WGS

OBJECT DETECTION SYSTEMS

SICK
Sensor Intelligence.

WGS

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Ordering information

Application	Items supplied	Type	Part no.
Driver assistance for forage harvesters and tractors with baler	TiM351 laser scanner with integrated windrow guidance software	WGS	1076929

Other models and accessories ➜ www.sick.com/WGS

Detailed technical data

Features

Areas of application	Agriculture
Number of sensors	1
Vehicles	Forage harvesters, tractors with baler

Mechanics/electronics

Weight	250 g, without connecting cables
Supply voltage	(9 V DC ... 28 V DC)
Power consumption	3 W (≤ 4.5 W)
Machine operating voltage	9 V DC ... 28 V DC
Laser class	1, eye-safe (EN 60825-1:2014)

Performance

Functions	Determining and outputting of windrow trajectory (windrow progression) and the absolute windrow position for automated transverse control; determining and outputting of windrow volume for automated speed control
Number of laserscanners	1
Self-diagnostics	✓

Interfaces

Ethernet	Interface of the TiM35x laser scanner
Protocol	CAN via Ethernet
Electrical connection	1 x Ethernet, M12 female connector, 4-pin, 1 x voltage supply, M12 male connector, 12-pin
Ethernet CAN gateway	Interface of the CAN gateway that can be ordered as an option
Protocol	J1939
Electrical connection	1 x Ethernet, AMP SuperSeal, 4-pin, 1 x CAN AMP SuperSeal, 3-pin, 1 x voltage supply, AMP SuperSeal, 2-pin

Ambient data

Ambient operating temperature	–25 °C ... +50 °C
Ambient temperature, storage	–40 °C ... +75 °C

General notes

Items supplied	TiM351 laser scanner with integrated windrow guidance software

Classifications

ECLASS 5.0	27339090
ECLASS 5.1.4	27339090
ECLASS 6.0	27339090
ECLASS 6.2	27339090
ECLASS 7.0	27339090
ECLASS 8.0	27339090
ECLASS 8.1	27339090
ECLASS 9.0	27330190
ECLASS 10.0	27330190
ECLASS 11.0	27330190
UNSPSC 16.0901	25172105

Dimensional drawing (Dimensions in mm (inch))
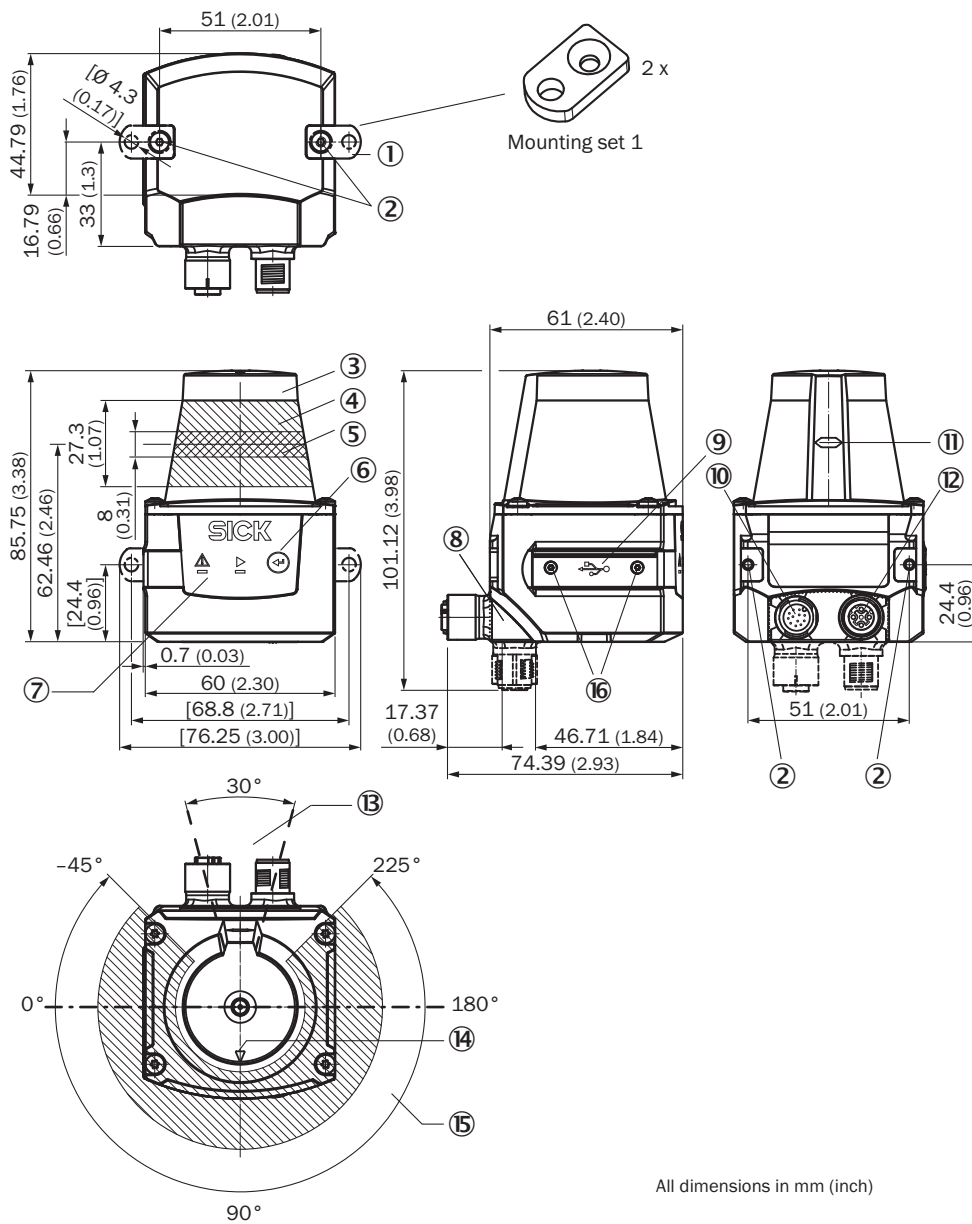
All dimensions in mm (inch)

