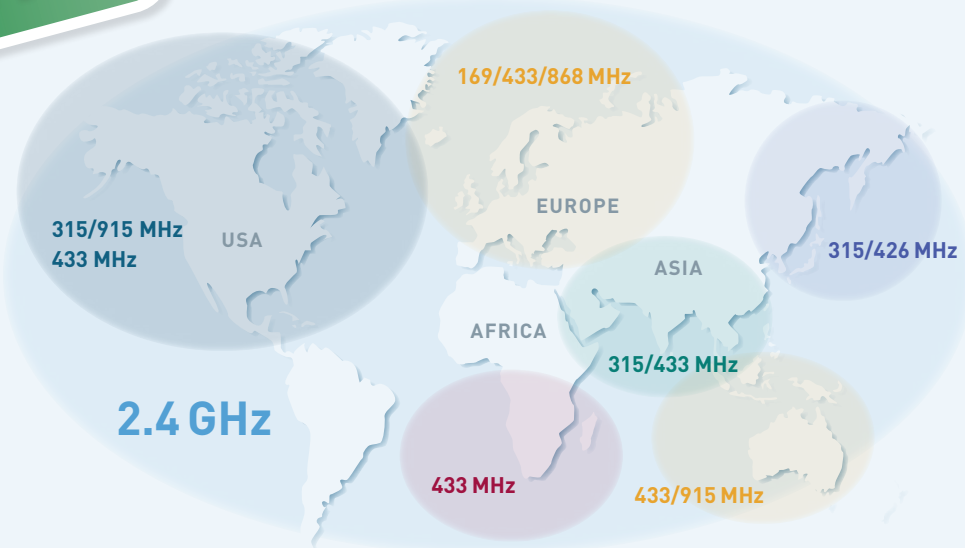


**NEW!**

## Short Range Products



### The product line is based on family concepts: TinyOne®, ME, LE and ZigBee®

**TinyOne® family**, consisting of TinyOne® Lite, TinyOne® Plus and TinyOne® Pro products pin-to-pin compatible dedicated to wireless applications operating in the ISM band (868 and 915 MHz), thus providing efficient power consumption management, low-data rates, and long distance.

TinyOne® Lite, TinyOne® Plus and TinyOne® Pro are delivered with proprietary Star Network Stack and proprietary Low Power Mesh Stack. Telit's stack is fully configurable and upgradeable over-the-air from a point-to-point communication to a star communication with listen before talk and allows mesh networking with efficient power consumption management. The efficient power management process enables multi-year battery powered operation, simple installation, and auto association including self healing and auto-repair functionalities as well as mobility functions.

**ME Family** is the latest generation of Wireless M-Bus products compliant with EN13757 part 4 and part 5 Wireless M-Bus standard optimized for one- or two-way data exchange with gas, water, heat and electricity meters and concentrators.

**LE Family** is the best solution for ultra low power and low latency time applications that require point-to-point or multipoint (broadcast) network communication operating in ISM band (868MHz and 433MHz). Simple plug and play protocol Star Network Stack for RF communication is ideal to replace applications with communication over cable.

**NE Family** is based on Telit proprietary protocol Low Power Mesh concept with the cluster-tree network structure

**ZigBee® ZE family** offers an extremely compact form factor with complete pin-to-pin alignment. The family consists of low-power digital radios based on the IEEE 802.15.4 standard at 2.4 GHz for wireless networks and uses a standard communication protocol dedicated to a range of markets and applications such as home automation and control, building automation, advanced metering, and telecom applications.

The ZigBee® ZE family OEM modules are based on the same concept while providing a small SMD component for optimized integration ranging from 1mW up to 100mW. The modules are offered with or without an embedded antenna and are available with the proven world-class in-house ZigBee® PRO stack. Moreover ME, LE, NE and ZE family are fully pin-to-pin compatible.

### Telit designs wireless data transmission solutions for machine-to-machine applications.

Telit's product portfolio offers a wide range of innovative and reliable RF solutions ranging from ready-to-use wireless radio modems to OEM RF modules and RF design services.

Solutions from Telit operate in the license-free worldwide ISM frequency bands of 433 MHz, 868 MHz, 915 MHz, and 2.4 GHz and are available in both standardized and proprietary low-power, low-data rate RF technologies for the m2m/industrial markets.

