



PINS632

Pinspector 2D

QUALITY CONTROL SYSTEMS

SICK
Sensor Intelligence.



Illustration may differ

Ordering information

Type	part no.
PINS632	1107738

Other models and accessories → www.sick.com/Pinspector_2D

Detailed technical data

Features

Technology	2D snapshot
Light source	Illumination LEDs: (to be ordered separately as accessories) Laser alignment aid: visible red light ($\lambda = 630 \text{ nm} \dots 680 \text{ nm}$)
Laser class	1, complies with 21 CFR 1040.10 except for the conformance according to "Laser Notice No. 50" from June 24, 2007 (IEC 60825-1:2014, EN 60825-1:2014)
Focus	Adjustable focus (manually)
Sensor	CMOS matrix sensor, grayscale values, 1.9 Mpixel, 1,600 px, 1,200 px
Spectral range	Approx. 400 nm ... 900 nm
Lens	C-mount

Mechanics/electronics

Dimensions, system (L x W x H)	108 mm x 63 mm x 46 mm (Housing only, without lens and optics protection hood)
Enclosure rating	IP67 (EN 60529 (1991-10), EN 60529/A2 (2002-02))
Protection class	III (EN 60950-1 (2014-08))
Power consumption	Typ. 10 W, $\pm 20 \%$
Housing material	Aluminum die cast
Output current	$\leq 100 \text{ mA}$
Connections	1 x M12, 17-pin male connector (serial, I/Os, voltage supply) 1 x M8, 4-pin female connector (USB, not used) 2 x M12, 8-pin female connector (Gigabit Ethernet, only one connection used) 1 x M12, 4-pin male connector (external illumination)
Supply voltage	12 V DC ... 24 V DC, $\pm 20 \%$
Window material	PMMA
Weight	430 g

Performance

Bar code types	2/5 Industrial Interleaved 2 of 5 Codabar Code 39 Code 93
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	Code 128 EAN-8 EAN13 Pharmacode
2D code types	Data Matrix ECC200 QR code Micro QR code PDF417 Aztec
OCR/OCV fonts	Universal, industrial, document, DotPrint, pharma, OCR-A, OCR-B, Arabic numbers
Maximum encoder frequency	1 kHz

Interfaces

Serial (RS-232, RS-422)	✓
Data transmission rate	(300 Baud ... 115.2 kBaud)
Ethernet	✓ , TCP/IP
Function	EtherNet/IPUDP / PROFINETFTPHTTP
Data transmission rate	10/100/1,000 Mbit/s
Operator interface	Web server
Optical indicators	5 x status display, 5 x LED bar graph, 1 green/red feedback spot
Data storage and retrieval	Image and data logging via microSD memory card and external FTP
Control element	2 buttons
Acoustic indicators	Beeper

Ambient data

Ambient temperature, operation	0 °C ... +50 °C, permissible relative humidity: 0% ... 90% (non-condensing)
Ambient temperature, storage	-20 °C ... +70 °C ¹⁾
Shock load	EN 60068-2-27:2009-05
Vibration load	EN 60068-2-6:2008-02

¹⁾ Permissible relative humidity: 0% ... 90% (non-condensing).

General notes

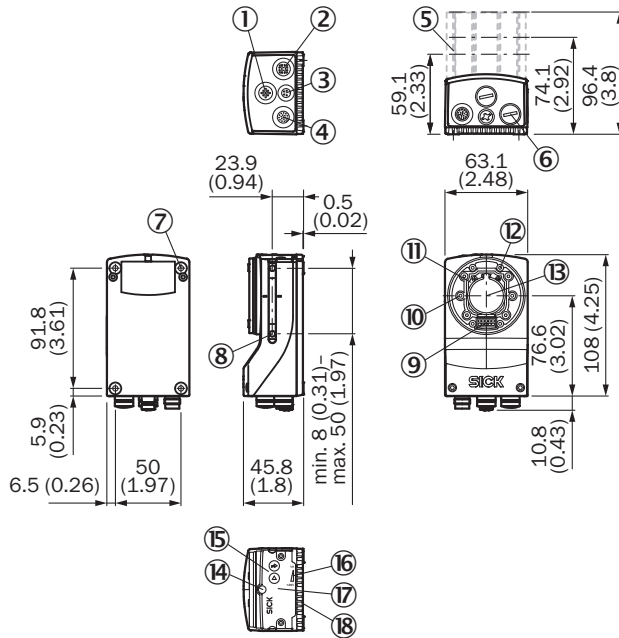
Items supplied	InspectorP V2D621P-2MSFBB5 LabelChecker software
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Classifications