① 2 x straight plates with M3 x 4 mm screw (included in delivery)
② M3 threaded mounting hole, 2.8 mm deep (blind hole thread), max. tightening torque 0.8 Nm
③ Optical hood
④ Receiving range (light inlet)
⑤ Transmission range (light emission)
⑥ Function button for teach-in
⑦ Red and green LED (status displays)
⑧ Swivel connector unit
⑨ Micro USB female connector, type B
⑩ Connection "Power", 12-pin, M12 male connector
⑪ Marking for the position of the light emission level
⑫ "Ethernet" connection, 4-pin M12 female connector
⑬ Area in which no reflective surfaces are allowed for mounted devices
⑭ Bearing marking to support alignment (90° axis)
⑮ Aperture angle 270° (scanning angle)
⑯ 2 x countersunk screw (Torx TX 6) M2 x 4 mm

Recommended accessories

Other models and accessories ➜ www.sick.com/WGS

	Brief description	Type	Part no.
Connection modules			
	Gateway CAN J1939 Ethernet, 1 port, reliable operating temperature –40 °C to +105 °C	CAN J1939 Ethernet gateway	6060948
Mounting brackets and plates			
	Mounting kit with sun shade/weather protection, Anodized aluminum, mounting hardware included	Mounting kit	2068398
	• **Connection type head A:** Male connector, M12, 4-pin, angled, D-coded • **Connection type head B:** Male connector, M12, 4-pin, straight, D-coded • **Signal type:** PROFINET • **Cable:** 5 m, 4-wire, CAT5, CAT5e, PVC • **Description:** PROFINET, shielded, Head A: male connector, M12, 4-pin, angled, D coded Head B: male connector, M12, 4-pin, straight Cable: PVC, shielded, 4 x 0.34 mm², Ø 6.5 mm	SSL-1204-F05MZ90	6048251
	• **Connection type head A:** Female connector, M12, 12-pin, straight, A-coded • **Connection type head B:** Flying leads • **Signal type:** Sensor/actuator cable, I/O • **Cable:** 5 m, 12-wire, PUR, halogen-free • **Description:** Sensor/actuator cable, I/O, twisted pair, shielded • **Connection systems:** Flying leads • **Application:** Zones with oils and lubricants	YF2A2B-050UD3XLEAX	6042735

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**