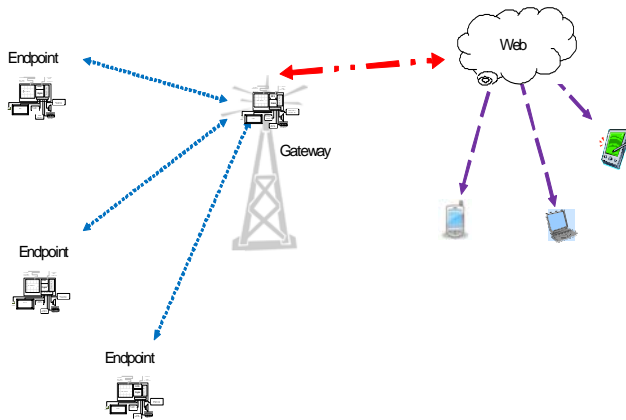
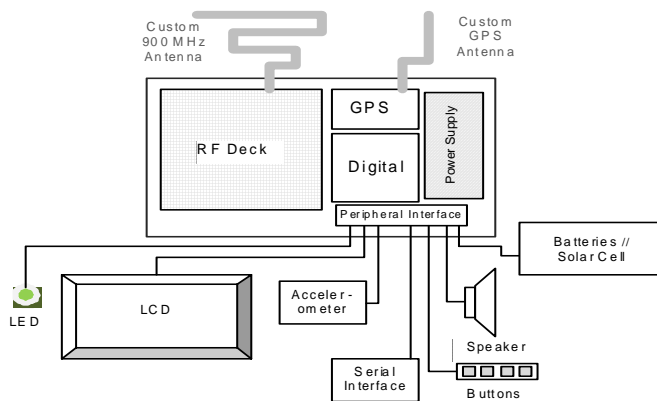


# MLink Wireless Networking Endpoint Module

## *The Future of Wireless Telemetry*



**MLink** is an ultra energy and cost efficient, long range wireless network. Available as a module, development platform or a fully customized product. Perfect for a wide range of applications, this highly versatile platform enables rapid design, development, and deployment of your next generation products.



**Ultra Low Energy:** Up to **10 years** from AA batteries or sunshine powered

**Impressive Range:** Up to **10 km** using high efficiency integral antennas.

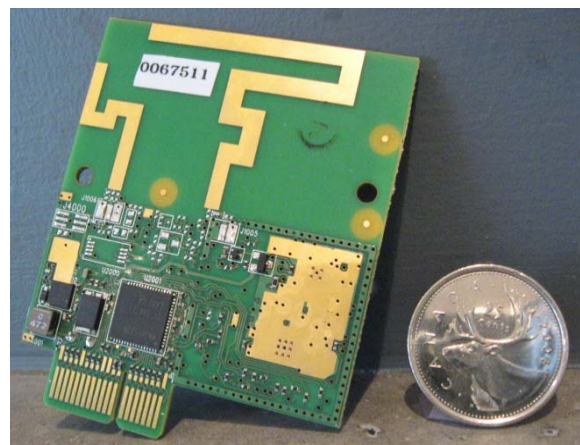
**Design Flexibility:** Communicate through a comprehensive host interface or imbed your custom application.

**Small Size:** Best in class performance in an extremely compact footprint.

**Integrated GPS optional**

**Support for a variety of peripherals:** Displays, accelerometers  
Industrial sensors, audio alerts

**Intrinsically safe** options available.



# MLink Wireless Networking Endpoint Module

## Specification Summary

### Performance

- Sensitivity Typically -121 dBm (1.2 kbps at  $10^{-3}$  BER)
- Output Power Dynamically adapted from +9 to +29 dBm
- Data Rate Dynamically adapted from 1.2 – 76.8 kbps
- Frequency Range 902 – 928 MHz (US/Can)  
915 – 928 MHz (AU/NZ)  
863 – 868 MHz (Europe)
- Supply Voltage 2.3 to 3.5 Vdc
- Energy Consumption (typical @ 38.4 kbps)
  - Tx/Rx <20 mJ /0.5 mJ
  - GPS update <150 mJ (typical)
  - Active standby <50 uW

### Size

- Size (incl. antennae) 56 x 64 x 15 mm

### Interfaces

- Antennae
  - Internal antennae (standard)
  - External Yagi + active GPS (optional)
- Digital/Base Band (customizable)
  - ADC, PWM, GPIO, I2C, SPI, UART

### Firmware

- Real Time Operating System
- Embedded, autonomous, energy efficient protocol
- Memory reserved for custom applications

### Environmental

- Operating Temperature -50 to +65 C
- Storage Temperature -50 to +65 C
- Operating Relative Humidity 0 to 90% non-condensing

### Regulatory

- Emissions: FCC, IC (modular grant)  
ACMA, RCM (Australia/ NZ)  
ETSI (anticipated)
- Intrinsic Safety: UL (semi-custom)

### Design Support

Aurora Wireless Networks provides ultra energy efficient, cost effective, long range radio solutions. Clients in a variety of industries can benefit from MLink's flexibility to interface with a multitude of different sensors while covering the distance. Aurora Wireless Network's experienced team can provide customization of MLink to your specific requirements.

### About Aurora Wireless Networks

Aurora Wireless Networks helps clients develop and deploy the most energy efficient, long range, license free, wireless data networks on the planet. Whether part of the Internet of Things revolution or Industrial Telemetry, we offer the hardware and software building blocks, technical expertise, and support necessary to rapidly turn your ideas into reliable, cost effective, products.

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