



Bar code scanners  
CLV69x / CLV690-0/1 / Standard Density

CLV690-0000



**Model Name** > **CLV690-0000**  
**Part No.** > **1056600**

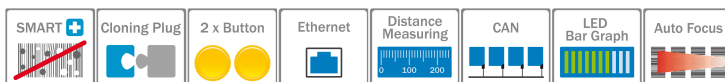


**At a glance**

- Advanced SMART+ code reconstruction technology
- New and flexible cloning plug technology
- CAN, Ethernet and serial communications available on board (dependent on cloning plug variant)
- Large depth of field due to real-time auto focus
- Consistent, user-friendly "SOPAS ET" software
- Built-in tracking without the use of an additional system controller
- Flexible sorting, filtering, and logical functions
- Integrated LED bar graph with pushbuttons

**Your benefits**

- Higher reading rate on damaged, heavily contaminated and partially damaged bar codes using the SMART+ algorithm
- Increased processing allows for faster and more accurate performance on demanding applications
- Fewer costs since no additional Ethernet gateway is required when using the Ethernet clone plug
- Time savings during commissioning thanks to integrated buttons and bar graph
- Increased scanner intelligence enables sophisticated configuration of logical operations, reducing the control system programming effort. Data is delivered in the desired format
- Cost savings since standard applications can be implemented without an additional system controller due to integrated tracking



**Features**

Version:	Standard Density
Connection type:	Depending on the cloning plug used
Reading field:	Front
Scanner design:	Line scanner
Focus:	Auto focus (alternative: dynamic focus control)
Focus adjustment time:	≤ 20 ms
Focus trigger source:	Data interface, Switching inputs
Light source:	Visible red light (660 nm)
MTBF:	100,000 h
Laser class:	2 (IEC 60825-1 (2007-3))
Field of view:	≤ 60 °

Code resolution:	0.25 mm ... 1 mm
Reading distance:	500 mm ... 2,100 mm <sup>1)</sup>
Scanning frequency:	400 Hz ... 1,200 Hz
No. of distance configurations:	8

<sup>1)</sup> For details see reading field diagram

## Performance

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Bar code types:	Interleaved 2 of 5, All current code types, Codabar, Code 128, Code 39, Code 93, GS1-128/EAN 128, UPC/GTIN/EAN
Print ratio:	2:1 ... 3:1
No. of codes per scan:	1 ... 20 (Standard decoder), 1 ... 6 (SMART decoder)
No. of codes per reading interval:	1 ... 50 (auto-discriminating)
No. of characters per reading interval:	5,000
No. of multiple readings:	1 ... 100

## Interfaces

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Serial (RS-232, RS-422/485):	✓
Remark (Serial (RS-232, RS-422/485)):	Only with cloning plug D-Sub and Ethernet
Function (Serial (RS-232, RS-422/485)):	Host, AUX (only RS-232)
Data transmission rate (Serial (RS-232, RS-422/485)):	300 Baud ... 500 kBaud, AUX: 57.6 kBaud (RS-232)
Ethernet:	✓
Remark (Ethernet):	Only with cloning plug I/O, CAN IN/OUT or CAN Redundant
Function (Ethernet):	Host, AUX
Protocol (Ethernet):	TCP/IP, EtherNet/IP, PROFINET (optional via external connection module CDF600-2), PROFINET Dual Port (optional via external connection module CDF600-2)
Data transmission rate (Ethernet):	10/100 Mbit
CAN bus:	✓
Function (CAN bus):	SICK CAN sensor network (Master/Slave, Multiplexer/Server)
Protocol (CAN bus):	CSN (SICK CAN Sensor Network)
Data transmission rate (CAN bus):	20 kbit/s ... 1 Mbit/s
PROFIBUS DP:	✓
Remark (PROFIBUS DP):	Optional via external connection module (CDF600-2)
DeviceNet:	✓
Remark (DeviceNet):	Optional via external connection module (CDM + CMF)
Control elements:	2 buttons
Switching inputs:	6 ("Sensor 1" ... "Sensor 6")
Switching outputs:	4 ("Result 1" ... "Result 4")
Reading pulse:	Auto pulse, CAN, Switching inputs, Serial interface
Optical indicators:	6 LEDs (Ready, Result, laser, Data, CAN, LNK TX, Bar graph for displaying the reading rate percentage (10 LEDs))
Parameter storage:	Integrated in cloning plug
Configuration software:	SOPAS ET

