Product data sheet
Characteristics

XGCS490B201
Panel mounting smart antenna, Radio frequency identification XG, antenna

Main

Range of product	Telemecanique Radio frequency identification 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
Net weight	0.057 kg

Environment

Product certifications	UL, FCC
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 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

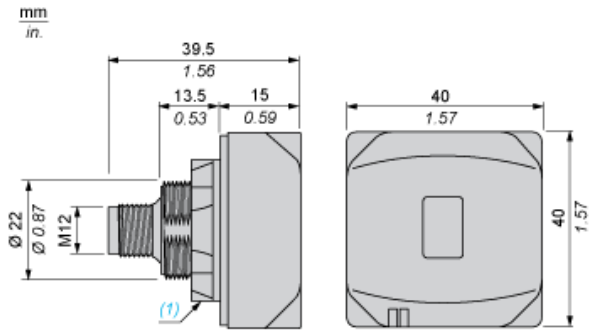
Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.400 cm
Package 1 Width	6.400 cm
Package 1 Length	9.400 cm
Package 1 Weight	75.000 g
Unit Type of Package 2	S01
Number of Units in Package 2	22
Package 2 Height	15 cm
Package 2 Width	15 cm
Package 2 Length	40 cm
Package 2 Weight	1.841 kg

Offer Sustainability

California proposition 65	WARNING: This product can expose you to chemicals including: Diisononyl phthalate (DINP), which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
For all Reach Rohs enquiries contact us at	sustainability@tesensors.com

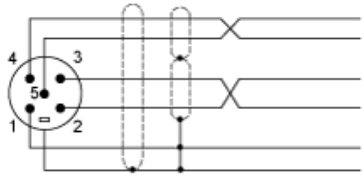
Dimensions



(1) Locking nut

Connections

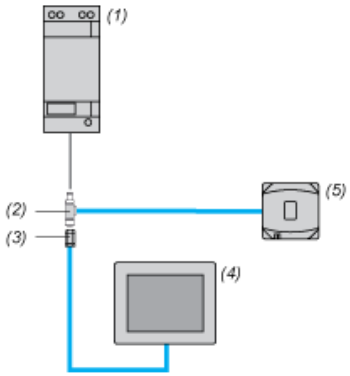
Modbus Connections



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

Connection Examples

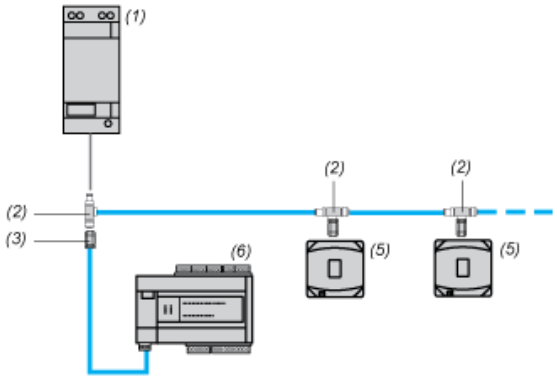
Connection to a Terminal



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

Connection to an Automation Platform

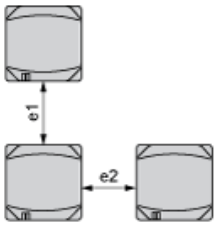
Daisy chain topology



(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