SICK bar code scanners accelerate logistics and automation. Their excellent reading properties ensure process flows even with poor or damaged bar codes. Whereby their high scanning frequency permits high process speeds. Their simple networkability and high level of user-friendliness offer advantages in operation. The compact connection technology saves space and cuts costs. SICK's range of bar code products offers the right solution for every task.
# Bar code scanners

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>CLV405</th>
<th>CLV410</th>
<th>CLV420</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reading ranges</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Width/mm</td>
<td>0.35</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>Height/mm</td>
<td>0.25</td>
<td>0.15</td>
<td>0.15</td>
</tr>
<tr>
<td>50</td>
<td>100</td>
<td>150</td>
<td>200</td>
</tr>
<tr>
<td>High Density – max. 90 mm</td>
<td>High Density – max. 95 mm</td>
<td>High Density – max. 200 mm Long range – max. 730 mm</td>
<td></td>
</tr>
<tr>
<td><strong>Application ranges</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Document handling</td>
<td>• Labeling</td>
<td>• Material handling</td>
<td></td>
</tr>
<tr>
<td>• PCB manufacturing</td>
<td>• Robotic systems</td>
<td>• Packaging industry</td>
<td></td>
</tr>
<tr>
<td>• Clinical analysers</td>
<td></td>
<td>• Document handling</td>
<td></td>
</tr>
<tr>
<td><strong>Technical data</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scanning frequency</td>
<td>300 ... 1,000 Hz</td>
<td>200 ... 800 Hz</td>
<td>400 ... 1,200 Hz</td>
</tr>
<tr>
<td>Operating voltage</td>
<td>5 V DC ± 5%</td>
<td>5 ... 30 V DC</td>
<td>10 ... 30 V DC</td>
</tr>
<tr>
<td>2 x IN/3 x OUT</td>
<td>2 x IN/3 x OUT</td>
<td>2 x IN/3 x OUT</td>
<td></td>
</tr>
<tr>
<td>44/5/44,5/21,6 mm</td>
<td>59/62/35 mm</td>
<td>59/62/35 mm</td>
<td></td>
</tr>
<tr>
<td>67 g</td>
<td>280 g</td>
<td>260 g</td>
<td></td>
</tr>
<tr>
<td>IP 65</td>
<td>IP 65</td>
<td>IP 66</td>
<td></td>
</tr>
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<tr>
<td>• Auto Setup</td>
<td>• Auto Setup</td>
<td>• Auto Setup</td>
<td></td>
</tr>
<tr>
<td>• Profile programming</td>
<td>• Profile programming</td>
<td>• Profile programming</td>
<td></td>
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<tr>
<td>• Setup button</td>
<td>• Reflector polling</td>
<td>• Reflector polling</td>
<td></td>
</tr>
<tr>
<td>• Graph for visualisation</td>
<td>• Raster scanner</td>
<td>• Host and Aux interfaces</td>
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<td></td>
<td></td>
<td>• Raster scanner</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Angle attachment</td>
<td></td>
</tr>
<tr>
<td><strong>Accessories</strong></td>
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</tr>
<tr>
<td>• CLV Setup Software, CLV Connect Software</td>
<td>• CLV Setup Software, CLV Connect Software</td>
<td>• CLV Setup Software, CLV Connect Software</td>
<td></td>
</tr>
<tr>
<td>• CD8400 connection module</td>
<td>• CD8410, CD8410 connection modules</td>
<td>• CD8420, CD8420 connection modules</td>
<td></td>
</tr>
<tr>
<td>• Reading trigger sensors</td>
<td>• Reading trigger sensors</td>
<td>• Gateways for PROFIBUS, DeviceNet, Ethernet</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• Reading trigger sensors</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Mounting bracket</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• Round rod bracket</td>
</tr>
</tbody>
</table>

**NOTE**
More detailed information about the products presented in this product overview can be found in the corresponding product informations. These can be ordered as printed materials or downloaded as PDF files from the internet at www.sick.com.

