

LPM Low Power Transceiver Module



The Qual-Tron LPM, Low Power Module, is an RF data modem designed to make it easy for users to send data over-the-air, to and from remote units. The LPM consumes very little power when receiving, and only microamperes while in sleep mode. The LPM is an ideal solution for remote units that require battery power. Users can provide their own (low noise) power supply of at least 6.5 VDC, or the LPM can also be purchased with our robust power supply.

The LPM defaults to ASCII text mode, which allows the user to send and receive messages with the use of any terminal program.

The LPM also has the option of a pure binary mode, which allows the user to send binary messages, with half the overhead of ASCII.

Applications:

- Security
- Sensor reporting
- Telemetry
- Remote Control

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Features

- Frequency Ranges:
- 138-154 MHz
 640 channels
 25 kHz step
- 154-158.3 MHz 860 channels 5 kHz step
- 164-174 MHz
 1600 channels
 6.25 kHz step
- Small Form Factor 2.1"x1.3"x0.5" Weighs only 0.78 oz
- RS-485 interface
- Message relay/repeat capability
- Very low power consumption Receive: 3.2mA typ Sleep: < 10uA typ
- PCB mountable
- Extended Temperature Range with built in temperature sensing
- Messages can be sent using ASCII or binary.

	Specifications	
Serial Data		
Baud rate Parity Data bits Stop bits	38.4k None 8 1	
Flow Control	None	
Power		
Input Voltage Receive Current Transmit Current Sleep Current Power Consumption	6-12 VDC <3.2mA @ 9V <1A @ 9V, 700mA typical <80uA @ 9V, 10uA typical <30mW @ 9V Receiver ON	
Environmental		
Operating temperature Storage temperature	-40 to +65 C -50 to +70 C	
Radio Frequency		
Frequency	138-154, 154-158.3, 164-174 MHz	Ŧ
Transmitter Power Receiver Sensitivity RF Data Rate	1.3 W typical -117dB typical 2.4 kbps	
Agency Approvals	2.1.1000	
FCC	pending	8
	TEC TFM-105-02-L-P-D	
Pin 1,2	Vin [Input] 6.0-12 VDC 1.5A Peak Transmit Enable [Output] Active	2.082
Pin 3	Low	
Pin 4	RS485 Data [A]	
Pin 5	RS485 Data [B]	
Pin 6	NC	
Pin 7	NC	
Pin 8	NC	
Pin 9, 10	GND	-1800
RF Connector		
50 ohm	MMCX	
Mechanical Dimensions		
L, W, H	2.082"x1.281"x0.49"	
Standoff Tabs	0.175" long, 0.075" standoff	





CONDETECTOR

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