

# RJModem™

## Embedded Modem



### Benefits

- Complete integrated modem
- RJ-11 form factor
- Global compliance
- Quick-to-market solution

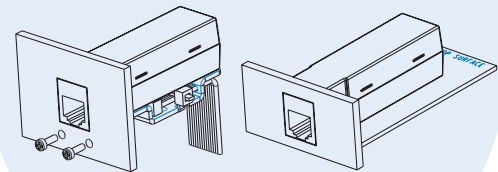
The Multi-Tech RJModem™ embedded modem creates communication-ready devices by integrating modem functionality into the most compact, integrated device. The first-of-its-kind RJ-11 form factor includes the controller, data pump, DAA and RJ-11 connector providing device manufacturers with the ability to integrate dial-up connectivity into any product design. With minimal engineering effort, the RJModem embedded modem instantly adds global communication capabilities, enhancing the end-user experience and increasing product value.

### Features

- Complete data modem including the controller, data pump, DAA and RJ-11 connector
- V.92/56K, V.34/33.6K, V.32bis/14.4K data rate options
- High speed models backward compatible with lower speeds
- Telecom approved in more than 50 countries (some pending)
- V.44 and V.42bis data compression
- V.42 error correction
- Intelligent DAA technology detects line status
- AT command compatible
- U.S. Caller ID reporting
- Low power/sleep mode
- FastPOS (V.29) and V.22bis Fast Connect
- V.80 Synchronous Access
- 10 or 11-bit modes
- 3.3V or 5V power input options
- Board mount or remote panel mounting
- Two-year warranty

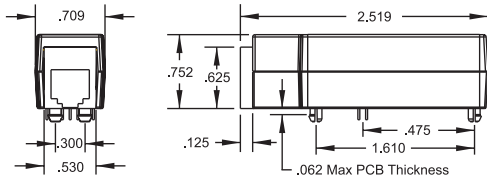
Remote Panel Mount  
(using MTRJ-RMK)

Board Mount



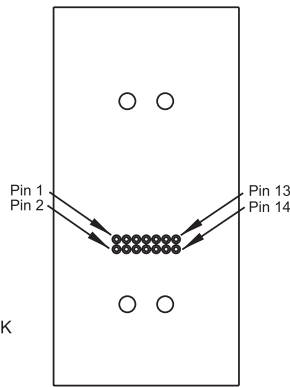
## Highlights

**Integration Provides Quickest Time-to-Market.** The RJModem embedded modem offers the highest level of integration and the quickest time-to-market for embedded modem connectivity. In the space slightly greater than one that is normally consumed by a connector, the RJModem embedded modem integrates the controller, data pump, DAA and RJ-11 connector. This complete, ready-to-deploy modem instantly allows you to enhance your product while you focus on developing its core features.



**RJModem Pin-out.** The RJModem embedded modem interfaces easily with devices through a standard serial communication channel. The serial DTE channel is capable of transfer speeds to 230.4K bps and can be interfaced directly to a UART or microcontroller. The RJ-11 jack provides a direct connection to the public switched telephone network.

Pin 1 = Ring  
 Pin 2 = CD  
 Pin 3 = DTR  
 Pin 4 = Reset  
 Pin 5 = VCC In  
 Pin 6 = CTS  
 Pin 7 = RTS  
 Pin 8 = TDCLK  
 Pin 9 = TXD  
 Pin 10 = RXD  
 Pin 11 = External CLK  
 Pin 12 = GND  
 Pin 13 = Speaker  
 Pin 14 = RDCLK



**Global Compliance.** The RJModem embedded modem is in the process of international compliance testing (homologation) for global approval. This means one module can be specified per design without having to integrate specific country approved modules for each system used across the world. Contact your Multi-Tech sales representative for a current list of approvals.

**Developer's Kit.** The Developer's Kit provides the ability to plug in the modem and use it for testing, programming and evaluation. The kit includes one development board with RS-232 DB-25 connector, universal power supply, connector for attaching the RJModem embedded modem, RS-232 cable and Developer guide CD.

## Specifications

### Modem

ITU-T V.92/V.90/56K, V.34/33.6K, V.32bis/14.4K, V.22, V.23, & V.21; Bell 212A & Bell 103  
 V.42 LAPM, MNP 2-4 Error Correction  
 V.44, V.42bis & MNP Class 5 data compression

### Power Requirements

Typical: 66mA (.33W @5VDC)  
 Maximum: 75mA (.39W @ 5.25VDC)  
 Typical: 95mA (.31W @ 3.3VDC)  
 Maximum: 105mA (.38W @ 3.6VDC)

### Physical Description

.709" w x 2.519" h x .752" d; .64 oz.  
 (1.8 cm x 6.4 cm x 1.92 cm; 0.02 Kg)

### Operating Environment

Temperature Range: 0° to +70° C

### Certifications

UL 60950-1, IEC60950-1, ACA TS001/AS3260, CCC  
 EMC: FCC CFR47 Part 15 (Class B); ICES-003 Canada (Class B); EN 55022 (Class B), EN 55024

## Ordering Information

Product	Description	Region
MT5656RJ-92	V.92 Serial Data Only	Global
MT5656RJ-34	V.34 Serial Data Only	Global
MT5656RJ-32	V.32bis Serial Data Only	Global
MT5656RJ-L-92	V.92 Serial Data Only	Global
MT5656RJ-L-34	V.34 Serial Data Only	Global
MT5656RJ-L-32	V.32bis Serial Data Only	Global
MTSMI-IDK	ISDN + RJModem Developer Kit	Global
MTRJ-RMK	Panel Mounting Kit for RJModem	Global
Ordering Codes	Description	
92	V.92/56K Data Rate	
34	V.34/33.6K Data Rate	
32	V.32bis/14.4K Data Rate	
L	3.3V Power Input (default is 5V)	

Made in Mounds View, MN, U.S.A.

**Trademarks & Registered Trademarks:** RJModem, Multi-Tech, and the Multi-Tech logo: Multi-Tech Systems, Inc. / All other products and technologies are the trademarks or registered trademarks of their respective holders.

**World Headquarters**  
 Tel: (763) 785-3500  
 (800) 328-9717  
[www.multitech.com](http://www.multitech.com)

**EMEA Headquarters**  
 Multi-Tech Systems (EMEA)  
 United Kingdom  
 Tel: +(44) 118-959 7774

Multi-Tech Systems (EMEA)  
 France  
 Tel: +(33) 1 64 61 09 81