ECLASS 5.0	27310205
ECLASS 5.1.4	27310205
ECLASS 6.0	27310205
ECLASS 6.2	27310205
ECLASS 7.0	27310205
ECLASS 8.0	27310205
ECLASS 8.1	27310205
ECLASS 9.0	27310205
ECLASS 10.0	27289090
ECLASS 11.0	27289090
ECLASS 12.0	27289090

ETIM 5.0	EC001820
ETIM 6.0	EC001820
ETIM 7.0	EC001820
ETIM 8.0	EC001820
UNSPSC 16.0901	43211731

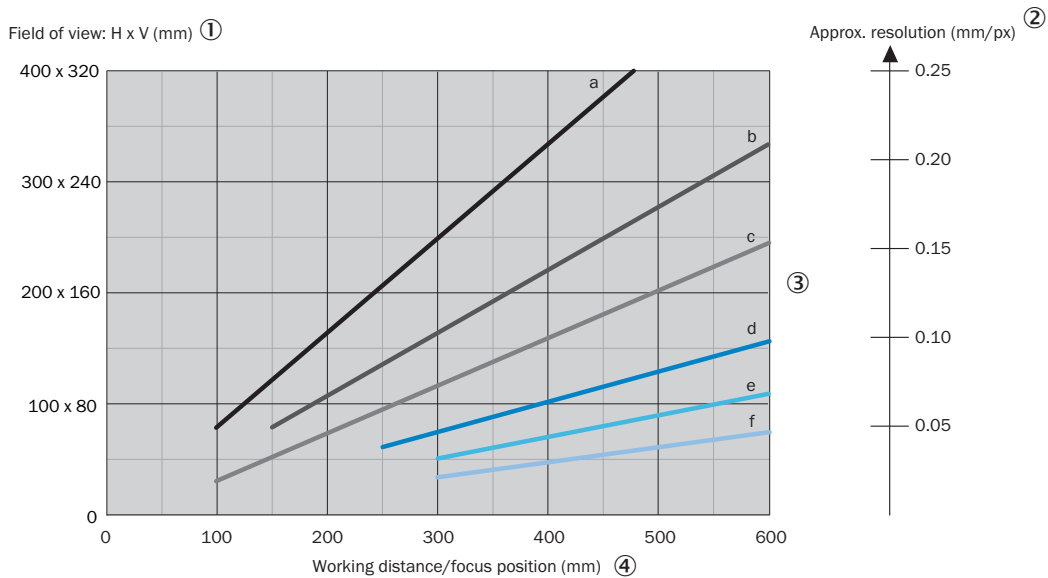
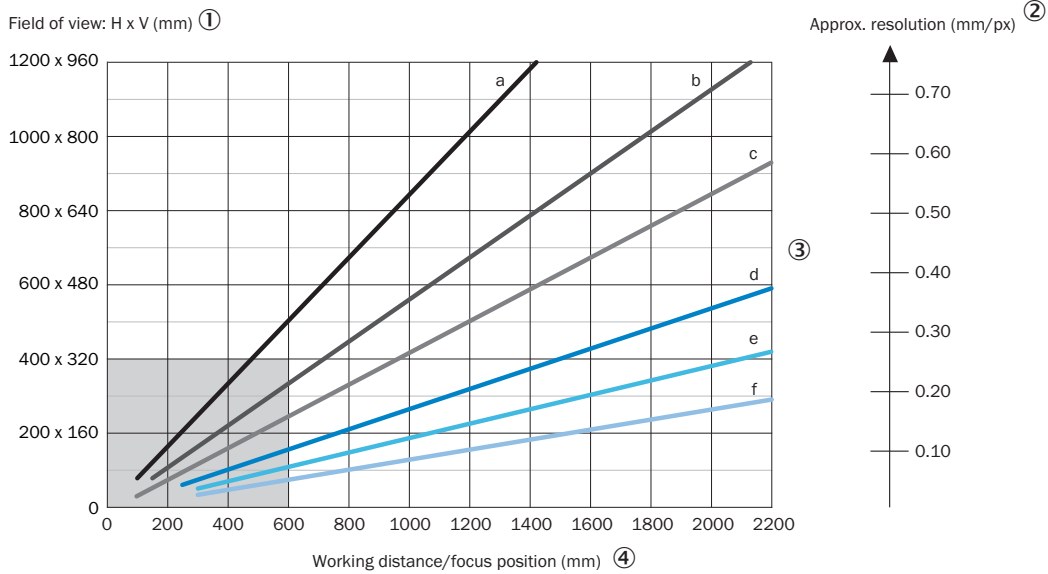
Dimensional drawing