The long-term experience and extensive expertise in cost-effective state-of-the-art radio solutions allow a significant reduction in TCO (total cost of ownership) and time-to-market. Additionally, having full IP stack ownership and a multi-chip vendor approach ensure continuity of supply and highly reliable products.

#### 433 MHz band

- Frequency: 433.05 – 434.79 MHz
- Application: Europe, Australia, South Africa, Asia
- Standard: ETSI 300-220
- Power: up to 25 mW
- Duty cycle: 10% to 100%
- Family: LE

#### 868 MHz band

- Frequency: 868.00 – 870.00 MHz
- Application: Europe
- Standard: ETSI 300-220
- Power: 5 to 500 mW (Depending on sub-band)
- Duty cycle: 0.1 to 100% (Depending on sub-band)
- Families:
  - TinyOne® Lite/Plus/Pro
  - PowerOne™
  - ME, LE, NE

#### 915 MHz band

- Frequency: 902.00 – 928.00 MHz
- Application: U.S., Canada, Australia
- Standard: FCC 15.247
- Power: 1 W with possibility to have 6dB gain antenna
- Duty cycle: Frequency Hopping Spread Spectrum, 400 ms allowed per channel, hop on 50 channels min
- Families: TinyOne® Pro

#### 2.4 GHz band

- Frequency: 2400 – 2483.5 MHz
- Application: Worldwide
- Standard: IEEE 802.15.4
- Power: 2.5 mW to 100 mW
- Duty cycle: N/A
- Families:
  - ZE51-2.4 / ZE61-2.4 (ZigBee® compliant)



## Short Range to GSM | GPRS Gateways

## License-Free System for Frequencies <1 GHz

### Terminal

#### Short Range to GSM | GPRS Gateways

Terminal



GG863-SR

Gateway

ARM9	ARM9 220 MIPS Embedded
4G	Quad Band GPRS
📶	GPRS Class 10
🌿	RoHS Compliant
📀	Linux
📡	Embedded FTP and SMTP Client
🌡️	Extended Temperature Range
📶	Extended RF Sensitivity
IMS band	SR to GSM/GPRS Gateways
🌐	Embedded TCP/IP Stack

Telit GG863-SR is an all-in-one gateway terminal that brings together the GSM/GPRS and short-range technology, hosting programmable GE863-PRO<sup>3</sup> and any of the short-range modules from Telit's wide product offer in a unique cost-saving, fully customized solution. Thanks to the possibility of choosing among different ISM bands (433MHz, 868MHz, 915MHz and 2.4GHz), protocol stacks (ZigBee, Wireless M-Bus or proprietary), network topologies (Star, Mesh, Cluster tree) and coverage (from 70m to 4km), time to market and total cost of the final application are significantly reduced. The behavior of the gateway can be customized through the embedded Linux complete development environment and dedicated libraries for GSM and short range, thus simplifying integration in a final application.

### Terminal

#### License-Free System for Frequencies <1 GHz

Terminal



TinyOne<sup>®</sup> Plus 868 MHz

38.4 Kbps - 25 mW

ETSI	ETSI Certified Device
WEEE	RoHS and WEEE Compliant
📱	Embedded S-One or M-One Stack
💡	Low Power Mode
🔌	RS232, RS422 and RS485 Serial Interfaces
🔄	DOTA - Upgradeable and Configurable Over-the-Air
🌐	Network Compatibility TinyOne <sup>™</sup> Plus with -Pro
IP67	IP67 Casing
🔌	Standby: 70µA
📶	Complete Terminal with 6-40V Power Supply

The TinyOne<sup>®</sup> Plus IP67 terminal is compliant with European Directive 1999/05/EC requirements, low-cost RF solution in the license-free 868 MHz ISM band for harsh environments and weather conditions. The terminal includes a 25 mW multi-channel radio module with advanced proprietary embedded standard firmware (S-One) or mesh networking (M-One), and a reinforced hard metal casing with removable quarter antenna. With a power supply range of 6-40 V, supporting RS232/RS485/RS422 serial interfaces and an efficient low-power mode, this terminal is optimal for outdoor applications such as telemetry, irrigation, urban traffic control, or urban display control and is capable of transmitting data up to 1,500 m. TinyOne<sup>®</sup> Plus is compatible with the extended 500 mW TinyOne<sup>®</sup> Pro, for backbone network topology and is upgradeable over-the-air.

