SICK Service Manual

CLV621-1120

1. Description

CLV621-1120

3. Product Information

CLV621-1120

Features

Task Identifying - 1D code

Version Long Range

Connection type Ethernet

Reading field Front

Sensor type Raster scanner

Optical focus Fixed focus

Light source Light spot, laser, Visible, Red, 655 nm

Laser class 2 (IEC 60825-1:2014, EN 60825-1:2014)

Aperture angle ≤ 50°

Reading distance 60 mm ... 730 mm

Scanning frequency 400 Hz ... 1,200 Hz

Code resolution 0.35 mm ... 1 mm

Raster height, number of lines, at distance 15 mm, 8, 200 mm

Mechanics/electronics

Connection type 2 x M12 cylindrical connectors (12-pin male connector, 4-pin female connector) on swivel connector

Supply voltage 10 V DC ... 30 V DC

Power consumption 4.5 W

Housing Aluminum die cast

Housing color Light blue (RAL 5012)

Window material Glass

Enclosure rating IP65 (DIN 40 050)

Protection class III (VDE 0106/IEC 1010-1)

Weight 205 g, without connecting cable

Dimensions (L x W x H) 61 mm x 66 mm x 38 mm

MTBF 100,000 h

MTTF 40,000 h (Laser diode)

Performance

Readable code structures 1D codes

Bar code types All current code types, Code 39, Code 128, Code 93, Codabar, GS1-128 / EAN 128, UPC /

GTIN / EAN, Interleaved 2 of 5, Pharmacode, GS1 DataBar, Telepen, MSI/Plessey

Code printing process Label (printed codes)

Print ratio 2:1 ... 3:1

No. of codes per scan 1 ... 20 (Standard decoder)

1 ... 6 (SMART620)

No. of codes per reading interval 1 ... 50 (auto-discriminating)

No. of characters per reading interval 1,500

500 (for multiplexer function in CAN operation)

No. of multiple readings 1 ... 99

Interfaces

Ethernet ✔, TCP/IP

Function Data interface (read result output), Service interface

Data transmission rate 10/100 MBit/s

PROFINET ✔

Function PROFINET Single Port, PROFINET Dual Port (optional via external connection module

CDF600-2)

Data transmission rate 10/100 MBit/s

EtherNet/IP™ ✔

Data transmission rate 10/100 MBit/s

EtherCAT ✔

Type of fieldbus integration Optional over external fieldbus module CDF600

Serial ✔, RS-232, RS-422, RS-485

Function Data interface (read result output), Service interface

Data transmission rate 2,400 Baud ... 115.2 kBaud, AUX: 57.6 kBaud (RS-232)

CAN ✔

Function SICK CAN sensor network CSN (CAN controller/CAN device, multiplexer/server)

Data transmission rate 20 kbit/s ... 1 Mbit/s

CANopen ✔

Data transmission rate 20 kbit/s ... 1 Mbit/s

PROFIBUS DP ✔

Type of fieldbus integration Optional over external fieldbus module CDF600-2

Digital inputs 3 (“Sensor 1”, 2 inputs via optional parameter storage CMC600 in CDB620/CDM420)

Digital outputs 2 (Via optional CMC600 parameter memory in CDB620/CDM420)

Reading pulse Digital inputs, non-powered, serial interface, auto pulse, CAN

Optical indicators 6 LEDs (Ready, Result, laser, Data, CAN, LNK TX)

Acoustic indicators Beeper/buzzer (can be switched off, can be allocated as a result indication function)

Configuration software SOPAS ET

Ambient data

Electromagnetic compatibility (EMC) EN 61000-6-3 (2001-10) / EN 61000-6-2:2005

Vibration resistance EN 60068-2-6 (1995)

Shock resistance EN 60068-2-27 (1993)

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 barcode

Bar code print contrast (PCS) ≥ 60 %