



SCORPION BOX CAMERA

SCOPE

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

- industrial strength
- flexibility
- functionality

The Scorpion Box Camera has the following features:

INTEGRATED LED CONTROL AND FLEXIBLE IO

- Built in strobing for white LEDs
- Supports external light - LED spot
- External trigger

FLEXIBLE INDUSTRIAL HOUSING

- H = 43 mm W = 87 mm L = 120 mm
- Easy connection with Ethernet, USB3 and Hirose connectors.
- Optional glands in back-end

HIGH QUALITY IMAGE SENSORS

- VGA to 12 MP resolution
- GigE and USB3
- Monochrome or colour
- Global and rolling shutter

PROVEN SOFTWARE SUPPORT

- Scorpion Vision Software
- Scorpion Stinger Software
- Scorpion 2D Scanner

The Scorpion Box Camera is designed to be used industrial applications. The Box camera is the ideal choice when you need to look at a specific detail in an advanced inspection or assembly verification task. The camera is used for crack detection, colour verification and 2D scanning.

It is connected to a PC with a GigE connection, POE (Power over Ethernet) or an USB3 cable. Every camera is factory calibrated to a task with specific resolution at the selected working distance.



The Scorpion Box Camera is delivered from the factory calibrated at a given working distance with a specified resolution and 2D FOV.

The main target applications are ID tracking, object tracking, height measurement, object counting and more. Fast feature location and measurement will support fast tracking framerates from 5 to 200 fps.

NEW: Connect one or more Scorpion Box Camera, connect an encoder signal to SMARTio for camera synchronization. The Scorpion 2D Scanner camera driver will turn this into a high performance 2D Scanner. The scan can be in color or monochrome. The output image will be high quality without any lens distortion.

For more information:

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Scorpion Vision Software® is a registered trademark and Scorpion Stinger™ is a trademark of Tordivel AS.

The Scorpion Box camera is the perfect companion for Scorpion Vision Software. Scorpion Vision Software can control multiple 2D and 3D cameras from a single Scorpion Embedded PC. Using the Scorpion SMARTio digital-io multiple Box cameras capture images in synch or is driven by the encoder signal of a conveyor.

The Scorpion Stinger Technology has been used to create the Scorpion Box Camera available for selected OEM partners of Tordivel AS.



The Scorpion Box Camera supplements the Scorpion 2D and 3D Stinger camera range from Tordivel.

The Scorpion Stinger Box Camera consists of:

- an aluminium enclosure
- one camera including lens and optional filter
- one or two LEDs
- internal termination and cables
- Scorpion LEDstrobe board

POWER CONSUMPTION

The unit is powered by external power, PoE - Power over Ethernet or USB3.

Type typical power consumption is 2 to 5 Watts. The actual power consumption depends on the camera configuration.

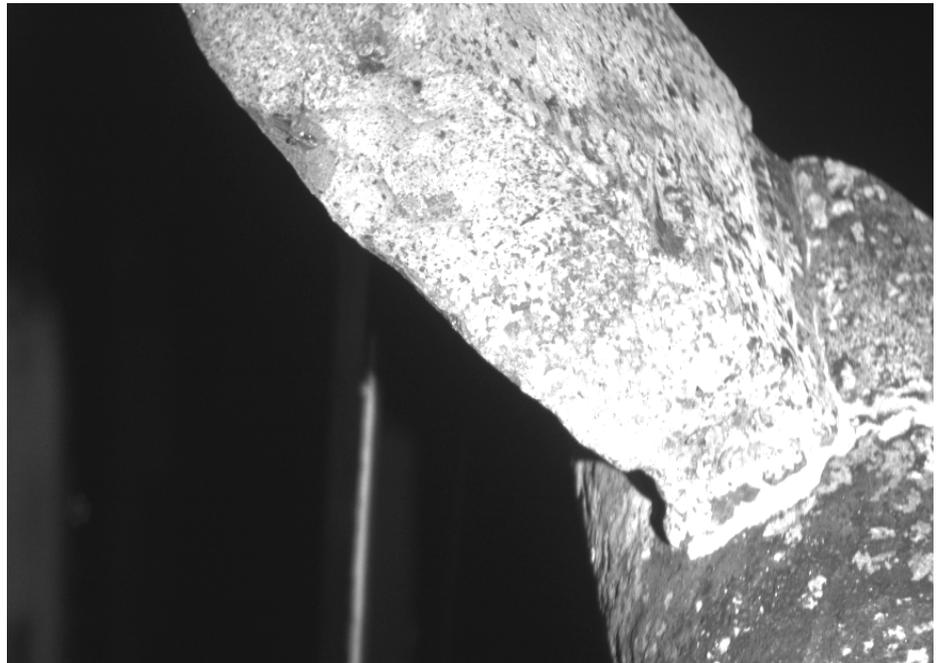
DIMENSIONS

- Height = 43 mm
- Width = 87 mm
- Length = 120 mm
- Weight = 0,3 kg

ISBN 0-13-953613-2



NEW - SCORPION NEURALOCR turns the Box camera into a reliable Optical Charcter Reader



Scorpion Box Camera used for crack inspection

The Scorpion Stinger Box Camera is a high performance industrial camera enclosed in an industrialised housing which contains electronics for illumination, camera connectivity and power distribution.

The camera is designed to be mounted inside a machine, on a robot, underneath a conveyor, to look through a gap or placed over a pallet.

The Box camera is used to build the Scorpion 3D Box camera that provides a truly flexible platform for industrial 3D Stereo Vision.