Dimensions in mm (inch)

- ① “External light” connection (external illumination unit, female connector, M12, 4-pin, A-coded)
- ② “Ethernet” connection (Gigabit Ethernet, female connector, M12, 8-pin, X-coded)
- ③ “USB” connection (female connector, type M8, 4-pin), for temporary use as a service interface only
- ④ “Power/Serial Data/CAN/I/O” connection (male connector, M12, 17-pin, A-coded)
- ⑤ Optics protection hood (length: 22.7 mm, 37.7 mm or 60 mm)
- ⑥ 4 protective caps for sealing off the electrical connections as required for enclosure rating IP67 (delivery condition)
- ⑦ 4 tapped blind holes, M5, 5.5 mm deep for mounting the device
- ⑧ 2 sliding nuts, M5, 5.5 mm deep, as an alternative method of mounting the device
- ⑨ Connection for an integrable illumination unit (VI55I ring illumination unit)
- ⑩ 2 laser alignment aids
- ⑪ S-mount or C-mount optics module
- ⑫ 4 blind tapped holes, 2.5 mm for mounting the spacers for the integrable illumination (VI55I ring illumination unit)
- ⑬ Optical axis and center of the image sensor
- ⑭ Basic device: Manual focus screw for an S-mount lens, accessible via the round opening in the housing cover. To secure the focus setting, cover the round opening with a self-adhesive label. Complete device: The opening is already covered by a label.
- ⑮ 2 function keys
- ⑯ 5 bar graph LEDs
- ⑰ Hinged cover on the top side of the device, access to the microSD memory card and the manual focus screw (S-mount)
- ⑱ 5 status LEDs (2 levels)

