Scorpion Box Camera

The Scorpion Box Camera is designed to be used in 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, color 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 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.

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.

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

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

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

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>GigE, or USB3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board</td>
<td>LEDstrobe</td>
</tr>
<tr>
<td>Standard Connectors</td>
<td>Ethernet (PoE), USB3 (Power), Hirose (24V+, GND)</td>
</tr>
<tr>
<td>LEDs</td>
<td>White, IR</td>
</tr>
</tbody>
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The Scorpion Box Camera is a platform - custom front and back-ends are available upon request.

NEW - Scorpion NeuralOCR turns the Box camera into a reliable Optical Character Reader.
### Scorpion Box Camera Models

<table>
<thead>
<tr>
<th>ARTICLE #</th>
<th>Scorpion Box Camera Standard Model</th>
<th>Comment</th>
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</thead>
<tbody>
<tr>
<td>80-Box-VGA-W-F-GigE</td>
<td>Box Camera VGA 1/3&quot; CCD - 200 fps</td>
<td>W = Working distance from 50 mm</td>
</tr>
<tr>
<td>80-Box-2.3MP-W-F-GigE</td>
<td>Box Camera 2.3 MP 1/1.2&quot; CMOS</td>
<td>F = 2D FOV from 20 x 20 mm</td>
</tr>
<tr>
<td>80-Box-5.0MP-W-F-GigE</td>
<td>Box Camera 5.0 MP 1/1.2&quot; CMOS</td>
<td>POE and USB3 power direct to camera - Hirose connector supported as option.</td>
</tr>
<tr>
<td>80-Box-6.0MP-W-F-GigE</td>
<td>Box Camera 6.0 MP Rolling Shutter 1/1.2&quot; CMOS</td>
<td>GigE or USB3 models are supported</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>ARTICLE #</th>
<th>Scorpion Box Camera LEDstrobe Model</th>
<th>Optional LED</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>80-Box-LS-VGA-W-F-GigE</td>
<td>Box Camera LEDstrobe VGA 1/3&quot; CCD - 200 fps</td>
<td>White</td>
<td>W = Working distance from 50 mm</td>
</tr>
<tr>
<td>80-Box-LS-2.3MP-W-F-GigE</td>
<td>Box Camera LEDstrobe 2.3 MP 1/1.2&quot; CMOS</td>
<td>Multiple LEDs are strobed by LEDstrobe</td>
<td>F = 2D FOV from 20 x 20 mm</td>
</tr>
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<td>80-Box-LS-5.0MP-W-F-GigE</td>
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