

SICK NANS3-CAAZ30AN1

SICK NANS3-CAAZ30AN1 Safety laser scanners, nanoScan3, Type 3, SIL 2, Ethernet

Features

Product version nanoScan3 Pro I/O

Model Sensor without system plug

Application Indoor

Protective field range 3 m

Warning field range 10 m

Distance measuring range 40 m

Number of simultaneously monitored fields ≤ 8 1) 2)

Number of fields 128

Number of monitoring cases 128

Scanning angle 275°

Resolution (can be configured) 20 mm

30 mm

40 mm

50 mm

60 mm

70 mm

150 mm

200 mm

Angular resolution 0.17°

Response time 70 ms

Protective field supplement 65 mm

Safety-related parameters

Type Type 3 (IEC 61496)

Safety integrity level SIL 2 (IEC 61508)

Category Category 3 (EN ISO 13849)

Performance level PL d (EN ISO 13849)

PFHD (mean probability of a dangerous failure per hour)

8.0×10^{-8}

TM (mission time) 20 years (EN ISO 13849)

Safe state in the event of a fault At least one OSSD is in the OFF state.

Functions

Restart interlock ✓

External device monitoring (EDM) ✓

You can contact us through the following contact information

www.sparetechplc.com +86 180 3000 5825 sales@sparetechplc.com

Multiple sampling ✓
Monitoring case switching ✓
Simultaneous monitoring ✓
Static protective field switching ✓
Dynamic protective field switching ✓
Safe contour detection ✓
Contour as a reference ✓
Integrated configuration memory ✓
Measured data output Via Ethernet
Interfaces
Connection type Depending on system plug
Universal I/Os 4
Outputs
OSSD pairs 2
Inputs
Universal inputs 8
Dynamic switching signals 4
Static control inputs 6
Configuration method PC with Safety Designer (Configuration and Diagnostic Software)
Configuration and diagnostics interface USB 2.0, micro USB
Data interface
Services CoLa 2 (configuration and diagnostics using Safety Designer)
Data output
DHCP
SNTP
Display elements Graphic color display, LEDs
Protection class III (EN 61140)
Supply voltage Vs 24 V DC (16.8 V DC ... 30 V DC)

Power consumption typical 3.9 W (without output load)
Mechanics
Dimensions (W x H x D) 106.6 mm x 80 mm x 117.5 mm (including system plug)
Weight 0.67 kg
Housing material Aluminum
Housing color RAL 1021 (yellow), RAL 9005 (black)
Optics cover material Polycarbonate
Ambient data
Enclosure rating IP65 (IEC 60529)
Ambient light immunity ≤ 40 klx (IEC 61496-3)
Ambient operating temperature $-10^{\circ}\text{C} \dots +50^{\circ}\text{C}$
Storage temperature $-25^{\circ}\text{C} \dots +70^{\circ}\text{C}$

You can contact us through the following contact information

www.sparetechplc.com +86 180 3000 5825 sales@sparetechplc.com

Vibration resistance IEC 60068-2-6, IEC 60068-2-64, IEC 60721-3-5, IEC TR 60721-4-5, IEC 61496-3
Class 5M1 (IEC 60721-3-5)

Shock resistance IEC 60068-2-27, IEC 60721-3-5, IEC TR 60721-4-5, IEC 61496-3
Class 5M1 (IEC 60721-3-5)

Continuous shock 50 m/s^2 , 11 ms
 100 m/s^2 , 16 ms

EMC IEC 61496-1, IEC 61000-6-2, IEC 61000-6-3

1) Typical ambient light immunity, for ambient light sources directly in the scan plane in accordance with IEC 61496-3: $\leq 3 \text{ klx}$.

Other information

Type of light Pulsed laser diode

Wave length 905 nm

Detectable remission factor 1.8% to several 1000%

Laser class 1 (21 CFR 1040.10 and 1040.11, IEC 60825-1)



You can contact us through the following contact information

www.sparetechplc.com +86 180 3000 5825 sales@sparetechplc.com