Characteristic curve

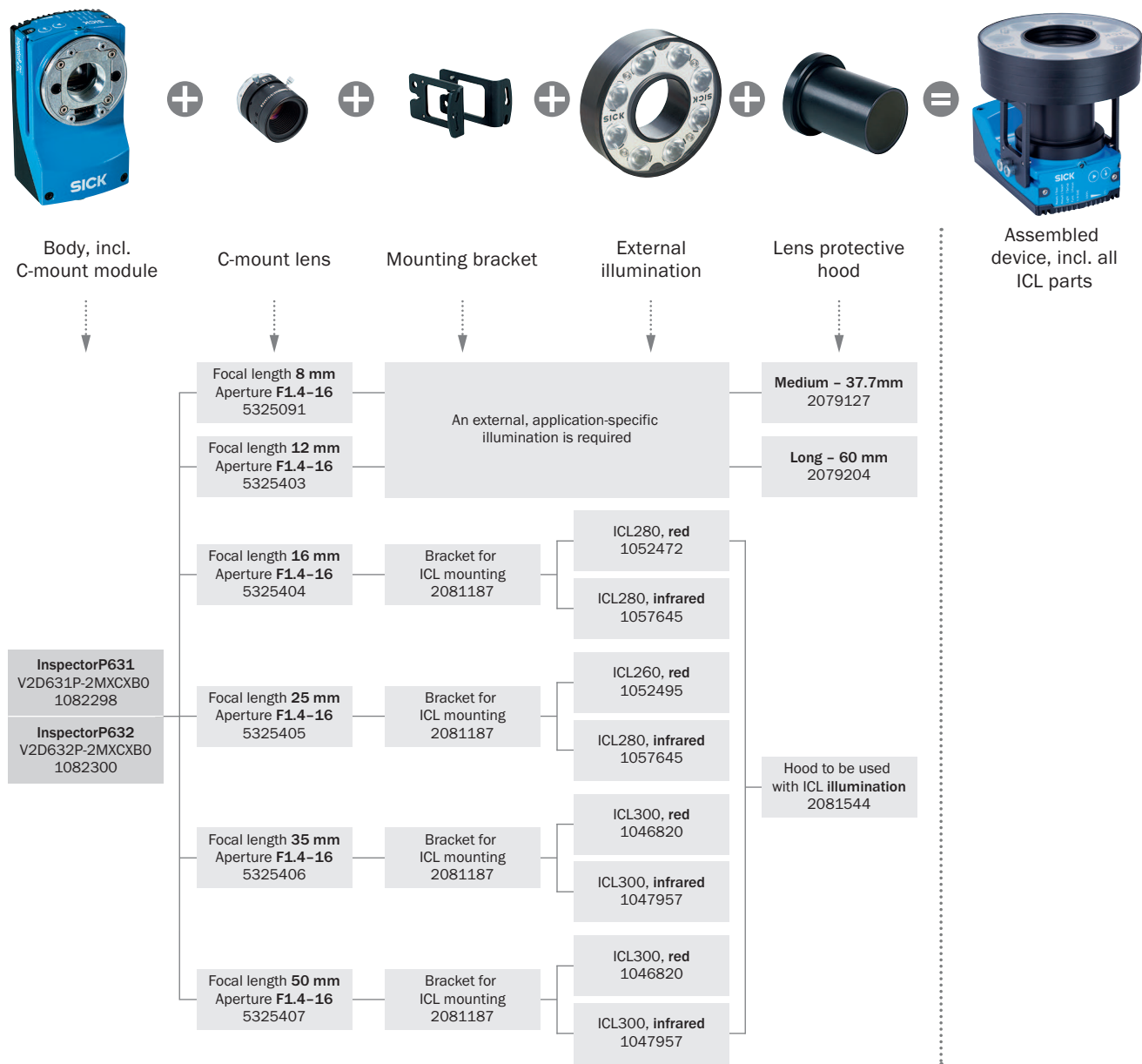


- a: f = 8.0 mm (only C-mount standard)
- b: f = 12.0 mm
- c: f = 16.0 mm
- d: f = 25.0 mm
- e: f = 35.0 mm
- f: f = 50.0 mm

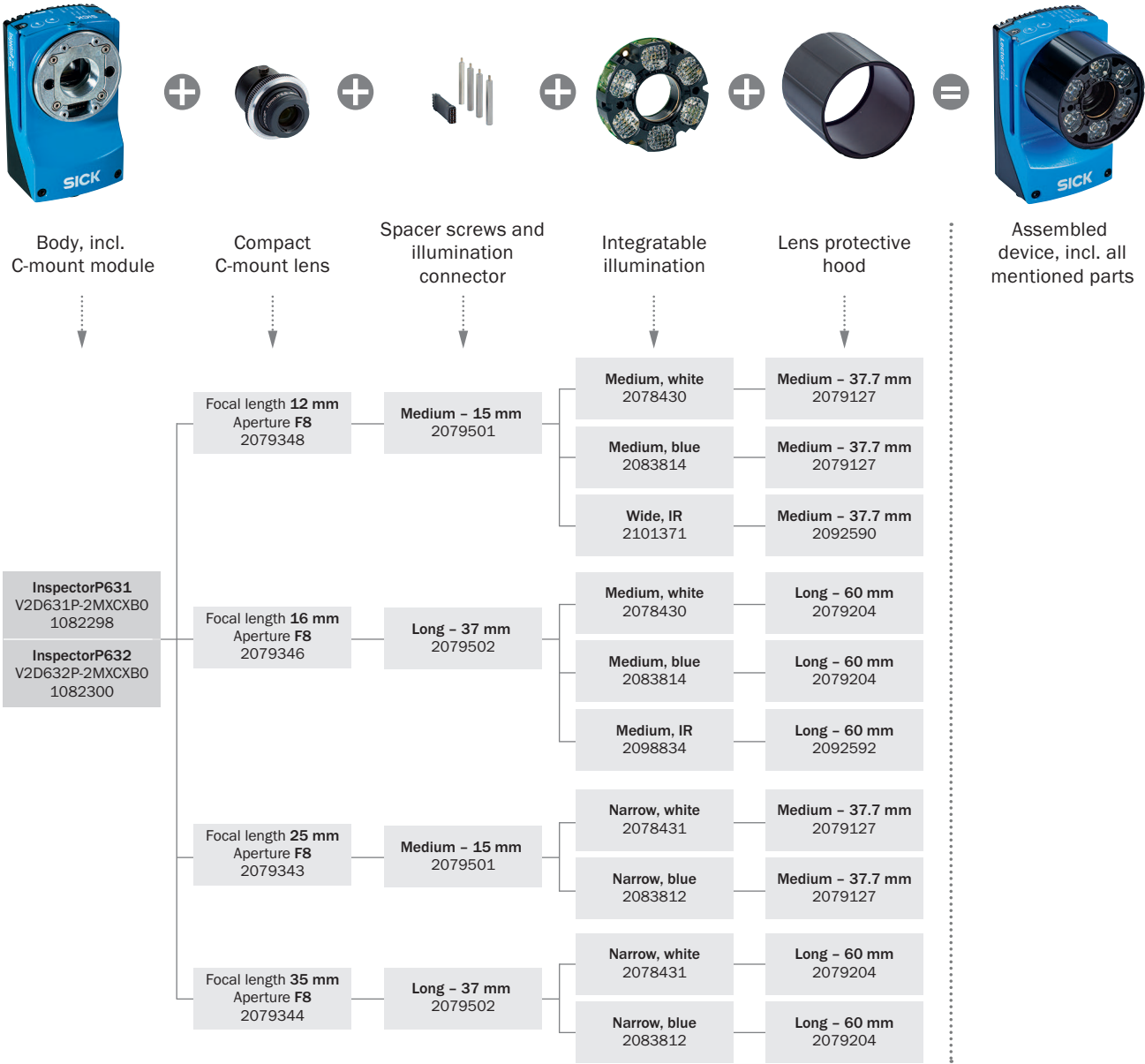
For S-mount and standard C-mount lenses, spacer rings are needed for working distances shorter than approximately 10 times the focal length. For compact C-mount lenses, spacer rings are not needed, but the built-in illumination cannot be used for distances shorter than 300 mm.

