

# BVS-II Wotan

## Machine Vision Stroboscope



### Features

- High pulse-to-pulse stability, typically < 2,5 %
- Burst-mode
- Compact design
- Easy to use with keypad and RS-232
- Various trigger inputs
- Maximum flash frequency 200 Hz (internal trigger adjustable from 1 to 200 Hz)
- Intensity adjustment via keypad, computer or analog interface

The BVS-II stroboscope is designed for machine vision applications. Especially when high-contrast images without in-motion unsharpness and effect of ambient light are required.

It provides a source of extremely short duration, high intensity light pulses. When combined with a suitable fiber optic component, the object is illuminated perfectly.

The heart of the stroboscope is an ultra stable pulsed Xenon flash lamp whose light output is focused by an elliptical reflector into the fiber optic.

The BVS-II Wotan has a maximum pulse frequency of 200 Hz. Through the integrated microprocessor an excellent pulse-to-pulse stability of between 1.5 % and 2.5 % can be achieved.

The desired intensity can be achieved by an analogue signal, via RS-232 interface from the computer, or by setting the default value from the control panel.

The triggering is possible via a TTL signal (5 V), SPS (24 V), or PAL/CCIR-video signal. The shutter lag can be adjusted. In burst mode with one trigger signal several pulses can be delivered.



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### Machine Vision

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## Technical Data

| Flash lamp   |  |
|--|--|
| Maximum energy   | approx. 2,16 J electrical  |
| Maximum frequency  | 200 Hz (internal triggering adjustable from 1 to 200 Hz)   |
| Pulse length   | < 8 $\mu$ s  |
| Spectrum   | approx. 300 nm to 1000 nm  |
| Pulse-to-pulse intensity stability                             | typical < 2,5 %  |
| Lamp lifetime with max. energy                                 | 10 <sup>8</sup> pulses (to 70 % remaining intensity)   |
| Electronic   |  |
| Intensity regulation   | via the control panel, computer or analogue input (1.4 - 6 V: BNC jack)  |
| Delay  | min. approx. 10 $\mu$ s; adjustable to max. 3 ms in 0.01 % steps   |
| Burst mode (producing several flashes from one trigger signal) | pulse count (up to 250) and pulse interval (5 ms – 250 ms) wählbar   |
| Supply voltage   | 85 V – 265 V/50 Hz – 60 Hz   |
| Performance reception  | max. 75 VA   |
| Interfaces   | Schott fiber optics connector<br>Trigger input for TTL (5 V), SPS (24 V) and PAL-video signal (BNC-jack)<br>RS-232 interface to control the stroboscope<br>Up to 9 stroboscopes in RS-232 network connection |
| Dimensions, weight and operating conditions                    |  |
| Cabinet  | (width x depth x height) 106 x 166 x 182 mm  |
| Base Plate   | (width x depth) 110 x 190 mm   |
| Weight   | approx. 2 kg   |
| Operating temperature  | 0 °C – 43 °C   |
| Humidity   | 0 – 80 %, non-condensing   |
| Maximum altitude   | 3000 m above sea level   |
| Industrial protection  | IP 40  |