## Mechanics/electronics

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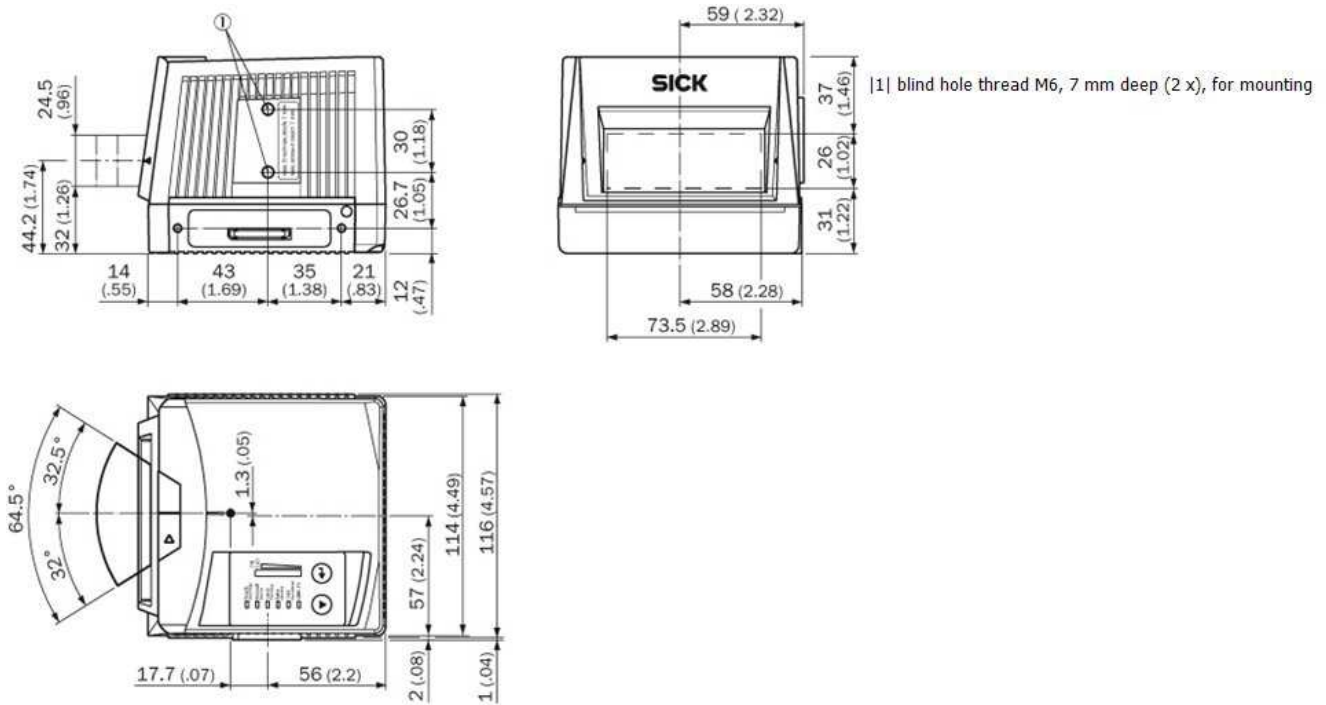
Electrical connection:	Depending on the cloning plug used
Operating voltage:	18 V DC ... 30 V DC
Power consumption:	15 W
Housing:	Die-cast aluminum
Housing color:	Light blue (RAL 5012)
Front screen:	Glass

Enclosure rating: IP 65 (IEC 60529 (1989-11))  
 Protection class: III (EN 60950-1 (2011-01))  
 Weight: 1,500 g  
 Dimensions: 117 mm x 117 mm x 94 mm

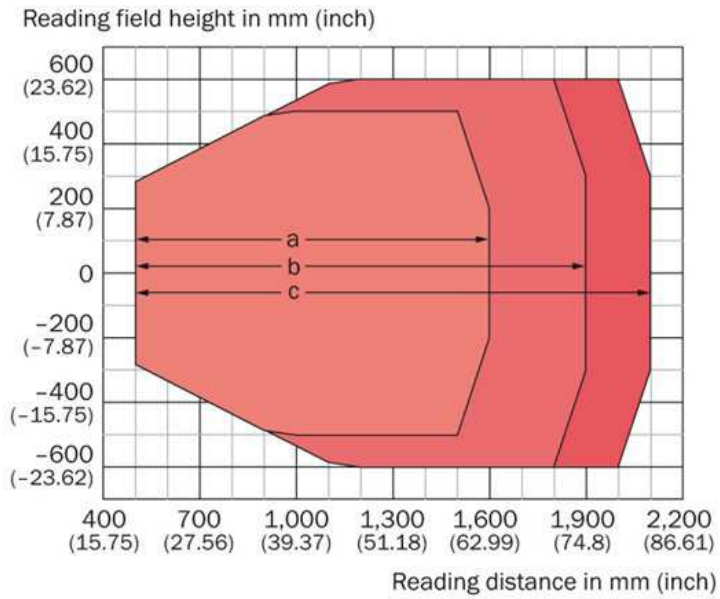
**Ambient data**

Vibration resistance: EN 60068-2-6 (2008-02)  
 Shock resistance: EN 60068-2-27 (2009-05)  
 Ambient operating temperature: 0 °C ... +40 °C  
 Storage temperature: -20 °C ... +70 °C  
 Permissible relative humidity: 90 %, non-condensing  
 Ambient light immunity: 2,000 lx, on bar code

**Dimensional drawing**



## Reading field diagram



### Resolution

- a: 0.30 mm (11.8 mil)
- b: 0.35 mm (13.8 mil)
- c: 0.50 mm (19.7 mil)

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