



## CLV 430/440

The CLV 430/440's compact size allows it to fit into any application, even ones in tight spaces. The strong performance characteristics of these scanners are not limited by their size; SMART technology (SICK's Modular Advanced Recognition Technology) enables the scanner to read bar codes that could not be read by other scanners. The CLV 430/440 processes complete bar code images before decoding. This translates to a much higher percentage of successful reads, even with bar codes presented at high tilt angles, bar codes damaged by tearing, smearing or splotches, or bar codes partially hidden from the scanner.

The CLV 430 is a Fixed Focus scanner, while the CLV 440 has Dynamic Focus Control. Dynamic Focus Control allows the CLV 440 to accommodate a large depth of

field by dynamically adjusting its focus position to the object distance, making the CLV 440 ideal for decoding bar codes on objects of different heights.

The CLV 430/440 has a user-selectable scan rate of 300 to 800 Hz at a reading range of 2 to 32 in (51 to 800 mm). All parameters of the CLV 430/440, including minimum reading distance, bar code resolution, scan frequency, bar code label specifications and data format, are selectable via included Windows™-based CLV Setup Software.

The CLV 430/440 is especially suited to applications such as material handling, print and apply verification, product label verification, automated medical instrumentation, automotive assembly, electronic circuit board identification and packaging.

### Features

- Compact design (3.5 x 2.4 x 1.4 in)
- 300...800 Hz
- 2...32 in (51...800 mm) reading range
- Integrated scanner and decoder
- Die cast zinc housing
- Windows™ CLV Setup Software
- All parameters software selectable
- Real-time diagnostics
- Real-time decoding
- Match code capability (match, mismatch, no read outputs)
- SMART technology (SICK's Modular Advanced Recognition Technology)
- Integrated CAN Bus interface
- Dynamic Focus Control
- Automatic triggering

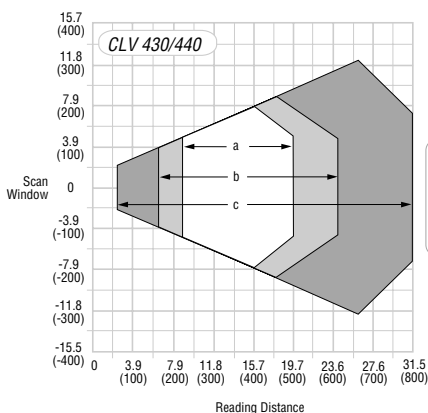
# SICK

# CLV 430/440

## Technical Data

	CLV 430/440	CLV 431	CLV 432
<b>Scanning Characteristics</b>			
Scanning Method	8-sided polygon mirror wheel		
Aperture Angle	Maximum 50°		
Scanning Frequency	300...800 Hz (software selectable)		
Light Source	Visible laser diode (670 nm); CDRH Class II		
Reading Distance (Bar Code Dependent)	2.0...31.5 in (51...800 mm)	3.5...16.7 in (89...424 mm)	2.0...10.0 in (51...254 mm)
Resolution	0.008...0.040 in (0.2...1.0 mm)		
<b>Bar Code Types</b>			
Bar Code Symbology	Code 39, Interleaved 2/5, Codabar, Code 93, EAN/EAN 128, UPC, Code 128, Pharmacode		
Readability	1 to 20 bar codes per reading gate (standard decoder); 1 to 6 (SMART)		
Auto Discrimination	8 different symbologies per scan or reading gate		
<b>Communications / I/O / Indicators</b>			
Host Interface	RS 232 and RS 422/485, variable data output format (software selectable)		
Baud Rate	300...57,600 (software selectable)		
Data Format	Data bits, stop bits, parity (software selectable)		
Network Configuration	Pass-through; master/slave; RS 485 network; CAN Bus		
LED Indicators	Device ready, result, sensor, data		
Switching Inputs	2 x PNP, opto-decoupled, maximum 30 V DC		
Switching Outputs	2 x PNP, maximum 100 mA / 24 V DC		
Trigger Methods	Sensor input (I/O interface) / Serial (host interface) / Free running / Reflector polling (automatic)		
<b>Mechanical / Electrical</b>			
Supply Voltage	Operating voltage 10...30 V DC		
Current Consumption	Line/raster scanner: 208 mA at 24 V DC / 5.0 W; Osc mirror: 258 mA at 24 V DC / 6.2 W		
Dimensions (L x W x H)	Line/raster scanner: 3.5 x 2.4 x 1.4 in (90 x 60 x 35.7 mm); Osc mirror: 3.9 x 3.6 x 1.5 in (99.8 x 92.2 x 37.8 mm)		
Weight	Approx. 14.7 oz (420 g)		
Housing / Enclosure Rating	Die cast zinc / IP 65		
Connectivity	15-pin male D-Sub high density connector		
<b>Environmental</b>			
Ambient Operating Temperature	32...104°F (0...40°C)		
Storage Temperature	-4...158°F (-20...70°C)		
Vibration	To IEC 68-2-6 test FC		
Shock	To IEC 68-2-27 test EA		
EMV	To IEC 801		
Maximum Relative Humidity	90%, non-condensing		
<b>Programming</b>	Windows™-based CLV Setup Software		

## Reading Range



dimensions in inches (mm)

## Dimensional Drawing