- ① Field of view: Horizontal x vertical in mm
- ② approximate resolution in mm/px
- ③ Lens focal length
- ④ Working distance/Focus position in mm

Selection Guide

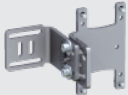


Selection Guide



Recommended accessories

Other models and accessories → www.sick.com/Pinspector_2D

	Brief description	Type	part no.
Mounting systems			
	Description: Mounting bracket set consisting of mounting bracket, cooling plate, includes angle display for setting the tilt angle Suitable for: Lector63x, Inspector63x, Lector83x – up to 40 °C ambient operating temperature, Insepctor83x – up to 40 °C ambient operating temperature, Lector83x – up to 40 °C ambient operating temperature, Insepctor83x – up to 40 °C ambient operating temperature, Lector63x, Insepctor63x	Mounting bracket set with inclination angle -40°- 40°	2076735

	Brief description	Type	part no.
reflectors and optics			
	Description: C-mount 2/3", focal length 35 mm, aperture 1.4 – 16 Dimensions: 36.5 mm Without C-mount thread	C-mount lens	5325406
	Description: C-mount 1/1.8", focal length 50 mm, aperture 1.4 – 16 Dimensions: 62.6 mm Without C-mount thread	C-mount lens	5325407
	Description: Optics protection hood, long, enclosure rating IP 67, length: 60 mm, PMMA, for use with compact C-mount lens with focal length 16 mm or 35 mm	Optics protection hood (PMMA)	2079204
	Description: Adapter ring, from CS-mount to C-mount lenses, 17.5 mm focal length	Spacer ring	2047711
connectors and cables			
	Connection type head A: Female connector, M12, 17-pin, straight, A-coded Connection type head B: Flying leads Signal type: Power, serial, CAN, digital I/Os Cable: 3 m, 17-wire, stripped, PE-X Description: Power, suitable for 2 A, shieldedSerial, Changed color coding of the flying leadsCAN-Digital I/Os Connection systems: Flying leads Note: Max. permissible current strength at ambient temperature 50 °C: Contact 1 (blue) and contact 2 (brown): 3 A while the remaining contacts are operated with max. 100 mA; max. permissible current strength at ambient temperature 40 °C: 2 A for two and 1.5 A for 15 contacts. Application: Drag chain operation	YF2ASD-030XXXXLECX	2070425
	Connection type head A: Male connector, M12, 8-pin, straight, X-coded Connection type head B: Male connector, RJ45, 8-pin, straight Signal type: Gigabit Ethernet Cable: 2 m, 8-wire, AWG26, PUR, halogen-free Description: Gigabit Ethernet, twisted pair, shielded Application: Zones with oils and lubricants	YM2X18-020EG2M-RJA8	6049728
	Connection type head A: Male connector, M12, 8-pin, straight, X-coded Connection type head B: Male connector, RJ45, 8-pin, straight Signal type: Gigabit Ethernet Cable: 5 m, 8-wire, AWG26, PUR, halogen-free Description: Gigabit Ethernet, twisted pair, shielded Application: Zones with oils and lubricants	YM2X18-050EG2M-RJA8	6049729

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

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.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com