## Integra-TR™

SERIAL RADIO MODEM FOR LICENSED SPECTRUM

Cai Amp®

136-162 MHZ | 148-174 MHZ | 406.1-440 MHZ | 440-476 MHZ



The Integra-TR from CalAmp provides advanced features without complicated system setup. Available for UHF and VHF, the Integra-TR offers reliable data communications over an extended range. Virtually real-time data is transferred through this PC programmable, transparent modem with CWID for identification and CSMA to minimize retries and reduce channel interference.

Data-activated transmit (DOX) automatically activates the transmitter in the presence of data without needing an RTS handshake from terminal equipment. The Integra-TR also supports CTS flow control when the terminal rate exceeds the network rate. The Integra-TR also prevents transmission of any extraneous data bits to the terminal device, making it the perfect choice when working with protocols that cannot tolerate extra data bits.

Remote online diagnostics monitor and maintain your communications link. Power, temperature, voltage, signal strength, antenna/feedline condition, and data decode performance are transmitted without application interruption.

# Experience The Advantage

- Up to 19.2 kbps error-free data
- Separate application and setup/diagnostics ports
- 1-5 Watts operation, software selectable
- Diagnostic output supportsOPC-enabled diagnostics feature
- Full application transparency
- Extended temperature range for harsh environments



### General

Frequency Range VHF: 136-162 MHz, 148-174 MHz

UHF: 406.1-440 MHz, 440-476 MHz

Channel Bandwidth 12.5 kHz, 25 kHz Modes of Operation Simplex, Half-Duplex

Modulation DRCMSK Certifications FCC, IC

#### Receiver

BER @ 1x10-6

12.5 kHz -104 dBm @ 4.8 or 9.6 kbps

25 kHz -107 dBm @ 4.8 or 9.6 kbps, -100 dBm @ 19.2 kbps

Adjacent Channel > 65 dB @ 25 kHz; > 55 dB @ 12.5 kHz

FM Hum and Noise < -45 dB max Conducted Spurious < -57 dBm

#### **Transmitter**

Frequency Stability

1.5 ppm

Carrier Output Power Output Impedance 1-5 Watts Adjustable

Output Impedance
Duty Cycle

50% Max, 30 Seconds (extended Tx time with cooling

fan option)

Spurious and Harmonics -20 dBm

#### **Electrical**

 Tx Current
 < 2.6A @ 13.3V</td>

 Rx Current
 < 270mA @ 13.3V</td>

 Primary Power
 10-16 VDC

#### Mechanical/Environmental

Nominal Dimensions

4.50 W x 2.4 H x 4.75" D, (11.4 x 6.1 x 12.1 cm)

Shipping Weight 1.6 lbs, (0.73 kg) Operating Temperature  $-30^{\circ}$  to  $+60^{\circ}$  C

#### **Interfaces**

COM, SETUP Antenna (2) Serial RS-232 DB-9 SMA Female (Tx/Rx)



CalAmp's industrial wireless solutions combine utility-class performance and the proven reliability needed for mission critical communications. Our ruggedized line of licensed, unlicensed, and cellular devices provide narrowband, wideband and broadband data connectivity for fixed and mobile applications.

<u>Air Superiority</u>™





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