

ETRX-UMI

Advanced ZigBee UMI Module



Telegesis, the leading manufacturer of ZigBee modules announce another product first. The ETRX-UMI is the first ZigBee module on the market conforming to the new UMI standard.

UMI (Universal Metering Interface) is a new, low power hardware interface standard developed by Cambridge Consultants to simplify and ease the design of Smart meters.

UMI is primarily aimed at smart metering applications such as:

- Meters (Electricity, Gas, Water, and Heat)
- Energy Displays
- Gateway Devices.



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How does UMI work?

The UMI standard separates meter metrology and communication functions into separate modules with a wired connection between them. This separation is valuable as metrology standards such as MID in Europe are stable and Meter OEMs can be faced with the need to provide a selection of communications standards.

Meter OEMs can now develop 'Smart-Ready' approved meters by including one or more UMI Ports and when ZigBee support is required the Telegesis ETRX-UMI communication module can be fitted to the meter or alternatively a Gateway or In Home Display.

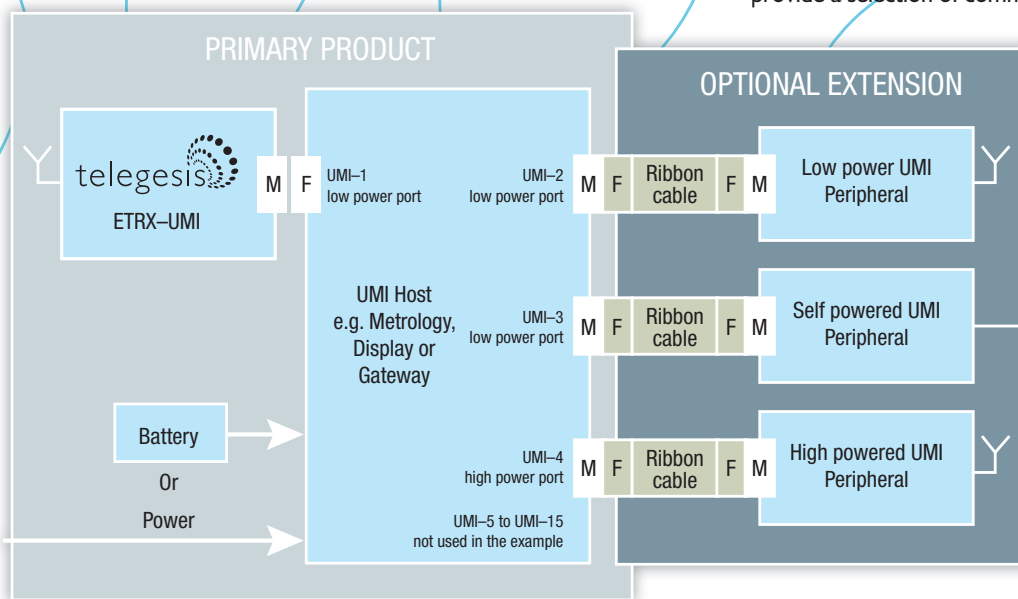
UMI uses a star network topology similar to USB but with much lower power consumption and in some ways UMI can be compared to a rugged version of the SD card interface. Telegesis have over four years of experience and dedication to ZigBee have taken the latest evolution of their ZigBee Module technology the ETRX3 series and applied it to the design of the ETRX-UMI module.

The ETRX3 series is the 3rd generation of advanced ZigBee module from Telegesis and first module family to feature the latest ARM® Cortex M-3 SOCs from Ember Corp. The EM357 used in the ETRX-UMI has a many advanced features and utilises an efficient architecture that exceeds the dynamic range requirements imposed by the IEEE 802.15.4-2003 standard by over 15 dB.

The integrated receive channel filtering allows for robust coexistence with other communication standards in the 2.4 GHz spectrum, such as IEEE 802.11 and Bluetooth.

OEMs designing Meters, In Home Displays, and other products requiring ZigBee that include the UMI interface do not have to develop their own ZigBee modules. They are now able to design their products as UMI Hosts and fit the high performance ETRX-UMI ZigBee module as required, significantly reducing development cost, risk, and time.

The ETRX-UMI is available now from Telegesis. For further information please see www.telegesis.com



ETRX-UMI ZigBee Technology

32 bit ARM Cortex M3 (@1.2V)

ZigBee SOC EM357

192k of Flash, 12k of RAM

108dB link Budget

Dimensions 50 mm x 40 mm

Improved Hardware MAC Acceleration

JTAG Interface for Programming and Debugging

Chip Antenna

