TEXAS INSTRUMENTS

Data Sheet

85mm Disk Transponder

Specifications:

Part number	RI-TRP-R9UR	RI-TRP-W9UR
Functionality	Read Only	Read/Write
Memory (Bits)	64	80*
Memory (Pages)	1	1
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	≤ 150 cm**	
Typical Programming Range	---	30 % of specified reading range
Typical Reading Time	70 ms	
Typical Programming Time	---	309 ms
Typical Programming Cycles	---	100,000
Operating Temperature	-25 to +85°C	-25 to +70°C
Storage Temperature	-40 to +85°C	
Case Material	Acrylate-Styrene-Acrylonitrile (ASA), black	
Protection Class	IP 53	
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; 15 g, 18 ms, half sine, 2 axes, 5 shocks per axis	
Vibration	IEC 68-2-6, Test Fc; 10 g, 20 – 500 Hz, 2 axes, 10 cycles per axis	
Dimensions	$\varnothing$ 85.5 mm $\pm$ 0.5 mm * 5.5 mm $\pm$ 0.5 mm	
Weight	35 g	

*   We recommend that you split each 80 bit page into 64 user programmable bits plus a 16 bit wide CRC CCITT Block Check Character as is done by TI-RFID LF readers.

** 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**