TEK Z-Radio System 2.4 GHz OEM RF Modules by TEK Industries, Inc.



Z-USB Data Sheet

TEK P/N 750200

The TEK Z-USB is a self-powered receiver module for the TEK Z-Radio System. The Z-USB is pre-programmed with Active Tag Firmware. Using the source code files supplied with every order, modification to the firmware to suit custom applications is encouraged. Applications range from industrial monitoring and animal tagging to educational projects.

Specifications		<u>Z-USB</u>
RF Output	Receive Sensitivity	Typically -95dBm
	Spurious Emissions	Typically less than -44dBm 1-12.75GHz
	Data Rate	250K bps
	Antenna	On-board 50 Ohm Ceramic Chip antenna w/ matching balun
	Antenna Output	1mW (0dBm) maximum, programmable
	Output Transmit Frequency	2405MHz (Chan 11), 5MHz steps to 2480MHz (Chan 15)
General	Chipset	Microchip Microcontroller PIC18F2620, Chipcon/TI Radio CC2420, FTDI FT232R USB interface pre-assembled and tested on FR4 2-layer
	Dimensions	2.08" x 1.09"; Recommended Enclosure Hammond 1551J
	USB Interface to Laptop or PC	115200 Bd N-8-1 Virtual Serial Port on miniature USB B connector

Radio Protocols Supported:

- Microchip ZigBee stack 1.0-3.6 Supplied with Stack 1.0-3.6 support files, complete stack software may be downloaded free of charge from Microchip website
- TEK Active Tag Protocol using IEEE 802.15.4 compatible physical layer pre-programmed with Active Tag Receiver Firmware, Supplied with MPLAB project file and complete source code in Microchip C18

Application Note including:

- Setup instructions, schematics, PC Demo application including source code
- Microchip Stack support files, MPLAB project and source code

Pre-installed Firmware supports commands to output CW test on 2410MHz, 2440MHz or 2480MHz.

Additional parts and modules available to order. Please contact the Sales Department for more information.



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