#### License-Free System for Frequencies <1 GHz

Terminal



TinyOne<sup>®</sup> Pro 868 MHz

38.4 Kbps - 500 mW

ETSI	ETSI Certified Device
WEEE	RoHS and WEEE Compliant
📱	Embedded S-One or M-One Stack
💡	Low Power Mode
🔌	RS232, RS422 and RS485 Serial Interfaces
🔄	DOTA - Upgradeable and Configurable Over-the-Air
🌐	Network Compatibility TinyOne Pro with -Plus
IP67	IP67 Casing
🔌	Standby: 70µA
📶	Complete Terminal with 6-40V Power Supply

The TinyOne<sup>®</sup> Pro IP67 terminal is compliant with European Directive 1999/05/EC requirements, low-cost RF and long-range solution in the license-free 868 MHz ISM band for harsh environments and weather conditions. The terminal is the 500 mW extension of the TinyOne<sup>®</sup> Plus 25 mW and is multi-channel capable of transmitting data up to 4,000 m. With a power supply range of 6-40 V, supporting RS232/RS485/RS422 serial interfaces, advanced proprietary embedded standard firmware (S-One) or mesh low-power networking (M-One), and a reinforced hard metal casing with removable quarter antenna, this terminal is optimal for long-range outdoor applications such as remote monitoring for the water, petroleum, and gas industries, traffic lights, and irrigation. TinyOne<sup>®</sup> Pro is compatible with the TinyOne<sup>®</sup> Plus backbone network topology and is upgradeable over-the-air.

#### License-Free System for Frequencies <1 GHz

Terminal



PowerOne<sup>™</sup> 868 MHz

9.6 Kbps - 500 mW

ETSI	ETSI Certified Device
WEEE	RoHS and WEEE Compliant
📱	Embedded S-One Stack + Multi, Protocol Modes
📶	High Performance for Long-Range Applications
🔌	RS232, RS422 and RS485 Serial Interfaces
🔄	Mod-, Profi-, JBus and Unitelway Compatible
I/Os	Deported Analog and Digital I/Os
IP67	IP65 or IP67 Casing for Harsh Environments
📶	Complete Terminal with 6-40V Power Supply

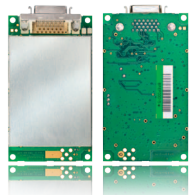
PowerOne<sup>™</sup> 868 MHz terminals are compliant with European Directive 1999/05/EC requirements RF solution for long-range reliable wireless data transmission. With a line-of-sight range of 16,000 m and featuring the powerful S-One embedded firmware, these 500 mW terminals bring high efficiency to wireless applications such as rural and urban telemetry, GPS data transmission for localization & fleet management, urban display monitoring, weather stations control and industrial control and are compatible with Profi-Bus, ModBus, and Unitelway protocols. PowerOne<sup>™</sup> terminals are available in a metallic IP65 or IP67 casing, with fixed or removable quarter antenna, with a power supply range of 6-40 V, support RS232/RS485/RS422 serial interfaces, and provide integrated or external I/O copy management.

## License-Free System for Frequencies <1 GHz

### Compact

#### License-Free System for Frequencies <1 GHz

Compact



PowerOne<sup>™</sup> 868 MHz RF modules

9.6 Kbps - 500 mW

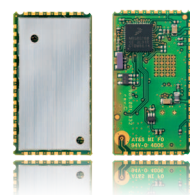
ETSI	ETSI Compliant
WEEE	RoHS and WEEE Compliant
📱	Embedded S-One Stack + Multi, Protocol Modes
📶	High Performance for Long-Range Applications
🔌	RS232, RS422 and RS485 Serial Interfaces
🔄	Mod-, Profi-, JBus and Unitelway Compatible
I/Os	Deported Analog and Digital I/Os

PowerOne<sup>™</sup> OEM RF modules, working in the license-free 868 MHz ISM band are high power radio solutions for long-range applications. Due to high RF performance and the powerful S-One embedded firmware, the modules are perfectly suited for long distance data transmission systems. These RF modules include RS232/RS485/RS422 serial interfaces and are ModBus, ProfiBus, JBus, and Unitelway compatible. The modules can be easily integrated into an application, thus reducing valuable development time and costs for industrial applications, I/O management, GPS data transmission for localization & fleet management, and urban display monitoring.

