

Product data sheet

Characteristics

XGCS4901201

RFID compact smart antenna - 13.56MHz - flat form 40x40x15 - M12 - cable 0.2m



Main

Range of product	Telemecanique Radio frequency identification XG
Product or component type	Compact smart antenna
RFID compact station name	XGCS
RFID frequency	13.56 MHz
Design	Flat form 40 x 40 x 15
Electrical connection	5 pin(s)male remote connector M12, shielded cable cable 0.2 m
Transmission rate	9600 bauds...115200 bauds (automatic detection)
Outer dimension	40 x 40 x 15 mm
Product compatibility	RFID microchip Microelectronic (EM4135) RFID microchip Texas (Tag-it HFI) RFID microchip NXP (SL2, SL1, Ultralight, Std 1K/4K, Desfire) RFID microchip STM (CR1X4K) RFID microchip INSIDE (micropass) RFID microchip Fujitsu (MB89R118 - MB89R119)
[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 Uni-Telway
Communication port support	RS485
Associated tag type	Automatic detection of the type of tag ISO 14443 standard tags ISO 15693 standard tags
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	< 1 N.m
Marking	CE
Net weight	0.057 kg

Environment

Product certifications	UL, FCC
Standards	ETSI EN 301 489-3 ETSI EN 300 330-1 ETSI EN 301 489-1 ETSI EN 300 330-2
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 IEC 60068-2-6 7 gn (f= 29.5...150 Hz) conforming to IEC 60068-2-6

Shock resistance	30 gn for 11 ms conforming to IEC 60068-2-27
IK degree of protection	IK02 conforming to IEC 62262
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

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	6.500 cm
Package 1 Width	4.000 cm
Package 1 Length	9.500 cm
Package 1 Weight	82.000 g
Unit Type of Package 2	S02
Number of Units in Package 2	44
Package 2 Height	15 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	3.927 kg

Offer Sustainability

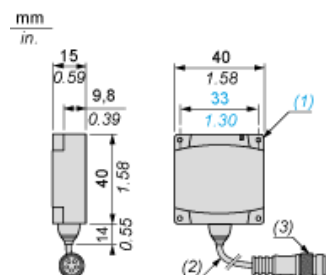
Sustainable offer status	Green Premium product
REACH Regulation	 REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
RoHS exemption information	 Yes

Contractual warranty

Warranty	18 months
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Dimensions

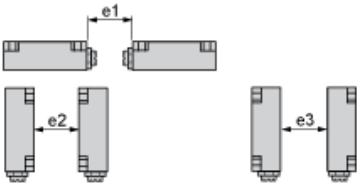
Compact Smart Antennas



- (1) 4 x Ø 4.5. for CHC type screws
- (2) Shielded cable (length: 20 cm)
- (3) A-coded, male 5-pin M12 connector

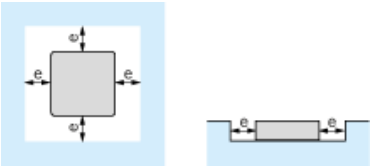
Minimum Mounting Distances

Distance Between Smart Antennas



Tag	e1	e2	e3
XGHB90E340 XGHB520246	310	550	120
XGHB221346	200	320	100
XGHB320***	140	360	110
XGHB211345 XGHB123345	210	180	60
XGHB44***	90	190	30

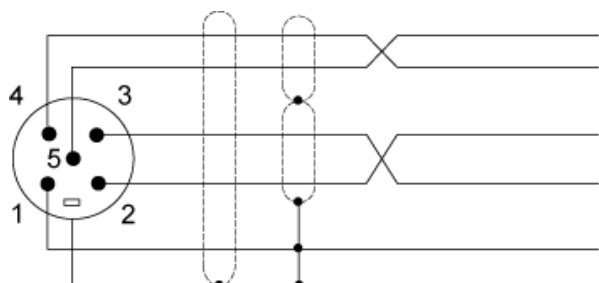
Minimum Mounting Distances in a Metal Structure



(e) ≥ 20 mm.

Wiring Diagram

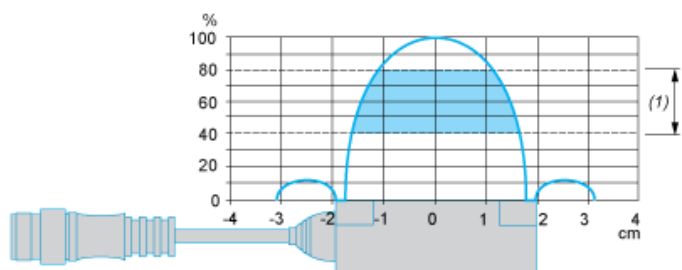
Modbus Connections



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

Curves

Dialogue Zones of Compact Smart Antennas



(1) Recommended movement zone: between 0.4 and 0.8 Pn.