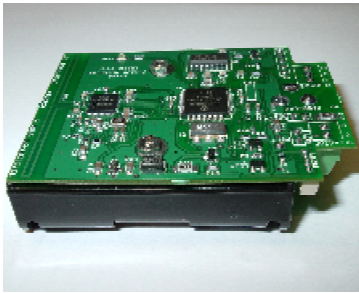


TEK Z-Radio System

2.4 GHz OEM RF Modules by TEK Industries, Inc.



TEK P/N 750210

Z-LINK Data Sheet (Page 1 of 2)

The TEK Z-LINK is a flexible transmit-receive module for the TEK Z-RADIO 2.4GHz System. The Z-LINK is primarily intended as a Coordinator to extend the range of the other modules (up to 200 feet), but would make a fine platform for general purpose node use where the larger size battery, more interfaces and large program memory are required. It has enough memory to run RFD, FFD, Coordinator or Router. Pre-programmed Active Tag transmit-receive firmware is installed. Customers are encouraged to modify the firmware to suit custom applications using the source code files supplied. Applications range from industrial monitoring and animal tagging to educational projects.

<u>Specifications</u>		<u>Z-LINK</u>
RF Output	Receive Sensitivity	Typically -95dBm
	Spurious Emissions	Typically less than -44dBm 1-12.75GHz
	Data Rate	250K bps
	Antenna	On-board PCB trace balanced loop antenna
	Antenna Output	1mW (0dBm) maximum, programmable
	Output Transmit Frequency	2405MHz (Chan 11), 5MHz steps to 2480MHz (Chan 15)
General	Chipset	Microchip Microcontroller PIC18F6722, Chipcon/TI radio CC2420, ST3232 RS232 interface, MCP300 LDO regulator, pre-assembled & tested on FR4 2-layer
	Dimensions	3.3" x 2.2"; Recommended enclosure Hammond 1591MFLBK, (modified)
	Battery Type	Primary (non-rechargeable): 3 x 1.5V AA size Alkaline, ANSI:15A, IEC:LR6, Duracell MN1500 or equivalent, total 4.5V, 2800mAh. Rechargeable Ni-Cad AA cells may be substituted. PCB Link option to enable trickle charging of Ni-Cads from external DC supply.
	Battery Consumption	Standby (sleep) mode: 5uA at 4.5V, Active (Transmit/Receive): 34mA at 4.5V
	USB Interface to Laptop or PC	115200 Bd N-8-1 Virtual Serial Port on miniature USB B connector

Preliminary data subject to revision.

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

Additional parts & modules available to order:
Z-TAG radio tag, Z-USB Interface, Programming cable Molex adapter to RJ11
Please contact the Sales Department for more information.



48 Hockanum Blvd. Vernon, CT 06066

Phone: 860-870-0001

Fax: 860-870-0003

www.tekind.com

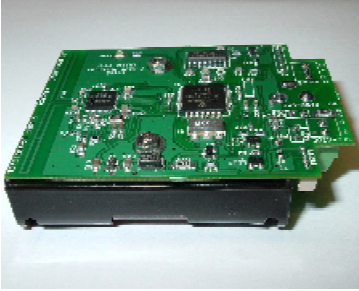
www.tekrfidshop.com



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TEK Z-Radio System

2.4 GHz OEM RF Modules by TEK Industries, Inc.



Z-LINK Data Sheet (Page 2 of 2)

TEK P/N 750210

Radio Protocols Supported:

- Microchip ZigBee stack 1.0-3.6 - Supplied with Stack 1.0-3.6 support files (Linker script & zlink.defpinout definition), complete stack software may be downloaded free of charge from Microchip website
- TEK Active Tag Protocol using IEEE 802.15.4 compatible physical layer - Radio is pre-programmed and tested with Active Tag receiver and monitor 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

Interfaces:

- Serial COM Port on 3-pin screw terminal block
- RS232 +/- 10V levels
- 115.2Kbd N-8-1 for PC interface, diagnostics or interface to external equipment
- Interrupt wakeup from sleep on RXD line
- Expansion Connector, 0.1" 5-pin header, 3 "Port A" Lines, analog or digital, VDD & GND

Additional Information:

- DC Power Input, DC Jack connector for DC input regulated 6V, center +, <0.1A
- External power may be used instead of battery, or with battery back-up to support coordinator during power outage
- Programming-ICD 5-pin mini-Molex connector for interface to Microchip programmer

Preliminary data subject to revision.

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

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