

WIT2410 Roaming Frequency Hopping Transceiver OEM Module

Combining seamless roaming capability, a low operating voltage and low power consumption, the Digital Wireless WIT2410 represents the next generation of wireless OEM transceiver modules. Smaller than a business card and just 9mm thick, the WIT2410 utilizes 2.4 GHz frequency hopping spread spectrum technology providing immunity to both jamming and multipath fading. Compliant with both North American and European requirements, the WIT2410 can be used license-free worldwide.

Mobile. Used with the companion SNAP2410 access point, the WIT2410 provides seamless roaming. With 16 million factory-set addresses available, the 2410 can move from access point to access point without the need for re-synchronizing. This means the application can be in constant communication with each 2410, even when the user moves from one access point to another.

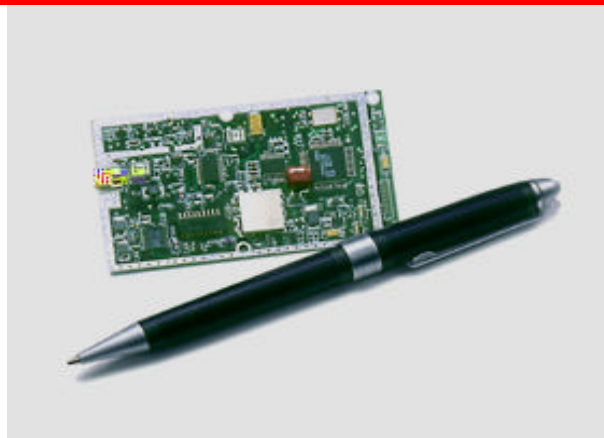
Measuring just 80mm x 47mm x 9mm and weighing 43 grams, the WIT2410 can be integrated into a portable or handheld device with little impact on the size and weight. The 3.3 volt operating voltage and 12 mA standby current consumption make the 2410 well suited for battery operation.

Versatile. All of the module parameters are configurable under software control. Even transmit power can be selected through a straightforward command set. Point-to-point and point-to-multipoint modes are supported using either CSMA or TDMA modes. Standard communication rates between the 2410 and the host are supported between 1200 bps and 115.2 Kbps. Non-standard rates are supported as well.

Reliable. The WIT2410 provides both reliable communication and reliable operation. With Frequency Hopping Spread Spectrum technology, the WIT2410 provides immunity to jamming as well as immunity to multipath fading. Using Automatic Retransmit Request (ARQ) in addition to a 3K buffer, transparent error-free communication is automatic. The built-in data scrambling adds a measure of security.

Reliable operation is assured through our stringent QA processes. All WIT2410s go through a full 48-hour burn-in. And compliance with ISO9002 is on schedule to be completed by Q2 '99. Another reason Digital Wireless is the choice of hundreds of designers.

Simple. Simple to use and simple to integrate. Although the WIT2410 offers great flexibility, the



factory default settings work for many applications. For those other applications, software control makes changing settings simple.

The WIT2410, with its small size and low power consumption, is simple to integrate into your product. The RS-232 style interface with standard CMOS signal levels makes the electronic integration easy. Since the WIT2410 is FCC certified, your 2410-based product does not have to repeat the FCC type approval.

Let us be your experts. The WIT2410 lets you be the expert on your product and lets Digital Wireless be the expert on wireless transceivers. Put our 10 years experience with wireless technology to work for you.

Features:

- 2.4 GHz Frequency Hopping Spread Spectrum technology
- Seamless roaming capability
- 3.3 Volt operation
- Low power consumption
- Small size, light weight
- 460 Kbps channel data rate
- RS-232 style asynchronous interface
- FCC certified for unlicensed operation

Benefits:

- Worldwide license-free operation
- Immunity to jamming and multipath fading
- Supports far ranging mobile applications
- Ideal for battery powered devices
- Supports large number of nodes
- Easy to integrate
- Shortens time to market

To find out how to put Digital Wireless to work for you, visit our website www.digital-wireless.com or call:

