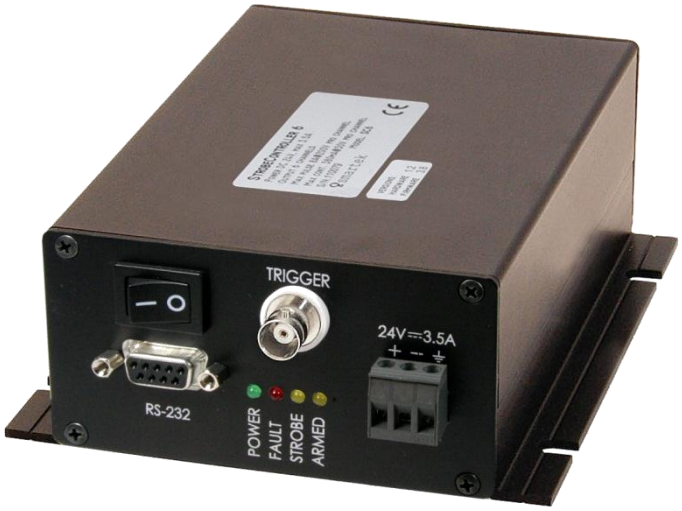
smartek vision



Datasheet

LED Strobe Controller SC6

Business Class LED Illumination Controllers at Economy Prices

The SMARTEK Vision Strobe Controller series is designed for Industrial Machine Vision applications where fast moving objects shall be captured by cameras with minimal blur. This is achieved by creating very bright LED flashes synchronized with the image captures of the cameras at very short exposure times. Due to ultra-short but high power flashes, the achieved illumination intensity is significantly increased with reduced thermal effects for the LEDs. It allows for a save exploitation of LED illumination devices way beyond their standard mode of operation.
The six channel model SC6 drives a broad range of LED illuminations in continuous and flash mode. Thanks to the capability to deliver current pulses of up to 8A and up to 200V per channel, it is even suitable for large and high-power LED lights in serial connection. The exceptional switching power and precision is complemented by an integrated power supply for LED cooling fans and by Digital Light-Head coding, which reads the power limitations of the used LED illumination device and avoids damage caused by high power pulses.
Besides its longevity and reliability, customers appreciate the RS232 access to the controller settings via a comfortable graphical user interface provided with the ScLibClient, and a C++ based API for an easy integration into any software application. The combination of cutting-edge performance and highly competitive price point led to an ever-growing list of demanding reference applications for the SMARTEK Vision Strobe Controller series, from quality assurance in German luxury car production to print inspection of tokens. Our sales and support team is happy to assist you in finding the right solution for your specific scenario.

Key Benefits & Features:

- 6 channels with adjustable output voltage from 5V up to 200V
- High power pulses of up to 8A @ 200V per channel
- Ultra precise pulse adjustment per 1µs and 1mA
- Variable pulse durations from 1µs to 50ms
- Comfortable control via client application or API, over RS232
- Trigger input interface from 5V up to 24V level at negative or positive edge
- Digital or analog light-head coding
- Online current and voltage measurement
- Temperature sensor and overload protection
- Integrated power supply for cooling fan
- Robust and compact anodized aluminum case
- Optional 48V output voltage limitation

Strobe Controller SC6

Specifications:

Output channels:	6
Max current pulse (depending on pulse width):	8A @ 200V per channel (48A total)
Max continuous current:	385mA @ 30V per channel (2.3A total)
Pulse output range:	1µs to 50ms in 1µs increments
Trigger input:	0 – 5V or 0 – 24V level, positive or negative edge
Control interface:	RS232
Power requirements:	+24V DC (min 22V, max 27V)
Power consumption:	Max 3.5A @ 24V (84W) Max 4A @ 24V (96W) with cooling fan on output
Housing:	Black aluminum case
External dimensions (H / W / L):	56 x 130 x 182 mm
Weight:	approx. 780g
Storage temperature:	from -30°C/-22°F up to +80°C/+176°F
Operating temperature:	from -5°C/+23°F up to +50°C/+122°F
Operating relative humidity:	from 25% up to 80% (non-condensing)

Accessories (sold separately):

Our team is happy to assist you in finding the optimal accessories for your controller.

Power supply:	100W/ 24V DC, AC plug E+F(CEE 7/7), 2 leads with core ends for controller DC interface
Cabling:	Power output cables to connect LED lights (on request)
Lighting:	Please contact your local sales representative for our comprehensive lighting portfolio

Software Environment:

Client software:	SMARTEK Vision ScLibClient Strobe controller configuration and control, intuitive graphical user interface for the adjustment of all available settings
SDK:	ScLibSDK with documented API, configuration software and programming samples
Firmware update:	via RS232

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Pin Assignment (Output Connector):

1 – **Channel 1, GND**
2 – **Channel 2, GND**
3 – **Channel 3, GND**
4 – **Channel 4, GND**
5 – **Channel 5, GND**
6 – **Channel 6, GND**
7 – ID2
8 – ID1
9 – GND (SDA, SCL)
10 – not connected
A1 – +24V DC, max 0.4A (for light head cooling fan)
A2 – Power GND
A3 – **+V, Common Output voltage**