- Standard
- Optional
### Product: CLV430, CLV440, CLV450

#### Reading Ranges

<table>
<thead>
<tr>
<th>Product</th>
<th>Module width (mm)</th>
<th>Module distance (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLV430</td>
<td>2.4 mm</td>
<td>0 - 350</td>
</tr>
<tr>
<td>CLV440</td>
<td>6.35 mm</td>
<td>0 - 500</td>
</tr>
<tr>
<td>CLV450</td>
<td>9.3 mm</td>
<td>0 - 600</td>
</tr>
</tbody>
</table>

- Short range - max. 250 mm
- Mid range - max. 440 mm
- High Density - max. 340 mm
- Optimised for resolution 0.5 mm - max. 950 mm

#### Application Ranges

- Stacker crane
- Material handling
- Pallet handling
- Material handling
- PCB manufacturing
- Clinical analysers
- Pallet handling
- Forklift truck
- Automotive industry

#### Technical Data

- **Scanning Frequency:**
  - 300...300 Hz
  - 10...30 V DC
  - 2 x IN/2 x OUT
  - RS-232, RS-422/485, CAN
- **Dimensions (L x W x H):**
  - 90 x 60 x 35.7 mm
  - 420 g
  - IP 65
- **Weight:**
  - 420 g
- **Enclosure Rating:**
  - IP 65

#### Special Features

- **Adjustable focus**
- **SMART decoder**
- **Auto Setup**
- **Profile programming**
- **Reflector polling**
- **Host and Aux interfaces**
- **Onto the mirror**
- **Raster scanner**
- **Angle attachment**

#### Accessories

- **CLV Setup Software**
- **CLV Connect Software**
- **CD420, CD420 connection modules**
- **Gateways for PROFINET, DeviceNet, Ethernet**
- **Reading trigger sensors**
- **Mounting bracket**
- **Round rod bracket**

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*Standard
Optional*
## Bar code scanners

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>CLV480</th>
<th>CLV490</th>
<th>CLV620</th>
</tr>
</thead>
</table>

### Reading ranges
- **CLV480**
  - Min. width (mm): 0.3
  - Max. width (mm): 1,200
  - Reading width max.: 1,200 mm

- **CLV490**
  - Min. width (mm): 0.3
  - Max. width (mm): 4.2
  - Reading width max.: 2,200 mm

- **CLV620**
  - Min. width (mm): 0.3
  - Max. width (mm): 4.2
  - Reading width max.: 200 mm

### Application ranges
- **CLV480**
  - Automotive industry
  - Pallet handling
  - Forklift truck

- **CLV490**
  - Pallet handling
  - Forklift truck
  - Automotive industry

- **CLV620**
  - Material handling
  - Packaging industry
  - Document handling

### Technical data
- **CLV480**
  - Scanning frequency: 500 - 1,200 Hz
  - Operating voltage: 18...30 V DC
  - Data interfaces: RS-232, RS-422/485, CAN 6 x IN/4 x OUT
  - Dimensions (L x W x H): 117/117/94 mm
  - Weight: 1.5 kg
  - Enclosure rating: IP 65

- **CLV490**
  - Scanning frequency: 500 - 1,200 Hz
  - Operating voltage: 18...30 V DC
  - Data interfaces: RS-232, RS-422/485, CAN 6 x IN/4 x OUT
  - Dimensions (L x W x H): 117/117/94 mm
  - Weight: 1.5 kg
  - Enclosure rating: IP 65

- **CLV620**
  - Scanning frequency: 400 - 1,200 Hz
  - Operating voltage: 10...30 V DC
  - Data interfaces: RS-232, RS-422/485, CAN 2 x IN/2 x OUT
  - Dimensions (L x W x H): 117/117/36 mm
  - Weight: 225 g
  - Enclosure rating: IP 65

### Special features
- **CLV480**
  - Adjustable focus
  - SMART decoder
  - Reading software
  - Host and Aux interfaces
  - Oscillating mirror
  - Optional heating for operating temperature down to -35 °C
  - Remote diagnostics

- **CLV490**
  - Auto-focus
  - SMART decoder
  - Reading software
  - Host and Aux interfaces
  - Oscillating mirror
  - Optional heating for operating temperature down to -35 °C
  - Remote diagnostics

- **CLV620**
  - Host and Aux interfaces
  - Integrated ethernet
  - Raster scanner
  - And/or attachment

### Accessories
- **CLV480**
  - CLV Setup Software
  - CLV Connect Software
  - RDT400 Remote Diagnostic Software
  - ODB420, ODM490 connection modules
  - Gateways for PROFIBUS, DeviceNet, Ethernet
  - External parameter memory
  - Reading trigger sensors
  - Incremental encoder
  - Mounting bracket
  - Mounting bracket with shock-absorber

- **CLV490**
  - CLV Setup Software
  - CLV Connect Software
  - RDT400 Remote Diagnostic Software
  - ODB420, ODM490 connection modules
  - Gateways for PROFIBUS, DeviceNet, Ethernet
  - External parameter memory
  - Reading trigger sensors
  - Incremental encoder
  - Mounting bracket
  - Mounting bracket with shock-absorber

- **CLV620**
  - S0FAS Software
  - COD320* (PROFIBUS)
  - Reading trigger sensors
  - Mounting bracket
  - Round rod bracket

* available Q4/2007