

TOUMAZ Low Power Wireless System on Chip



This product is RoHS compliant.

The TELRAN TZ1053 is an easy to use single chip radio for point to point and star wireless sensor networks. With an exceptional ultra low power consumption of ~3mW in continuous Tx/Rx and the ability to operate from a single 1V button cell, it leads its class as a low power sub 1GHz radio transceiver

Features:

- ISM band Radio:
 - EU: 862-870MHz, USA: 902-928MHz, Japan: 950-956MHz
- Bidirectional secure wireless transceiver with AES 128 encryption in hardware
- Single battery cell: supply 1.08V – 1.5V
- Peak Tx/Rx current 3.3mA/3.1mA
- NSP protocol giving robust and easy to use radio network
- Point to point and star network supported
- Raw data rate 50kbps
- Range: 10m to 100m los (100m with 0dBi antenna, >10m with chip antenna on TDK)
- Simple configuration through system commands via UART/SPI. No compilers needed
- Over the Air (OTA) configuration and programming of sensor node
- Local processing of compact algorithms (up to 2k byte) on sensor node
- Interfaces – GPIO x5/SPI/UART/I2C compatible
- 3V tolerant digital I/Os
- Unique 48bit fuse ID, 128 bit customer field
- Temperature range -40 to +85deg C
- 32pin VQFN 5x5x0.9mm

Applications:

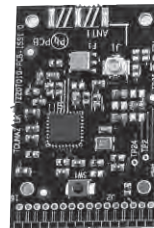
- Remote control for consumer electronics
- Environmental monitoring
- Smart metering
- Health and Lifestyle monitoring
- Wireless keyboard/mouse/PC peripherals
- Home, car and personal security
- Toy control
- Remote keyless entry
- Hand held wireless terminals
- Professional sports monitoring
- Physical activity monitoring

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Toumaz Part No.	Description	Price Each		
			1	10	100
930-TZ1053C1QN032DR	TZ1053-C1-QN032DR	Telran Ultra Low Power Radio 50 KBS	6.00	5.45	4.62

DEVELOPMENT KITS

The TELRAN development kit (TDK) comprises a TELRAN USB basestation, TELRAN RF module and a detachable sensor development board with 3 axis accelerometer and 16 way IDC port replicator/expansion connector including a UMI pin-out compatible subset (for smart metering applications). The communication range can easily be extended by using external LNA and PA circuits and a choice of on-board or external antenna.



Plug-in RF Module



Sensor Development Board

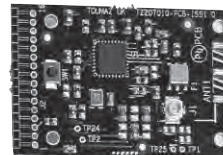


USB Base Station

MOUSER STOCK NO.	Toumaz Part No.	Description	Price Each
930-TZ1053TDK868	TZ1053TDK868	868-870MHz for Europe	299.00
930-TZ1053TDK915	TZ1053TDK915	902-928MHz for US, Canada, Australia	299.00
930-TZ1053TDK950	TZ1053TDK950	950-956MHz for Japan	299.00

RF MODULES

The TELRAN RF module is ideal for development, rapid prototyping and production for applications requiring short range (10-100m) ultra low power wireless connectivity. TELRAN RF modules (TZ1053RFM) can be configured either as basestations or sensor nodes.



Plug-in RF Module



Sensor Development Board

MOUSER STOCK NO.	Toumaz Part No.	Description	Price Each
930-TZ1053RFM868	TZ1053RFM868	868-870MHz for Europe	69.22
930-TZ1053RFM915	TZ1053RFM915	902-928MHz for US, Canada, Australia	69.22
930-TZ1053RFM950	TZ1053RFM950	950-956MHz for Japan	69.22
930-TZ207030SDB	TZ207030SDB	Sensor Development Board with PIC18LF25K22 and 3 axis accelerometer	107.70