

SCORPION 2D STINGER™ CAMERA

SCOPE

Scorpion Stinger™ is a family of machine vision components and products. They provide building blocks for OEM and system integrators.

Scorpion 2D Stinger™ products have focus on:

- industrial strength
- flexibility
- functionality

The Scorpion 2D Stinger Camera is an automation component designed to be used in cutting-edge machine vision applications. It is compatible with the latest version of Scorpion Vision Software.

The system contains one camera with lens, power, stinger control card and provides easy mounting. The standard unit provides the power of GigE vision. The unit is fed with 24 volts. The Scorpion Stinger Control card provides 12V to the camera and strobing currents to internal and external LEDspots and LEDbars.

The following standard units are available:

ARTICLE #	N=CAMERA LENS	M=LED TYPE	O=LED LENS	CAMERA
BLACK AND WHITE CAMERAS				
STG-2D-VGA-N-M-O	6mm 9mm 12mm	White IR	24,2° 33,5°	Sony XCG-V60E
STG-2D-SXGA-N-M-O	6mm 9mm 12mm	White IR	24,2° 33,5°	Sony XCG-V97E
STG-2D-2MP-N-M-O	6mm 9mm 12mm	White IR	24,2° 33,5°	Sony XCG-U100E
STG-2D-5MP-N-M-O	6mm 9mm 12mm	White IR	24,2° 33,5°	Sony XCG-5005E
COLOUR CAMERAS				
STG-2D-VGA-C-N-M-O	6mm 9mm 12mm	White IR	24,2° 33,5°	Basler acA640-120gc
STG-2D-2MP-C-N-M-O	6mm 9mm 12mm	White IR	24,2° 33,5°	Sony XCG-U100CR

SPECIFICATION

The Scorpion 2D Stinger™ Camera consists of:

- an IP-64 enclosure
- one camera with lens
- optional LED, white or IR
- cables
- internal terminal panel
- Support for external LEDspots and LEDbars
- Scorpion Stinger Control Card input 24V, output 12V and strobing signals



Scorpion 2D Stinger™ Camera

NOTE: A Fast Strobing option is required to strobe faster than 10Hz.

Other configurations and different field of views are available upon request.

The following connectors are available depending on system configuration:

CONNECTOR	A	B
1	IN 24V +	IN 24V +
2	IN 24V GND	IN 24V GND
3	Trig +	Trig +
4	Trig -	Trig -
5	Expo out	LED +
6	Expo out GND	LED -
Comment	Used when connecting external LEDbar.	Used when connecting external LEDspot.

APPLICATION AREAS

The unit is designed to be used in 2D and 3D robot vision, measurement, assembly verification and other advanced machine vision solutions. The unit is designed with the highest quality and the design will save man-hours when creating and deploying Machine Vision Solutions.

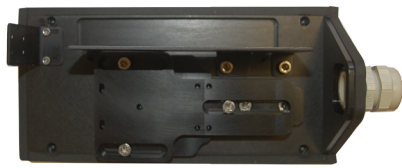
SOFTWARE SUPPORT

The unit is the perfect companion for Scorpion Stinger for Robot Vision and Scorpion Vision Software. Multiple units can be controlled from a single Scorpion Compact PC. The state-of-the-art multi-core support in Scorpion Vision Software ensures the fastest and most robust vision solutions.



**SCORPION
STINGER™**

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Brackets for camera and LED mounting.



The Scorpion Stinger LEDbars and LEDspots are perfect companions to Scorpion 2D Stinger when more light is needed.

TRIGGERING

There are two trigger inputs on the Scorpion Stinger Interface Board inside the Scorpion 2D Stinger Camera. The standard input is straight via an opto-coupler: +A4 and -A5. An input with debounce circuitry is also available: +A1 and -A2.

RELAY MODE

The standard Trigger Input used is through an opto-coupler where the +input (A4 or A1) is connected to 5 volt (A3) through a pullup resistor and the -input (A5 or A2) is connected to GND (A6).

24 V TRIGGER INPUT

By removing the pullup resistor (A3) and the GND connection (A6) the relay input is turned to a 24 volt input.

