

TEKZIPARK RADAR SPECIFICATIONS

Abstract

This document details the specifications related to the TEKZIPARK RADAR NODE.



TEKZIPARK RADAR Terms of Usage

The device is designed to be used for detecting parking space occupancy states. This product is not intended for incorporation into finished appliances that are made commercially available as single functional units to end users.

This product uses the WISOL Sigfox module which is SIGFOX verified.

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

Exposure to absolute maximum rating conditions for extended periods may affect device reliability.



Contents

1. DEVICE SPECIFICATION	3
2. BATTERY SPECIFICATION	4



1. DEVICE SPECIFICATION

LPWAN	Sigfox
Operating Zones	RCZ1 (868Mhz) - Europe, Oman, Iran, South Africa, Tunisia, UAE RCZ2 (902Mhz) - USA/Mexico/Brazil RCZ3 (923Mhz) - Japan RCZ4 (920Mhz) - Australia/New Zealand/South East Asia/Rest of South America
Power	Built-in Lithium batteries (3.6V)
Antenna	Internal included
Detection	RADAR and Magnetometer
RADAR	60 GHz low power Pulsed Coherent Radar (PCR)
MAGNETOMETER	Ultra-low-power high- performance three-axis magnetic sensor
Mounting	Surface/Flush
Dust & Water Protection	IP68
Operating temperature	-40 to +85 °C
Body Material	Polycarbonate. Makrolon FR7087 from Bayer. Flame retardant and UV stabilized that enhances impact strength and retains mechanical properties even under prolonged UV exposure. Suitable for high temperature conditions.
Firmware Update	Over the air upgrade of firmware. No need to unmount and remount.
CPU	ARM® Cortex®-M4 32-bit processor with FPU, 64 MHz
Battery Life	Expected lifetime of up to 9.5 years**
Dimensions (Surface version)	219mm diameter, 30mm height
Dimensions (Flush version)	150mm diameter, 33mm height

** Under estimated number of transmissions per day @ 24 for RC2/RC4. This also includes the scanning for vehicular identity.

SURFACE VERSION



Model # TEKZ-SIG-X¹-PKSUF

FLUSH VERSION



Model # TEKZ-SIG-X¹-PKFLS

⁽¹⁾X is the operating zone

- X=1-> RCZ1 868Mhz
- X=2-> RCZ2 902Mhz
- X=3-> RCZ3 923Mhz
- X=4-> RCZ4 920Mhz



2. BATTERY SPECIFICATION

Battery Rating (Ah) <i>2 Class C batteries used each with a capacity of 9Ah</i>	18
Battery Qty.	2
RCZ4/RCZ2 (Battery Life)	
10 parking events per day(years)	10
12 parking events per day(years)	9.5
24 parking events per day(years)	6
RCZ1 (Battery Life)	
10 parking events per day(years)	9
12 parking events per day(years)	8
24 parking events per day(years)	6

A parking event consists of 2 transmissions, one for Occupied and one for Vacant. This also includes the scanning for beacons.

IMPORTANT NOTICE – PLEASE READ CAREFULLY

TEKZITEL PTY LTD reserve the right to make changes, corrections, enhancements, modifications, and improvements to TEKZITEL products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on TEKZITEL products before placing orders. TEKZITEL products are sold pursuant to TEKZITEL terms and conditions of sale in place at the time of order acknowledgement. No license, express or implied, to any intellectual property right is granted by TEKZITEL herein. Resale of TEKZITEL products with provisions different from the information set forth herein shall void any warranty granted by TEKZITEL for such product. Information in this document supersedes and replaces information previously supplied in any prior versions of this document.