

Sigma

The Sigma series is made FR4 material with cost-effective and performance of waterproof, anti-metal, anti-drop, which is the best option for the general asset tracking, Sigma tags typical application include fixed asset management, logistics and warehouse management, equipment management, container management, etc.

APPLICATIONS

- Product Tracking
- Logistics management
- Warehouse shelves and vehicle

FEATURES

- Good reliability
- Fit for indoor and outdoor
- Available in a wide selection of size and performance



RF Specifications

MODEL	SIGMA 820	SIGMA 808	SIGMA 513	SIGMA 410	SIGMA 313
RF protocol	ISO18000-6C, EPC Class 1 Gen2				
Operating frequency	865-868MHz (EMEA); 920-925MHz (CN, US)				
Chip type	UCODE 8				
Memory configuration	128-Bits EPC 48-Bits Unique TID				
Data retention	50 years at operation temperature				
Read range on metal (2W ERP) ¹	Up to 8M (26.4 ft)	Up to 6M (19.8 ft)	Up to 5M (16.5 ft)	Up to 4M (13.2 ft)	Up to 3.5M (11.5 ft)
Read range off metal (2W ERP) ¹	Limited				
Polarization	Linear				

¹Read ranges are achieved by lab testing methodology, the read range will vary with output power of reader and applications.

Physical Specifications

MODEL	SIGMA 820	SIGMA 808	SIGMA 513	SIGMA 410	SIGMA 313
Tag Materials	FR4				
Color	Black (Customizable)				
Dimensions (mm)	80 x 20 x 3.5	80 x 8 x 3.5	52 x 13 x 3.5	40 x 10 x 2	36 x 13 x 3.5
Dimensions (inch)	3.15 x 0.79 x 0.138	3.15 x 0.32 x 0.138	2.05 x 0.51 x 0.138	1.57 x 0.39 x 0.079	1.42 x 0.51 x 0.138
Weight	0.4 oz (12g)	0.18 oz (5g)	0.19 oz (5.5g)	0.07 oz (2.0g)	0.16 oz (4.6g)

Operational and Environmental Specifications

Operational temperature	-40°F (-40°C) to +185°F (+85°C)
Survivability temperature	-40°F (-40°C) to +248°F (+120°C)
Operational humidity	5% to 95% non-condensing
IP Rating	IP68 at 20°C, 6.6 ft (2 m) 24 hours tested
Shock and Vibration	MIL STD 810-G
Drop spec	Multiple drops to concrete: 4 ft./1.2 m, across the operating temperature range
Withstands exposure to	Salt water, Bleach, Cleaning solutions, Formic acid, Gasoline, Oil, etc.

Mounting System

Adhesive fixings	<ul style="list-style-type: none"> • Adhesive (Std) • Screws 				
Hole dimensions	3.5mm	3mm	3mm	3mm	2mm

Order Information

EMEA	WJT-S0100-1	WJT-S0200-1	WJT-S0300-1	WJT-S0400-1	WJT-S0500-1
CN/US	WJT-S0100-2	WJT-S0200-2	WJT-S0300-2	WJT-S0400-2	WJT-S0500-2

Others

Options	Per-Encoding, Labelling, Painting, Laser
Warranty	1 year

The performance of the product should always be tested in the actual application conditions. Our recommendations are based on our most current knowledge and experience and the pictures and illustrations presented in this document are for illustration purposes only. As our products are used in conditions beyond our control, we cannot assume any liability for damage caused through their use.

