

V20W-0101000

V200 Work Station Extended

SAFE 3D CAMERAS

SICKSensor Intelligence.



Ordering information

Туре	part no.
V20W-0101000	1042027

Other models and accessories → www.sick.com/V200_Work_Station_Extended

Illustration may differ





Detailed technical data

Features

Technology		2D camera
Resolution		20 mm, 24 mm, 30 mm ¹⁾
Protective field range		
	20 mm resolution	1.41 m
	24 mm resolution	1.7 m
	30 mm resolution	2.12 m
Protective field size		
	20 mm resolution	1 m x 1 m
	24 mm resolution	1.2 m x 1.2 m
	30 mm resolution	1.5 m x 1.5 m
Aspect ratio protective fiel	d	1:1 to 2:1
Response time		20 ms
Items supplied		Including teaching pen, operating instructions on CD-ROM and Quickstart (instructions for quick commissioning)

¹⁾ Depending on resolution set.

Safety-related parameters

Туре	Type 2 (IEC 61496-1)
Safety integrity level	SIL 1 (IEC 61508)
Category	Category 2 (EN ISO 13849)
Test rate (internal test)	50 /s (EN ISO 13849)
Maximum demand rate	30 min ⁻¹ (EN ISO 13849) ¹⁾
Performance level	PL c (EN ISO 13849)
$\mbox{PFH}_{\mbox{\scriptsize D}}$ (mean probability of a dangerous failure per hour)	5.6 x 10 ⁻⁹

¹⁾ Between two requirements on a safety-related response of the device, at least 100 internal or external tests must be carried out.

T _M (mission time)	20 years (EN ISO 13849)
Safe state in the event of a fault	At least one OSSD is in the OFF state.

 $^{^{1)}}$ Between two requirements on a safety-related response of the device, at least 100 internal or external tests must be carried out.

Functions

	Functions	Delivery status
Restart interlock	1	Deactivated
External device monitoring (EDM)	1	Deactivated
Cascading	1	
Teach/sync	1	

Interfaces

Connection type	Male connector M12, 8-pin
Permitted cable length	\leq 7.5 m $^{1)}$
Display elements	LEDs

 $^{^{1)}\,\}mbox{With a wire cross-section of 0.25 mm}^2.$

Electronics

Protection class	III (EN 50178)
Supply voltage V _S	24 V DC (19.2 V DC 28.8 V DC)
Power consumption	≤ 165 mA ¹⁾ ≤ 690 mA ²⁾
Output signal switching devices (OSSDs)	2 PNP semiconductors, short-circuit protected, cross-circuit monitored
ON state, switching voltage HIGH	V _S – 2.7 V DC V _S
OFF state, switching voltage LOW	≤ 3.5 V DC

 $^{^{1)}}$ At 24 V DC without output load.

Mechanics

Dimensions (W x H x D)	93.9 mm x 50 mm x 93.9 mm
Weight	355 g
Housing material	Aluminum die cast

Ambient data

Enclosure rating	IP54 (EN 60529)
Ambient operating temperature	0 °C +50 °C
Storage temperature	-25 °C +70 °C
Air humidity	15 % 95 %, Non-condensing
Vibration resistance	5 g, 10 Hz 55 Hz (EN 60068-2-6)

Other information

Certificates

ACMA declaration of conformity	✓
China RoHS	✓
cULus certificate	✓

 $^{^{2)}}$ Including maximum output load.

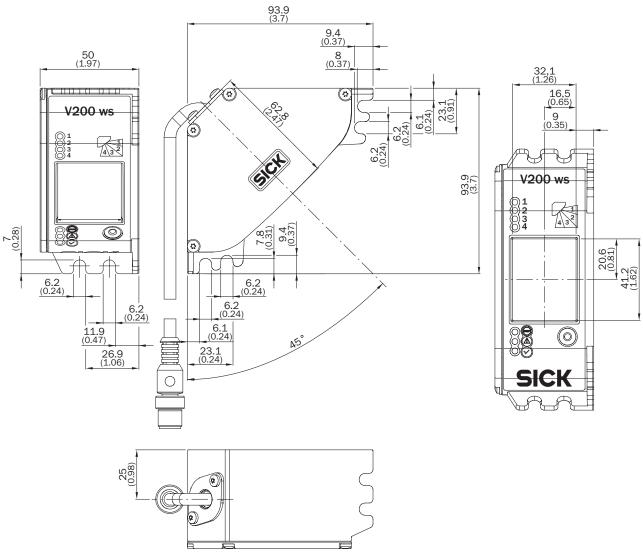
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SAFE 3D CAMERAS

Classifications

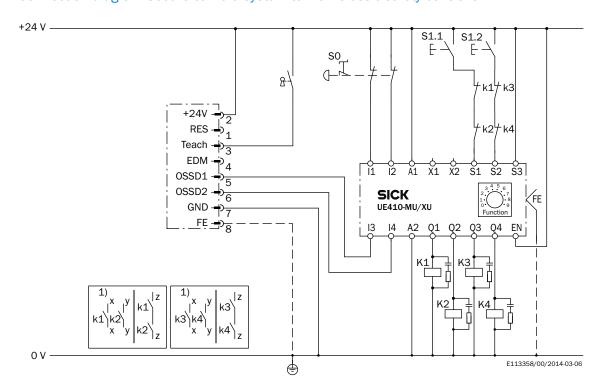
ECLASS 5.0	27272790
ECLASS 5.1.4	27272790
ECLASS 6.0	27272790
ECLASS 6.2	27272790
ECLASS 7.0	27272790
ECLASS 8.0	27272790
ECLASS 8.1	27272790
ECLASS 9.0	27272790
ECLASS 10.0	27272790
ECLASS 11.0	27272790
ECLASS 12.0	27272790
ETIM 5.0	EC001511
ETIM 6.0	EC001511
ETIM 7.0	EC001511
ETIM 8.0	EC001511
UNSPSC 16.0901	39121528

Dimensional drawing



Dimensions in mm (inch)

Connection diagram Secure camera system to Flexi Classic safety controller



Recommended accessories

Other models and accessories → www.sick.com/V200_Work_Station_Extended

	Brief description	Туре	part no.		
Mounting systems					
	Description: Mounting kit for mounting the sensor on the profile frame	Mounting kit	2045375		

	Brief description	Туре	part no.	
reflectors and optics				
Ŋ	• Description: Resolution set for 20 mm resolution and protective field size from 0.4 x 0.4 m to 1.0 m x 1.0 m	Resolution set 20 mm	2051336	
Ŋ	- Description: Resolution set for 24 mm resolution and protective field size from 0.4 x 0.4 m to 1.2 m x 1.2 m	Resolution set 24 mm	2051338	
Ŋ	• Description: Resolution set for 30 mm resolution and protective field size from 0.6 x 0.6 m to 1.5 m x 1.5 m	Resolution set 30 mm	2051339	
Commissioning aids and test equipment				
	Product: Configuration devices Description: Teach-in pin for safety camera systems	Teaching pen	4052939	

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We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

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