

# 12 mm Wedge Transponder Digital Signature (DST)



## Specifications:

Part Number		RI-TRP-B9WK-xx (xx= see REV table below)	
Functionality	Encryption		
Memory	88 bits		
Memory: Page 1	8 bits Password (user programmable and lockable)		
Page 2	8 bits Identification "ID" (user programmable and lockable)		
Page 3	32 bits Serial Number and Manufacturing Code (Factory programmed and locked)		
Page 4	40 bits Encryption Key (user programmable and lockable)		
Challenge	40 bits (random)		
Response	24 bits + 24 bits of SN with Cyclic Redundancy Check (CRC) on data		
Operating Frequency	134.2 kHz		
Modulation	FSK (Frequency Shift Keying) 134.2 kHz / 123.2 kHz		
Transmission Principle	HDX (Half Duplex)		
Power Source	Powered from the reader signal (batteryless)		
Typical Reading Range	≤ 20 cm **		
Typical Read Time	< 120 ms		
Reading Activation Field Strength @ 25 °C	132.5 dBμA / m		
Operating Temperature (Read)	-40 to +85°C		
Storage Temperature	-40 to +100°C (+175°C for 5 minutes)		
Case Material	Plastic		
Protection Class	IP 68		
EMC	Programmed code is not affected by normal electromagnetic interference or x-rays		
Signal Penetration	Transponder can be read through virtually all non-metallic material		
Mechanical Shock	IEC 68-2-27, Test Ea; 200 g, half sine, 3 ms, 6 shocks per axis		
Vibration	IEC 68-2-6, Test Fc; 10 - 500 Hz, 1.65 mm peak to peak, 10 g, 4 hours per axis		
Dimensions	12.0 mm + 0.2 mm * 6.0 mm +0.2 mm * 3.0 mm ± 0.05 mm		
Weight	0.4 g		
Packaging	Bulk (2000 units / Box)		
<b>REV.</b>	<b>MFC</b>	<b>Serial Number ( Hex )</b>	<b>From To</b>
05	10, 11,12, 13, 14		000000 FFFFFFFF

\*\* Depending on RF regulation in country of use, the Reader Antenna configuration used, and the environmental conditions.

For more information, contact the sales office or distributor nearest you. This contact information can be found on our web site at: <http://www.ti-rfid.com>

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