

## Low Power Transceiver Module + Power Supply

## 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"x0.8" Weighs only 1.59 oz
- RS-485 interface
- Message relay/repeat capability
- Very low power consumption Receive: 10.3mA typ Sleep: < 10uA typ</li>
- PCB mountable
- Extended Temperature Range with built in temperature sensing
- Messages can be sent using ASCII or binary.
- Robust power supply that greatly increases battery life for remote applications, and built in current limiting for USB.

The Qual-Tron LPM+, Low Power Module plus power supply, 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. The included robust power supply, adds enhanced battery operation that allows the user to power the LPM+ with 4.5 VDC up to 16.5 VDC, with built-in current limiting for USB.

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:

LPM+

- Security
- Sensor reporting
- Telemetry
- Remote Control

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	Specifications
Serial Data	
Baud rate Parity Data bits Stop bits Flow Control	38.4k None 8 1 None
Power	
Input Voltage Receive Current Transmit Current Sleep Current Power Consumption	4.5-16.5 VDC w/ current protection for USB <4.4mA @ 9V <500mA <80uA @ 9V <40mW @ 9V Receiver ON
Environmental	
Operating temperature Storage temperature	-40 to +65 C -50 to +70 C
Radio Frequency	
Frequency Transmitter Power Receiver Sensitivity RF Data Rate	138-154, 154-158.3, 164-174 MHz 1.3 W typical -117 dB typical 2.4 kbps
Agency Approvals	
FCC	pending
I/O Connector - SAMTEC TFM-105-02-L-P-D	
Pin 1,2 Pin 3 Pin 4 Pin 5 Pin 6 Pin 7 Pin 8 Pin 9, 10 <b>RF Connector</b>	Vin [Input] 4.5-16.5 VDC 1.5A Peak Transmit Enable [Output] Active Low RS485 Data [A] RS485 Data [B] NC NC NC GND
50 ohm	MMCX
Mechanical Dimensions	-
L, W, H	2.1"x1.3"x0.8"
Standoff Tabs	0.175" long, 0.075" standoff







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