



## INTEGRA-TR SPECIFICATIONS

### MODEM

Channel Bandwidth	6.25 kHz*	12.5 kHz	25 kHz
Data rate (PC programmable)	2400, 4800 bps	4800, 9600 bps	4800, 9600, 19200 bps
Modulation	DRCMSK		
RTS/CTS Delay	4 msec		
Bit error rate (1 x 10 <sup>-6</sup> )	@ .35 µV (2400 bps)	@ 1.4 µV (9600 bps)	@ 1.0 µV (9600 bps) @ 2.3 µV (19,200 bps)

### COM PORT

Interface	EIA RS-232C
Data Rate	1200 - 19200 bps
Protocol	Transparent: 7 or 8 data bits; 1 or 2 stop bits; even, odd or no parity
Setup / Diagnostic Port	
Data Format	Proprietary binary for setup, ASCII for diagnostics
Data Rate	9600 bps

### GENERAL

Band	UHF	VHF	900 MHz
Frequency Range	380-512 MHz †	132-174 MHz	928-960 MHz
Channel Bandwidth	6.25*, 12.5 or 25 kHz	6.25*, 12.5 or 25 kHz	12.5 or 25 kHz
FCC Type Acceptance	NP4MCUB5Q (6.25 kHz) EOTMCUB5R	NP4MCUA5Q(6.25 kHz) EOTMCUA5R	EOTMCUC5R
FCC Emission Designators	6K00F1D (6.25 kHz) 9K30F1D, 15K3F1D	6K00F1D (6.25kHz) 9K30F1D, 15K3F1D	9K30F1D, 15K3FD
IC Type Acceptance	773195561A	773195562A	773195611A
IC Emission Designators	9K30F1D, 15K3F1D	9K30F1D, 15K3F1D	9K30F1D, 15K0F1D
European Approval	CE Mark (403-470 MHz)!	CE Mark †	
ETSI	300.113 (403-470 MHz)!	300.113 †	
Current Drain			
Transmit @ 13.3 VDC	<2.6A		
Receive @ 13.3 VDC	< 220 mA (with a terminal connected to the COM port)		
Frequency Tolerance	0.5 ppm (6.25 kHz) 1.5 ppm	1.0 ppm (6.25 kHz) 2.5 ppm	1.5 ppm
Operating Voltage	10-16 VDC		
Operating Temperature	-30° C to + 60° C		
Dimensions (W x H x D)	4.5" x 2.4" x 4.75" (11.4 cm x 5.6 cm x 12.1 cm)		
Shipping Weight	1.60 lbs. (0.73 kg)		
Operating Mode	Simplex or half-duplex		
Bandwidth without tuning	450-470: 20 MHz all other ranges: 16 MHz	132-150: 18 MHz 150-174: 24 MHz	928-960: 32 MHz

### RECEIVER

Receive Operation	Continuous (no tuning required)
-------------------	---------------------------------

### TRANSMITTER

Tx Attack Time	< 7 msec
RF Output Power	1-5 watts, PC programmable
Duty Cycle	50% @ 5 watts, 30 seconds maximum transmit - extended transmit with cooling fan option
Transmit Operation	Continuous (no tuning required)

† 380-403 MHz frequency band is not FCC or IC type approved. \* 6.25 operation @ 450-470 UHF or 150-174 VHF  
! CE approval is limited to 4800 bps in a 12.5 kHz channel.

### COM AND SETUP PORTS

#### Connectors:DE-9F

##### Pin Description

- 1 DCD: Data Carrier Detect
- 2 RXD: Receive Data
- 3 TXD: Transmit Data
- 4 DTR
- 5 Ground
- 6 DSR
- 7 RTS: Request to Send
- 8 CTS: Clear to Send
- 9 Not Used

### POWER - I/O CONNECTOR:

#### Snap and lock 4-pin

##### Pin Description

- 1 +13.3 VDC (red)
  - 2 Ground (black)
  - 3 Analog In / Digital Out 1 (green)
  - 4 Analog In / Digital Out 2 (white)
- Rx-Tp

### MECHANICAL SPECIFICATIONS:

