

C1000μ™

Long-range, Micro-sized FHSS Radio Modem

Ask About Our
1.2 Mbps
Version!



Less than half the size of a business card, the miniature C1000μ module is a high performance 1.2 Mbps wireless datalink that provides robust RF data communications with up to 60 mile range. Measuring just 2.00" x 1.42" x 0.38" and weighing only 18g, the C1000μ is ideally suited for military/aerospace and industrial applications when size and weight are critical parameters. Backwards compatible with both the Intuicom Communicator II and C-series platforms, the C1000μ is available with a TTL interface for simplified integration in a variety of OEM products.

APPLICATIONS

- Unmanned Vehicles
- Robotics
- Remote Sensors
- Security Systems
- Asset Tracking
- SCADA Networks

"BEST-IN-CLASS" RF PERFORMANCE

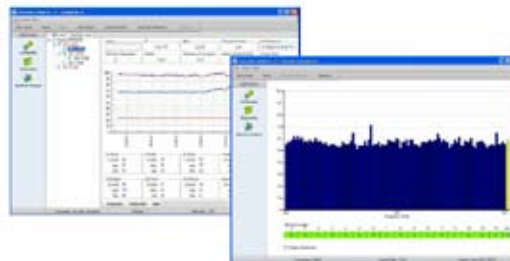
Employing secure, frequency hopping spread spectrum technology that is backwards compatible with Intuicom first and second generation products, the C1000μ can be easily integrated into existing network infrastructures.

Empowered with an ultra sensitive yet highly selective, digitally filtered RF receiver, the C1000μ provides robust communication links with high data transfer rates.

With proven performance in dense RF environments, Intuicom's wireless networks power through the congestion to provide reliable data transport up to 60 miles (LOS).

NETWORK MANAGEMENT

CommPRO Software facilitates the management of your C1000μ network with a suite of tools that provides simplified configuration, network-wide diagnostics and spectrum analysis tools for monitoring and optimizing system performance. Signal strength, noise figures, and data transfer success rates are among the many comprehensive performance parameters that can be monitored.



FEATURES

- Up to 60 mile range
- Up to 1.2 Mbps data rate
- Intuicom backwards compatible
- Point-to-point, multipoint, or TDMA modes
- TTL interface
- 128 Bit AES encryption option
- Secure 900 MHz FHSS technology
- 1 Watt RF output
- Configurable as a master, slave, repeater, or slave/repeater
- Low power consumption
- 2.00" L x 1.42" W x 0.38" H
- Weight: 18 grams
- -40°C to +85°C operation
- Made in USA

To learn more about enabling wireless networking for your applications, please contact us at: info@intuicom.com or call (303) 449-4330

Intuicom

C1000 μ Long-range, Micro-sized 115.2 kbps FHSS Radio Modem

GENERAL SPECIFICATIONS

Size	2.00" x 1.42" x .38"
Weight	18 g
Operating Temperature	-40° C to +85° C
Connector Signals	
External Antenna	Right angle MMCX
PCB Interface	Dual Row 14 pin header; 2 mm c-c
Input Voltage	3.0 to 5.0 VDC
Operating Modes	Master, Repeater, Slave, Slave/Repeater, Point-to-Point, Point-to-Multipoint, TDMA
Construction and Mounting	Dual Sided SMT PCB with .093 mounting holes (4X)

WIRELESS TRANSCEIVER

Frequency Range	902 - 928 MHz
Transmitter	
Output Power	1 Watt (User Adjustable from 5mW to 1 W)
Range, Line of Sight	60 miles (115 Kbps) / 30 miles (1.2 Mbps)
Modulation	Spread Spectrum, GFSK
Occupied Bandwidth	230 KHz
Spreading Method	Frequency Hopping (FHSS)
Hopping Patterns	15 per band, 105 total, user selectable
Hopping Channels	50 to 112, user selectable
Hopping Bands	7, user selectable
Receiver	
Sensitivity	-106 dBm at 10 ⁻⁶ BER
Selectivity	20 dB at fc \pm 230 KHz
System Gain	140 dB exclusive of antennas
Data Transmission	
Error Detection	32 Bit CRC, retransmit on error
Data encryption	Substitution, dynamic key; 128 bit AES optional
Data Rate*	56 to 115Kbps (standard version) 56 to 1.2Mbps (call for availability)
Data Protocol (standard)	TTL
Power Consumption @3.3VDC	
Hibernate	0.5 mA
Sleep	6 mA
Idle	19 mA
Receive	135 mA
Transmit (average)	635 mA (@ full 1W TX power)

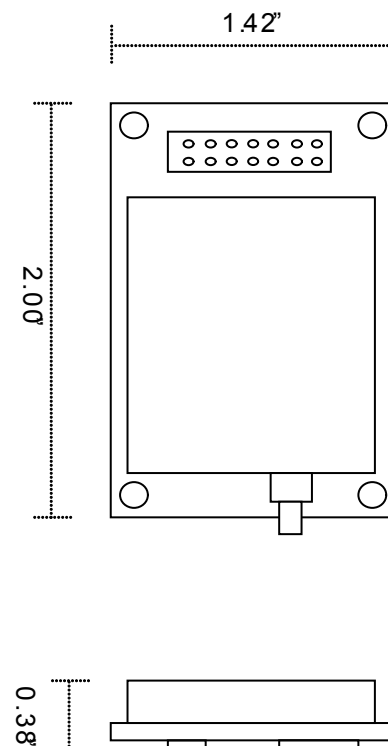
* Assumes 75% frequency availability, no repeater. Specifications subject to change without notice.

SOFTWARE

- Network-wide Diagnostics
- Local Diagnostics
- Spectrum Analyzer
- Configurator

ACCESSORIES

Antennas	Omni-directional & Yagi Antennas with various mounting options -- Call for details
Coaxial Cables	- MMCX to SMA bulkhead - MMCX to N-type female bulkhead - Call for details
Interface Cable	Mates to 14 pin header with 36" flying leads
Amplifier Kit	5 Watt bi-lateral amplifier (For military or licensed use only)



INTUICOM RADIOS REQUIRE PROFESSIONAL INSTALLATION