

Integra-TR[™]

Serial Radio Modem For Licensed Spectrum

RUGGED CONNECTIVITY FOR REMOTE MONITORING APPLICATIONS

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 supports
 OPC-enabled diagnostics feature
- > Full application transparency
- > Extended temperature range for harsh environments

INTEGRA-TR SPECIFICATIONS

GENERAL

Frequency Range

Channel Bandwidth

Data Bit Rates

6.25 kHz: 12.5 kHz: 25 kHz: Modes of Operation Modulation Certifications

RECEIVER

Sensitivity Alternate Channel 6.25 kHz: Adjacent Channel 12.5 kHz: 25 kHz: Intermodulation Spurious Rejection Conducted Spurious

TRANSMITTER

Frequency Stability	1.5 ppm 12.5 kHz and 25 kHz
	0.5 ppm 12.5 kHz and 6.25 kHz
Carrier Output Power	1-5 Watts adjustable
Output Impedance	50 Ω
Duty Cycle	50% max, 30 seconds (extended Tx time
	with cooling fan option)

-20 dBm

Spurious and Harmonics

VHF: 136-162 MHz, 148-174 MHz UHF: 406.1-440 MHz, 440-476 MHz VHF: 6.25 and 12.5 kHz, or 12.5 and 25 kHz UHF: 6.25 and 12.5 kHz, or 12.5 and 25 kHz

2400/4800 bps 4800/9600 bps 4800/9600/19200 bps Simplex, Half-Duplex DRCMSK FCC, IC

 $0.35 \,\mu\text{V}$ for 12 dB SINAD

>60 dB min

>55 dB min

>65 dB min

>70 dB min

>70 dB min <-57 dBm

ELECTRICAL

Tx Current	< 2.6A @ 13.3V
Rx Current	< 270mA @ 13.3V
Primary Power	10-16 VDC

MECHANICAL/ENVIRONMENTAL

Nominal Dimensions Shipping Weight Operating Temperature 4.50 W x 2.4 H x 4.75" D (11.4 x 6.1x12.1 cm) 1.6 lbs (0.73 kg) -30° to +60° C

INTERFACES

COM, SETUP		
Antenna		
LEDs		

(2) Serial RS-232 DB-9 SMA female (Tx/Rx) 4 bi-color status

About CalAmp

CalAmp (NASDAQ: CAMP) is a proven leader in providing wireless communications solutions to a broad array of vertical market applications and customers. CalAmp's extensive portfolio of intelligent communications devices, robust and scalable cloud service platform, and targeted software applications streamline otherwise complex machine-to-machine (M2M) deployments. These solutions enable customers to optimize their operations by collecting, monitoring and efficiently reporting business-critical data and desired intelligence from high-value remote assets. For more information, please visit www.calamp.com.

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