### Embedded

#### License-Free System for Frequencies <1 GHz

Embedded



TinyOne<sup>®</sup> Plus 868 MHz RF modules

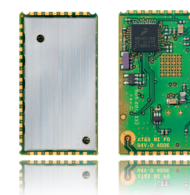
38.4 Kbps - 25 mW

WEEE	RoHS and WEEE Compliant
📱	Embedded S-One or M-One Stack
💡	Ultra Low Power Consumption + Std-by Mode
🔄	DOTA - Upgradeable and Configurable Over-the-Air
🌐	Network Compatibility TinyOne <sup>™</sup> Plus with -Pro
SMD	SMD Component
🔌	TTL RS232 Interface + Digital and Analog I/Os
TTTT	2.54 mm DIP Adapter Available
🛡️	SAW Filter   Best-in-Class Interference Immunity

TinyOne<sup>®</sup> Plus OEM RF modules are based on Telit's TinyOne<sup>®</sup> concept in the license-free 868 MHz ISM band. This 25 mW multi-band multi-channel radio module with advanced proprietary embedded S-One or M-One stack can be easily integrated, thus reducing development time and cost for applications in building automation, metering (water, gas, electric), irrigation, tracking, and access control. TinyOne<sup>®</sup> Plus is designed to be used with a battery and is compatible with the extended 500 mW TinyOne<sup>®</sup> Pro backbone network topology and is upgradeable over-the-air.

#### License-Free System for Frequencies <1 GHz

Embedded



TinyOne<sup>®</sup> Pro 868 MHz RF modules

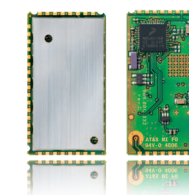
38.4 Kbps - 500 mW

ETSI	ETSI Compliant
WEEE	RoHS and WEEE Compliant
📱	Embedded S-One or M-One Stack
💡	Ultra Low Power Consumption + Std-by Mode
📶	500mW for Long Range Applications
🔄	DOTA - Upgradeable and Configurable Over-the-Air
SMD	SMD Component
🔌	TTL RS232 Interface + Digital and Analog I/Os
TTTT	2.54 mm DIP Adapter Available
🛡️	SAW Filter   Best-in-Class Interference Immunity

TinyOne<sup>®</sup> Pro OEM RF modules, based on Telit's TinyOne<sup>®</sup> concept, are optimized for long-range solutions in the license-free ISM band of 868 MHz and operate at a temperature range of -40°C to +85°C. These pre-certified SMD RF modules provide a TTL RS232 interface, integrated digital and analog I/O's, and advanced embedded proprietary S-One and M-One stacks. The modules are easily integrated into applications such as energy monitoring (windmills and solar panels), weather stations, irrigation, and watering, thus reducing development time and cost while providing highly reliable communications.

#### License-Free System for Frequencies <1 GHz

Embedded



TinyOne<sup>®</sup> Pro 915 MHz RF modules

38.4 Kbps - 500 mW

WEEE	RoHS and WEEE Compliant
📱	Embedded S-One Stack + Multi, Protocol Modes
💡	Ultra Low Power Consumption + Std-by Mode
📶	500mW for Long Range Applications
🔄	DOTA - Upgradeable and Configurable Over-the-Air
SMD	SMD Component
🔌	TTL RS232 Interface + Digital and Analog I/Os
TTTT	2.54 mm DIP Adapter Available
FCC	FCC Compliant Edit
🛡️	SAW Filter   Best-in-Class Interference Immunity

TinyOne<sup>®</sup> Pro OEM RF modules, based on Telit's TinyOne<sup>®</sup> concept, are optimized for long-range solutions in the license-free ISM band of 915 MHz and operate at a temperature range of -40°C to +85°C. These pre-certified SMD RF modules provide a TTL RS232 interface, integrated digital and analogical I/O's, and advanced embedded proprietary S-One and M-One stacks. The modules are easily integrated into applications such as energy monitoring (windmills and solar panels), weather stations, irrigation, and watering, thus reducing development time and cost while providing highly reliable communications.