770.564.5540



WIT2410 Specifications

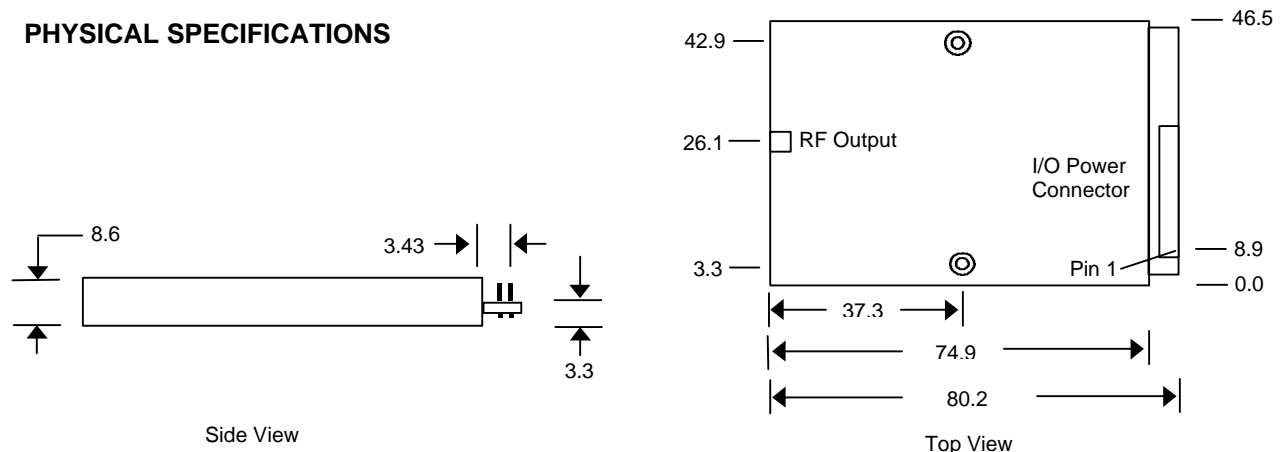
GENERAL SPECIFICATIONS

RF Frequency	2400 to 2483 MHz					
Radio Certification	FCC Part 15.247, ETS 300-328 and RSS210 rules, license free					
Operating Range	Indoor: 450' to 900' Outdoor: 3000' with dipole antenna, >20 miles with gain antenna					
Network Topology	Star network					
Network Protocol	CSMA/CA or TDMA					
Error Detection and Correction	24 bit CRC and ARQ					
Serial Data Interface	Asynchronous (RS-232) CMOS signals, 3.3v; 5v tolerant					
I/O Data Rate	Up to 115.2 Kbps, software selectable					
Channel Data Rate	460 Kbps					
# of Frequency Channels	75					
RF Bandwidth	750 KHz					
Transmit Power Output	10 mW or 100 mW, software selectable					
Receiver Sensitivity	-93 dBm					
Supply voltage	3.3 v to 10 v, 5 v nominal					
Current Consumption (100mW Transmit Power, 115.2Kbps I/O)	Remote Operation	Sleep Stby	< 50µA 12mA Typical 50mA Peak (Tx) 200mA	Base Operation	Typical Peak (Tx)	120mA 200mA
Size	80mm x 47mm x 9mm					
Weight	43g					
Operating Temperature	-20°C to 70°C					
Humidity	20% to 90% (non-condensing)					

CONNECTOR PINOUT

Pin	Signal	Type	Description
1	Gnd	-	Signal and chassis ground
2	TxD	Input	Transmit data
3	RxD	Output	Receive data
4	CFG	Input	Configuration selector. Used to switch radio between data and control mode
5	RTS	Input	Request to send. Used for receive flow control by the host
6	Sleep	Input	Sleeps/wakes the radio transceiver
7	DCD	Output	Data carrier detect. For remotes, indicates successful synchronization
8	CTS	Output	Clear to send. Used for receive flow control by the radio
9-15	Res	-	Reserved for future use
16	Vcc	-	Positive supply. Min 3.3 v, Nom 5.0 v, Max 10.0 v

PHYSICAL SPECIFICATIONS



Specifications subject to change without notice.