MONICOR WIRELESS PRODUCTS

MODEL IC-15ME

Economically converts your present terminals to RF/DC two-way wireless interactive units. You can network different terminals and equipment to your system at the same time.

Fully compatible with most hardware and software. Works with any make input/output device having an RS-232 interface.

Simple Installation. Dependable, user friendly technology provides straight forward operating ease.

Choose the best terminal for each application. Flexibility to upgrade and mix terminals without replacing the RF network.

Bi-directional transmission capabilities for your portable equipment. The RF modems can support real-time, two-way data input

Fast 4800 bps transmission over the air. Fast radio with 2 millisecond Tx/Rx turn on response time. Sends up to 520 characters per second. With optimized high performance components, narrow band can effectively handle dozens of terminals on a single base station at 4800 bps, and still provide subsecond response times. Economical 2400 bps option available.

Flawless RS-232 Serial Data Communication. A unique validation protocol assures that no errors will result from broadcast interference. Monicor radios are highly reliable UHF narrow band transceivers, providing full RS-232 compatibility (RS-422 simulated with Multidrop). The port is fully buffered and has full flow control, either hardware or software, and can be set to any baud rate up to 19.2K.

UHF 450 to 470 MHz narrow band radio technology operating on business band. Provides superior accuracy and coverage. The best trade off for speed, long range and low system cost. Military band 406 MHz to 420 MHz available.

Lower System Cost. One controller reaches up to 99 remote units! A single UHF controller gives you more coverage than you would get with systems requiring costly access points or repeaters. Generally, as frequency increases, data transfer rates increase, but power and range decrease. Given reduced range, you must increase the number of such base stations or repeaters to match UHF range performance, resulting in higher system cost.

Covers One Mile Radius (line of sight using standard short stubby antennas). Our 1/4 watt output power and highly sensitive digital receiver rivals the performance of many commercially available 2 watt radios. Site propagation analysis or site surveys are more demanding for other technologies than with UHF systems.

Ideal for a variety of businesses. Works well with a wide range of equipment, including scales, bar code readers, scanners, terminals, monitors, printers, and a variety of other equipment.

FCC licensing enforces interference free broadcasting. Monicor will help you obtain the site license. UHF RF systems have been successful due to FCC management of the radio spectrum which controls geographic allocation of the frequency. Licensing is, in fact, one of the advantages of operating in the UHF band.

Added protection against lightning damage. Eliminating buried cables and replacing them with the small profile of the radio modem significantly reduces down time and service charges for your customers.

Friendly Technical Support - for customers big and small. Monicor builds it's product for ease of implementation, operation and maintenance. Customers remark on our exceptional service.

MODEL IC-15ME RADIO MODEM

Accurate real-time data transmission is as simple as the IC-15ME series of wireless radio modems from Monicor. With exceptional one mile coverage, this reliable transceiver is easy to set up, operate and maintain. In addition, it's more economical than multiple access points or repeater systems. Discover the Monicor difference. Contact a Monicor Data Communication Specialist today.

Options

Link Network: When networked with two or more units, the Network Controller (IC-210AME) handles the data for all the remote units. Each circuit or data path between a terminal and the host computer is fully buffered so that the RF-modems can transfer data across all circuits at once, while the host switches the controller port to one circuit at a time. The Network controller polls the network for activity for up to 99 units on the network and responds immediately.
IC-210AME Metal Enclosure Network Controller

Point to Point: Provides a cost effective approach for cable elimination or replacement across a variety of applications. The system configuration performs like a hardwired link, in which no software changes are required for your application.

Multidrop: Terminals with a built in multidrop protocol will easily connect to this simple interface, providing truly portable access to a host without terminal and host reprogramming. This is accomplished by using the existing software and network protocol of the customer system with all its error correction and data transfer characteristics. Compatible with many Multidrop terminals. RS-422/RS-485 emulation capability. (Available in non point to point radios).

IC-15ME SERIES RADIO MODEM

Monicor products are manufactured in the USA and come with a one-year warranty. Additional service contracts are available.

General Features (Specifications differ with options)

Frequency	450-470 MHZ, 406-420 MHZ available
Turn-On Response Time	2 millisecond
Data Throughput	520 Char/sec 4800 bps, 260 char/sec 2400 bps
Channels	1 Channel/Half Duplex
Operating Temperature	-30 to 60 degrees Celsius
Storage Temperature	-30 to 70 degrees Celsius
Humidity	0 to 90% non-condensing
Housing	Aluminum Case
Dimensions	6.9" x 2.9" x 1.7" Metal Enclosure
Weight	16 oz. Metal
RF Connector	B.C.
RS-232 Interface	DB-9
Supply Volts	12 to 24vDC Metal Enclosure
Message Transmission	Synchronous variable length X.25 packets error detection and correction

Receiver Features

Sensitivity	12 dB SINAD: >0.35 uV
Frequency Stability	+/- 5PPM
Selectivity	>85 dB
Intermodulation	>60 dB
Spurious Rejection	>60 dB
Conducted Spurious Emissions	<-50 dBM
Noise Figure @ 25 deg C.	<7.5 dB
Current Drain	65 mA

Transmitter Features

RF Power Out	250 mW nominal
Conducted Spurs	>-55 dBC
Frequency Stability	+/- 5 PPM
Emission	14K4F1D/15K6F1D (4800)
Nominal Current Drain	180 mA - 200 mA

Accessories

3-Element Yagi Directional Antenna
6 dB Super Gain Omni Antenna
Power Divider (Splitter)
Lightning Arrester Kit
4.5 dB Gain Omni Antenna
Passive Repeaters
Magnetic Mount Antenna
Antenna Feed Cable

Operating Information

Data is transferred synchronously over the radio link at 2400 or 4800 bps. Communication is over a single channel, so throughput depends on the length and frequency of messages for each remote unit. The PAD (Packet Assembly and Disassembly) interface provides full access to multiple portable units via the asynchronous RS-232 port, and the profile is configurable to match different types of terminal equipment.

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