



# VHF/UHF Radio Modem 6661-1250-1

High Spec 19.2 kbps Wireless Modem  
380-512 MHz, 132-174 MHz, 928-960 MHz

## Specifications

### MODEM

Modulation	DRCMSK		
Signal Level	EIA RS-232C		
Data Format	Transparent asynchronous serial		
Word Length	7 or 8 big words, 1 or 2 stop bits		
Parity	Even, odd or none		
Handshake	RTS-CTS		
RTS/CTS Delay	30 msec		
Channel Bandwidth	<b>12.5 kHz</b>		<b>25 kHz</b>
Data rate (PC programmable)	4800, 9600 bps		9600, 19200 bps
Bit error rate	1 x 10 <sup>-5</sup> @ 1.0 μV (9600 bps)		1 x 10 <sup>-5</sup> @ 1.0 μV (4800 bps) 2 x 10 <sup>-5</sup> @ 1.7 μV (19200 bps)

### GENERAL

BAND	UHF	VHF	900MHz
Frequency Range	380-512 MHz	132-174 MHz	928-960 MHz
Channel Bandwidth	12.5 or 25 kHz	12.5 or 25 kHz	12.5 or 25 kHz
FCC Type Acceptance	NP4244046-001	NP42424016-001	NP42424096-001
IC Type Acceptance	2984195432A	2984195430A	2984195431A
European Approval	CE Mark (403-470 MHz)	CE Mark	--
ETSI	300.113 (403-470)	300.113	--
Current Drain			
Transmit	1800 mA	1600 mA	2300 mA
Receive	125 mA	120 mA	135 mA
Frequency Tolerance	1.5 ppm	2.5 ppm	1.5 ppm
Operating Voltage	10-16 VDC		
Operating Temperature	-30° C to +60° C		
Dimensions	4.5" x 3.25" x 2.12" (11.4 cm x 8.3 cm x 5.4 cm)		
Weight	1.18 lbs. (0.54 kg)		
Operating Mode	Simplex or half duplex		
RF Connector	SMA		
Data I/O Connector	DE-15 female		
Front Panel Indicators	Power, Transmit, Receive		
Timeout Timer	60 seconds switchable on/off		
Diagnostics Online	Supply voltage, internal temperature, forward & reverse power		
Diagnostics Offline	Same as Online plus: Tx B+ voltage, analog supply voltage, Tx test tones		
Bandwidth w/o tuning	450-470: 20 MHz	132-150: 18 MHz	928: 32 MHz
	all others: 16 MHz	150-174: 24 MHz	

### RECEIVER & TRANSMITTER

Receive Operation	Continuous (no tuning required)
Transmit Operation	Continuous (no tuning required)
RF Output Power	1-5 watts, software adjustable
Duty Cycle	50% @ 5 watts, 30 sec max transmit, extended w/cooling fan



## Features

- **Speedy and efficient for UHF, VHF, and 900 MHz with over the air rates of 19200, 9600, or 4800 bps in a 25 kHz channel and 9600 or 4800 bps in a 12.5 kHz channel**
- **Selectable operating modes provide flexibility** RS-232 compatible, simplex or half-duplex operation, RTS-CTS handshake protocol with the option for configuring any two units as a digital repeater. Transparent, asynchronous serial data formats are supported like Modbus™, Modbus-RTU™, DNP 3.0™, AB DF1™ and various other protocol formats.
- **Front panel LEDs** provide visual indication of transmit, receive and power. Easy-to-use Windows®-based Field Programming Software provides programming and diagnostics interface. Programming Software setup provides a unique programming ID that allows diagnostic reporting both locally and over-the-air from any location.
- **Real-time, non-intrusive online diagnostics** report received signal strength (RSSI), RF power output, supply voltage and other radio performance statistics. Offline diagnostics offer unit programming, link testing and RF path verification.
- Designed specifically for data transmission to provide **an economical solution**. Low cost options include DIN rail mounting and the SPS 2412/75 24VDC to 12VDC voltage converting power supply.