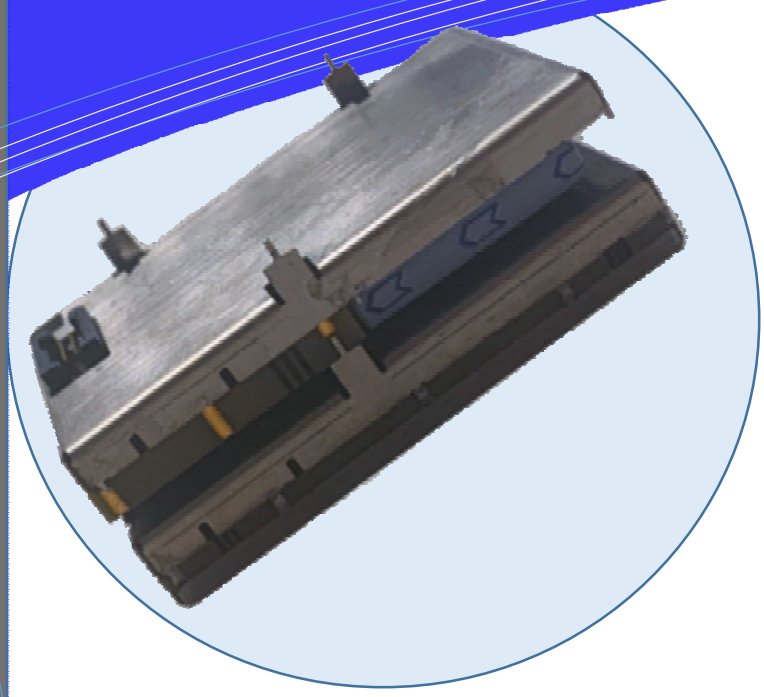
LPM+

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
- 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.

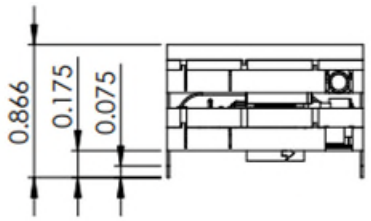
Applications:

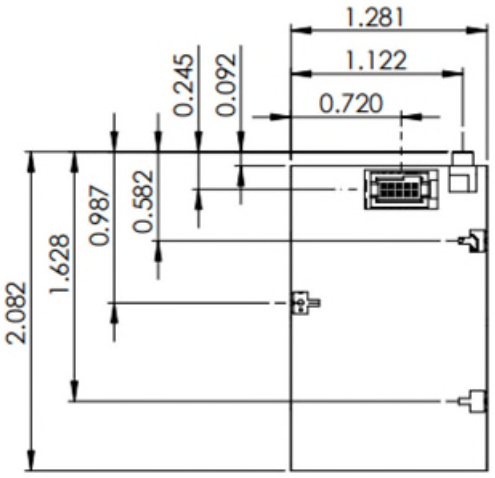
- Security
- Sensor reporting
- Telemetry
- Remote Control

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Specifications

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