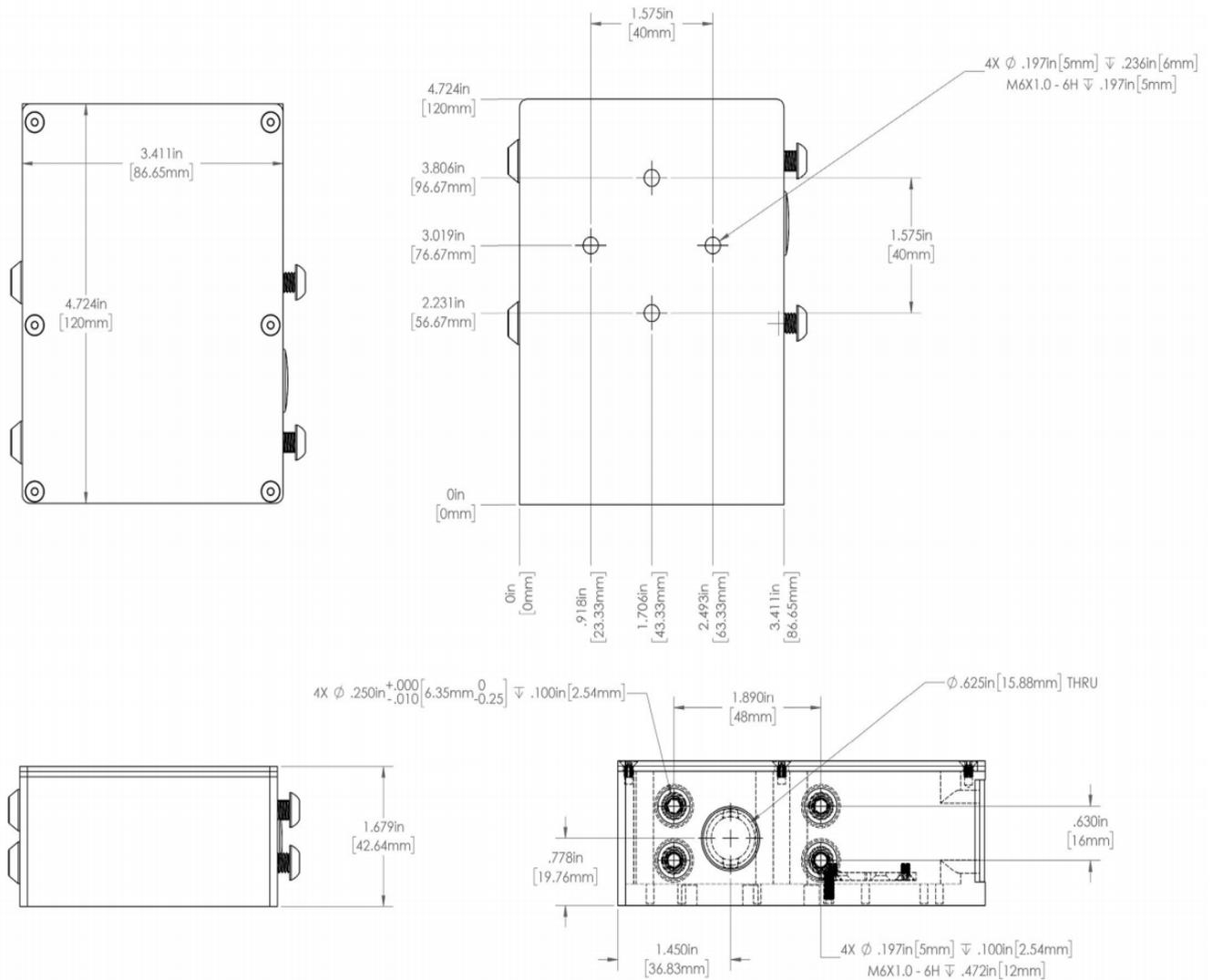


SCORPION BOX CAMERA CHARACTERISTICS

The flexibility of the camera is shown by the variants in camera type and connections in the table below.

CHARACTERISTICS	
Camera type	GigE, orUSB3
Board	LEDstrobe
Standard Connectors	Ethernet (PoE), USB3 (Power), Hirose (24V+, GND)
LEDs	White, IR

The Scorpion Box Camera is a platform - custom front and back-ends are available upon request.



Scorpion Box Camera dimensions

SCORPION BOX CAMERA MODELS

ARTICLE #	SCORPION BOX CAMERA STANDARD MODEL	COMMENT
80-Box-VGA-W-F-GigE	Box Camera VGA 1/3" CCD - 200 fps	W = Working distance from 50 mm F = 2D FOV from 20 x 20 mm POE and USB3 power direct to camera - Hirose connector supported as option. GigE or USB3 models are supported
80-Box-2.3MP-W-F-GigE	Box Camera 2.3 MP 1/1.2" CMOS	
80-Box-5.0MP-W-F-GigE	Box Camera 5.0 MP 1/1.2" CMOS	
80-Box-6.0MP-W-F-GigE	Box Camera 6.0 MP Rolling Shutter 1/1.2" CMOS	

ARTICLE #	SCORPION BOX CAMERA LEDSTROBE MODEL	OPTIONAL LED	COMMENT
80-Box-LS-VGA-W-F-GigE	Box Camera LEDstrobe VGA 1/3" CCD - 200 fps	White	W = Working distance from 50 mm F = 2D FOV from 20 x 20 mm GigE or USB3 models are supported
80-Box-LS-2.3MP-W-F-GigE	Box Camera LEDstrobe 2.3 MP 1/1.2" CMOS	Multiple LEDs	
80-Box-LS-5.0MP-W-F-GigE	Box Camera LEDstrobe 5.0 MP 1/1.2" CMOS	are strobed	
80-Box-LS-6.0MP-W-F-GigE	Box Camera LEDstrobe 6.0 MP Rolling Shutter 1/1.2" CMOS	by LEDstrobe	