment, misinterpretations e.g. due to the harmonic multiples or constant readjustment in processes with fluctuating speed are thus a thing of the past.



RT STROBE pocketLED Laser
@ 3° @ 200 mm @ 6,000 FPM

Innovative: Auto-save function

For applications in which the reflective tape cannot be attached directly to the observed object, a memory function (auto-save) has also been added. Thereby, similar to the focus lock on a photo camera, the speed at a position of the system which rotates with a similar to equal speed can be taken down, and this frequency can then be used for further observation on the position of the system which is actually to be tested.



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Scope of delivery

Stroboscope RT STROBE pocketLED LASER (device version with trigger / device version without trigger), operating instructions, calibration certificate, cable with plug for trigger signal, reflective tapes, 6 x AA size disposal batteries, case

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 designated for these.

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

> *"SLOW" (slow motion)*: The "SLOW" function allows the viewer to view movement in slow motion.

> *"Memory" (storage function)*: 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.

Technical data

General parameters	
Number of LEDs	6
Frequency range	30 ... 999,999 FPM (Flashes per minute)
Display	LCD, multiline, colored lighting
Accuracy	Flash frequency (internal) and frequency measurement
	(external): ± 0.02 % (± 1 digit / ± 0.025 µs)
Resolution	± 0.1 (30.0 ... 999.9 FPM) ± 1 (1,000 ... 999,999 FPM)
Current consumption	Max. 1.2 A
Flash parameters	
Light duration	0.025° … 6.000° / 1 … 1,000 µs
Light intensity	6,500 Lux @ 300 mm (12 inch) /
	9,000 Lux @ 200 mm (8 inch)
Flash color	approx. 6,500 K (5,000 … 8,000 K)
Illumination area	approx. 80 mm @ 300 mm / approx. 3 inch @ 12 inch
Power supply	
Power supply	3 x AA size disposable batteries or
	3 x NiMH rechargeable batteries
Continuous use time	5h @ 6,000 FPM
Housing	
Material	Aluminium / ABS, Heavy duty design
Dimensions (device)	191 x 82 x 60 mm
Dimensions (case)	207 x 252 x 72 mm
Weight (device)	approx. 400 g (including batteries)
Weight (total)	approx. 930 g (including case)
Ambient conditions	
Temperature	0 ... 45 °C / 32 ... 113 °F
Type of protection	IP65

Additional information for RT STROBE pocketLED LASER with trigger input and output

Trigger input	
Input signal level	Max. power: 3 … 30 V
	Low level: < 2.0 V
	High level: > 3.0 V
	Pulse length: > 50 µs
	Switch: internal: 10 kOhm to + 24 V
Input current	10 kOhm to + 24 V
Trigger output	
Output signal level	Short-circuit and overvoltage proof transistor output,
	non-isolated NPN, < 1 V, max. 30 V
Output current capability	max. 50 mA
Sensor supply	24 VDC ± 15 % max. 60 mA

Accessories (optional)

Belt bag with clip, Mounting kit for tripod or articulating arm, Articulating arm including mounting kit, Tripod, 3-way adjustable, Recalibration, Connection cable (1.5 m), Extension cable (2.0 m)

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