The default configuration for the trigger input is with a pullup resistor.

For more information:

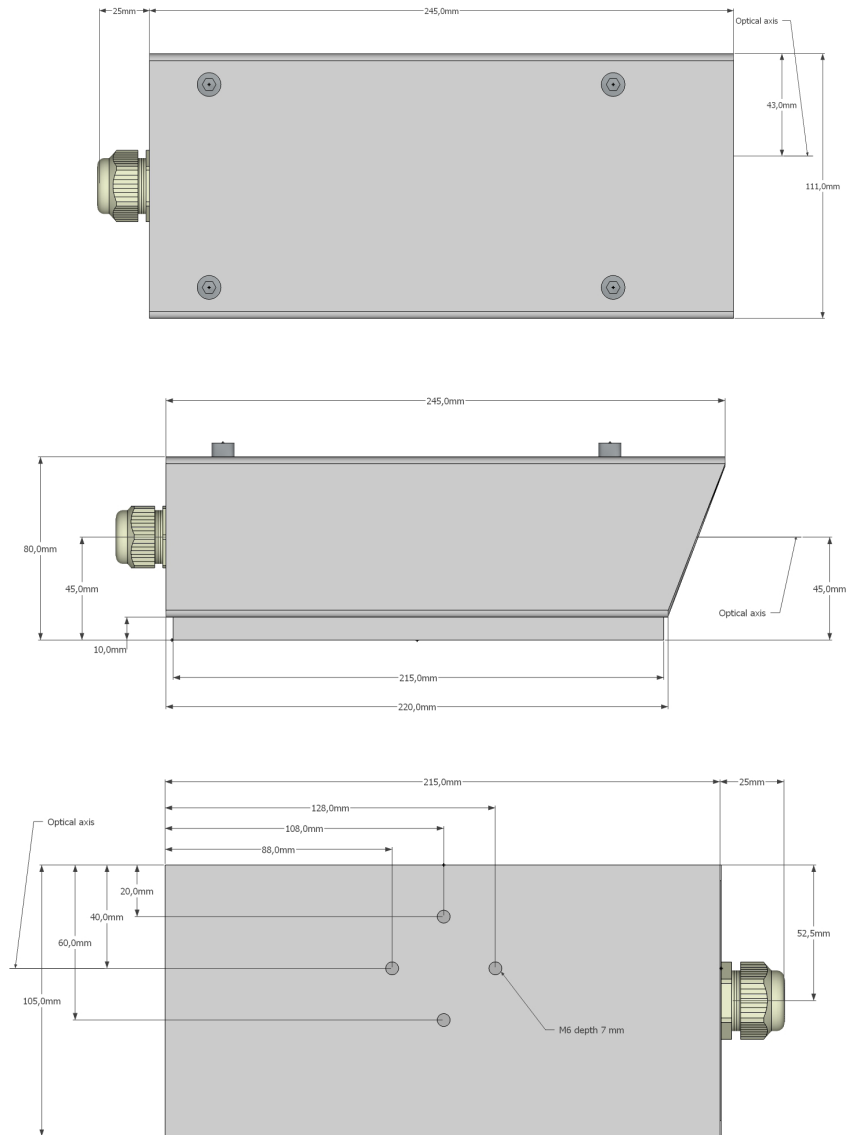


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DIMENSIONS



Housing dimensions: top view, side view and back plane

INTERFACE BOARD SWITCH SETUP

SWITCH	DEFAULT	OFF MEANS	ON MEANS
SW 1.1	On	No boost charge	Boost charge during LED pulse
SW 1.2	On	Capacitor charge current 190 mA	Capacitor charge current 480 mA
SW 2.1	Off	Select timeout 1,7 sec	Select timeout 163 ms
SW 2.2	Off	LED current 3A	LED current 1A
SW 3.1	Off	LED pulse limit 75 ms	LED pulse limit 6,3 ms
SW 3.2	Off	Laser pulse limit 75 ms	Laser pulse limit 6,3 ms
SW 4.1	On	LED pulse every 2nd image capture	LED pulse every image capture
SW 4.2	On	Laser pulse every 2nd image capture	Laser pulse every image capture