



### Main

Range of product	OsiSense XG
Product or component type	Panel mounting smart antenna
RFID compact station name	XGCS
RFID frequency	13.56 MHz
Design	Diameter 22 mounting
Electrical connection	5 pin(s)1 male connector M12
Transmission rate	9600 bauds...115200 bauds (automatic detection)
Outer dimension	40 x 40 x 40 mm
Product compatibility	RFID microchip Microelectronic (EM4135) RFID microchip Fujitsu (MB89R118 - MB89R119) RFID microchip INSIDE (micropass) RFID microchip Texas (Tag-it HFI) RFID microchip STM (CRIX4K) RFID microchip NXP (SL2, SL1, Ultralight, Std 1K/4K, Desfire)
[Sn] nominal sensing distance	10...70 mm
[Us] rated supply voltage	24 V DC conforming to Protective Extra Low Voltage

### Complementary

Communication port protocol	Modbus RTU
Communication port support	RS485 non isolated
Associated tag type	ISO 15693 standard tags ISO 14443 standard tags Automatic detection of the type of tag
Supply voltage limits	19.2...29 V DC
Current consumption	< 60 mA
Status LED	Communication network: 1 LED (dual colour) RFID communication: 1 LED (dual colour)
Tightening torque	< 2.2 N.m
Marking	CE
Product weight	0.057 kg

### Environment

Product certifications	UL, FCC
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Standards	ETSI EN 301 489-3 ETSI EN 301 489-1 ETSI EN 300 330-2 ETSI EN 300 330-1
Ambient air temperature for operation	-25...70 °C
Ambient air temperature for storage	-40...85 °C
IP degree of protection	IP65 conforming to IEC 60529
Vibration resistance	2 mm (f= 5...29.5 Hz) conforming to EN 60068-2-6 7 gn (f= 29.5...150 Hz) conforming to EN 60068-2-6
Shock resistance	30 gn for 11 ms conforming to EN 60068-2-27
IK degree of protection	IK02 conforming to EN 50102
Electromagnetic compatibility	Electrostatic discharge immunity test: (contact discharge), 3, 6 kV, conforming to IEC 61000-4-2 Electrostatic discharge immunity test: (air discharge), 3, 8 kV, conforming to IEC 61000-4-2 Electrical fast transient/burst immunity test: (signal ports), 3, 1 kV, conforming to IEC 61000-4-4 Electrical fast transient/burst immunity test: (power ports), 3, 2 kV, conforming to IEC 61000-4-4 Susceptibility to electromagnetic fields: , 3, 10 V/m, conforming to IEC 61000-4-3 1.2/50 µs shock waves immunity test: , 3, 10 kV, conforming to IEC 61000-4-5 Conducted RF disturbances: , 3, 10 V, conforming to IEC 61000-4-6 Magnetic field at power frequency: , 4, 30 A/m, conforming to IEC 61000-4-8

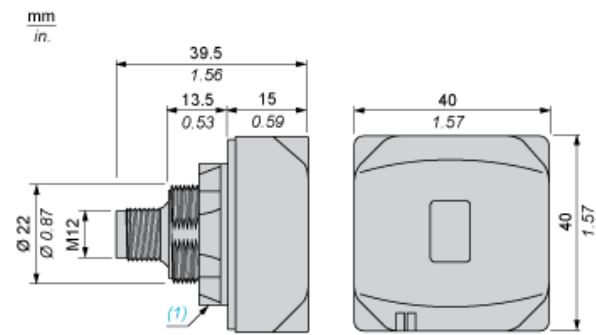
### Offer Sustainability

EU RoHS Directive	Not applicable, out of EU RoHS legal scope
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### Contractual warranty

Warranty	18 months
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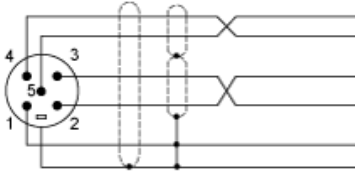
Dimensions



(1) Locking nut

## Connections

### Modbus Connections



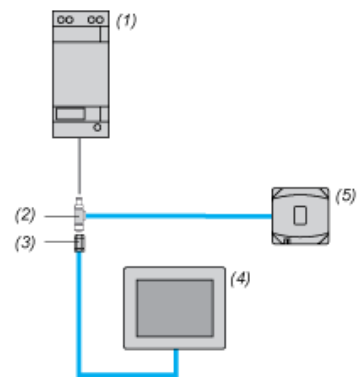
Pin no.	Modbus smart antenna signal
1	Drain (Modbus-SHLD)
2	+ 24 VDC
3	0 V/Modbus-GND
4	D0
5	D1

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Connection Examples

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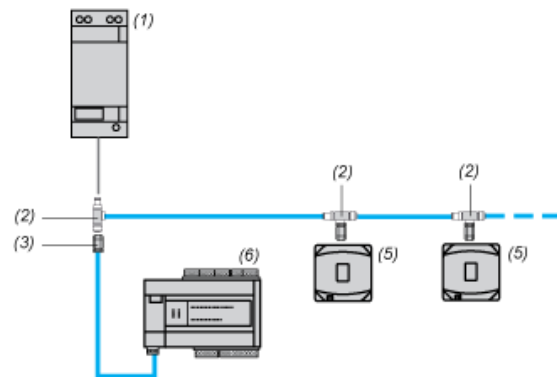
Connection to a Terminal



- (1) Power supply
- (2) Network Tee
- (3) Male M12 connector
- (4) Terminal
- (5) Smart antenna

Connection to an Automation Platform

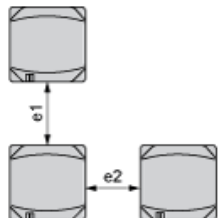
Daisy chain topology



- (1) Power supply
- (2) Network Tee
- (3) Male M12 connector
- (4) Terminal
- (5) Smart antenna
- (6) Automation platform

Mounting and Clearance

Minimum Distance Between 2 Identical Smart Antennas According to their Positioning and Type of Tag Used



Dimensions in mm

Tag	e1	e2
XGHBPB3345	90	90
XGHB90E340	310	310
XGHB90E341	90	90

Dimensions in in.

Tag	e1	e2
XGHBPB3345	3.54	3.54
XGHB90E340	12.20	12.20
XGHB90E341	3.54	3.54