

Micro^X II Plus-Paint Shop VDA Version



Functional Specifications

RF air protocol	EPC Global Class1Gen 2; ISO/IEC
Operational frequency	902-928 MHz (US); 866-868 MHz (EU)
IC type	Qstar-56GN
Memory configuration	496-EPC bits; 2K-bit user memory; 256-bit TID
Functionality	Read / write (user programmed)
Memory – expected read / write cycles	100,000 cycles at 77°F (25°C)
Memory Banks ¹	MB 00 "RESERVED" MB 01 "EPC" MB 10 "TID" MB 11 "USER"
Data retention	Up to 50 years ²
Read rate	1000 tags per second for 96-EPC bit number
Warranty (limited)	6 months
Applicable surface	Metal surfaces
Material	Engineering-grade nylon polymer
Color	Charcoal
Weight	1.06 oz (30 g)
Standard Compliance	VDA ³ -compatible data, ready for EDI VDA 5500, 5501, 5509, 5510, 5520

Performance Characteristics

Read range on metal (2W ERP) ⁴	Up to 23 ft (7 m)
Polarization	Linear



¹ Refer to the Structure of the Memory Banks (ISO/IEC 18000-63)

² The chip data retention is based on chip operating under general environment conditions.

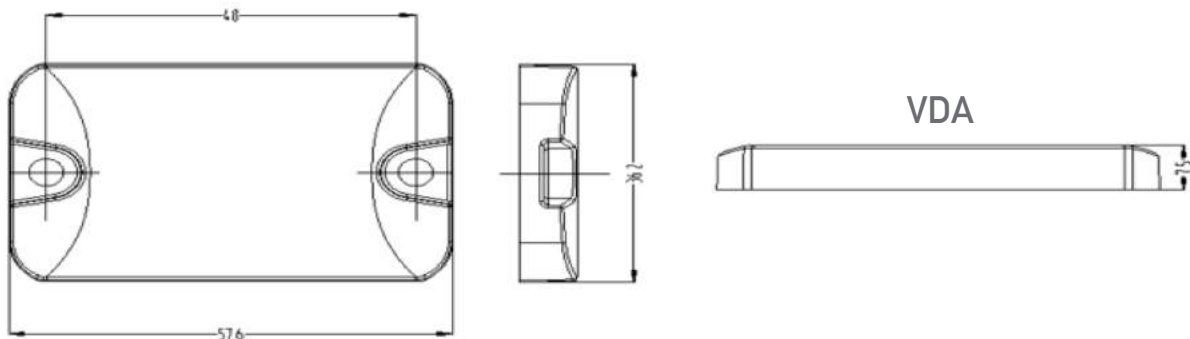
³ VDA: German Association of the Automotive Industry

⁴ Actual read range may vary based upon use case and attachment methods.

Environmental Influences and Durability

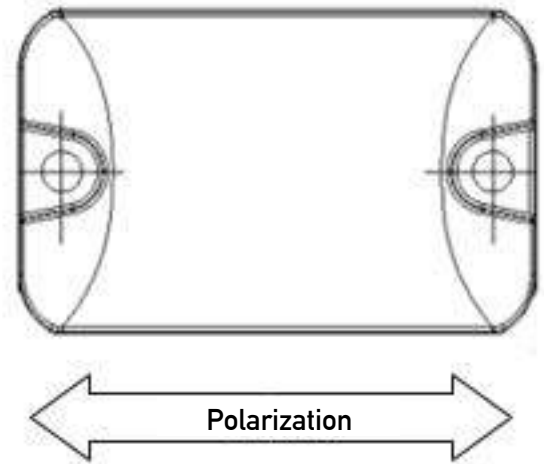
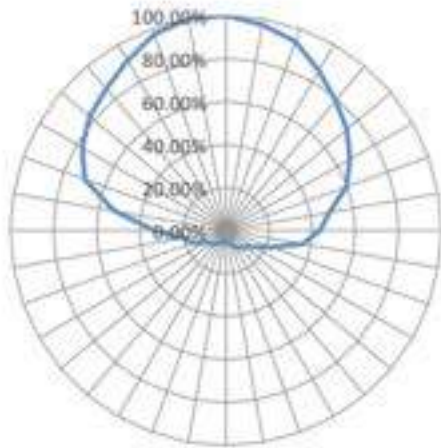
RoHS	EU Directive 2011/65/EU
ATEX/IECEX	Certified
Shock	3 ft (1 m) to concrete/granite up to 100 cycles
Compression strength	725psi (5000 kPa)
IP classification	IP68 (IEC 60529)
Operation temperature (read/write)	-40°F to +185°F (-40°C to +85°C)
Application temperature	-40°F to +482°F (-40°C to +250°C)
Temperature cycling test	30 Minutes at 250°C; 1 hour cool-down; 600 test cycles
Peak temperature	+482°F / +250°C 6 hours duration
Humidity	
Operational humidity	5%-95% non-condensing
Storage humidity	5%-95% non-condensing
Chemical resistance ⁵	
No physical or performance changes in: (tested in 186 hours exposure)	Salt water (15% salinity) / Ethanol / Acetone Industrial rust lubricant / Industrial cleaner Diesel fuel / Gasoline / Engine oil Isopropanol ⁵ Soap solution (30%) ⁵ Sodium hydroxide (10%, pH13) ⁵ Methanol
Mechanical resistance	Hits, vibrations, pressure, friction
Weather conditions resistance	Snow, rain, frost, ice, fog

Product Dimensions



Dimensions (mm)	57.6 x 36.2 x 7.5
Tolerance	+/- 0.5 mm
Dimensions (in)	2.27 x 1.43 x 0.30
Tolerance	+/- 0.02 in
Rivet hole diameter	0.177 in +/-0.008 (4.5 mm +/- 0.2)

Radiation Patterns



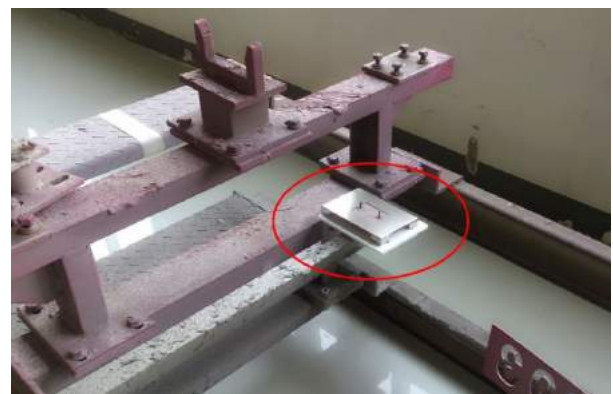
Installation Instructions

The tag can be mechanically attached using:

- Screws (Rivet hole, M4)
- Pop rivets (Max size 3.2mm)
- Adhesive bondings



This tag was used at real paintshop plant



Personalization Options

Several options are available:

- Tag programming
- Customized laser engraving
- Metal insert option, inner diameter 3.5mm

Order information

X2130-US130-Q56GN
X2130-EU130-Q56GN

Paint shop Micro XII Plus VDA US
Paint shop Micro XII Plus VDA EU

Structure of the Memory Banks (ISO/IEC 18000-63)