License-Free System  
for Frequencies <1 GHz

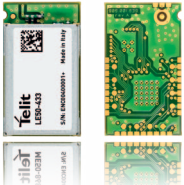
Embedded

License-Free System  
for Frequencies <1 GHz

Embedded

LE50 - 433  
RF modules

100 Kbps - 25 mW



- WEEE RoHS and WEEE Compliant
- Ultra Low Power Consumption+Std-by Mode
- DOTA - Upgradeable and Configurable Over-the-Air
- Available LGA Format
- TTL RS232 Interface + Digital and Analog I/Os
- 2.54 mm DIP Adapter Available
- Embedded In-House Star Network Stack

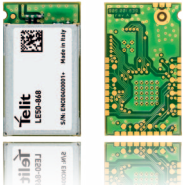
Telit LE50-433 modules are the latest generation of multi-band multi-channel radio module with advanced proprietary embedded stack easy to integrate and use in point-to-point or star network communication. LE50-433 modules operate in 433 MHz band with ultra-low power stand by mode, efficient wake up on radio and budget link of 123 dB (119 dB for EU). Available in LGA format, these pre-certified RF modules provide TTL RS232 interface, integrated digital and analog I/Os and can be integrated into a system, thus reducing development time and cost for applications in building automation, irrigation, tracking, lightning and access control. LE50-433 is also pin-to-pin compatible with other modules form Telit LE Family (LE50-868), ZE Family (ZigBee 2007 and PRO stack), NE Family (Mesh low power) and ME Family (Wireless M-Bus).

License-Free System  
for Frequencies <1 GHz

Embedded

LE50 - 868  
RF modules

115.2 Kbps - 25 mW



- WEEE RoHS and WEEE Compliant
- Ultra Low Power Consumption+Std-by Mode
- DOTA - Upgradeable and Configurable Over-the-Air
- Available LGA Format
- TTL RS232 Interface + Digital and Analog I/Os
- 2.54 mm DIP Adapter Available
- Embedded In-House Star Network Stack

Telit LE50-868 modules are the latest generation of multi-band multi-channel radio module with advanced proprietary embedded stack easy to integrate and use in point-to-point or star network communication. LE50-868 modules operate in 868 MHz band with ultra-low power stand by mode, efficient cyclic-wake up, budget link of 123 dB and dedicated telemetry mode. Available in LGA format, these pre-certified RF modules provide TTL RS232 interface, integrated digital and analog I/Os and can be integrated into a system, thus reducing development time and cost for applications in building automation, irrigation, tracking, lightning and access control. LE50-868 is also pin-to-pin compatible with Telit ZE Family (ZigBee 2007 and PRO stack), ME Family (Wireless M-Bus) and NE Family (Mesh low power).

License-Free System  
for Frequencies <1 GHz

Embedded

NE50 - 868  
RF modules

38.4 Kbps - 25 mW



- WEEE RoHS and WEEE Compliant
- Available LGA Format
- Embedded Low Power Mesh Stack
- Ultra Low Power Consumption+Std-by Mode
- Integrated Digital TTL I/Os and Analog Inputs
- DOTA - Upgradeable and Configurable Over-the-Air

Telit NE50-868 RF modules are based on Mesh network concept in the license-free 868 MHz ISM band. With adjustable output power from 5 mW to 25 mW NE50-868 modules can reach up to 1500 m in LOS. Advanced proprietary embedded low power mesh stack allows efficient power management on both end nodes and routers, network latency defined on the system requirements by setting different synchronous network time, data rate or message format, connecting up to 100 end nodes per router in a cluster tree architecture that enables scalability. Low power mesh stack is designed for battery powered sensor networks that can be built automatically making it easily to integrated, thus reducing development time and cost for applications in building automation, metering (water, gas, electric), irrigation, tracking, lightning and access control. Telit NE50-868 is pin to pin compatible with ZE Family (Zigbee), ME Family (Wireless M-Bus) and LE Family (Telit Star Network), while future 915 and 433 MHz version are planned.

License-Free System  
for Frequencies <1 GHz

Embedded

License-Free System  
for Frequencies <1 GHz

Wireless M-Bus EN13757

Embedded

ME50 - 169  
RF modules

38.4 Kbps - 25 mW



- WEEE RoHS and WEEE Compliant
- Ultra Low Power Consumption+Std-by Mode
- DOTA - Upgradeable and Configurable Over-the-Air
- Available LGA Format
- TTL RS232 Interface + Digital and Analog I/Os
- 2.54 mm DIP Adapter Available
- High Performance for Long-Range Applications
- M-Bus Compatible

Telit ME50-169 modules are the latest generation of Wireless M-Bus products compliant with EN13757 part 4 Wireless M-Bus standard optimized for one- or two-way data exchange with gas, water, heat and electricity meters and concentrators. ME50-169 modules operate in 169MHz band with ultra-low-power for maximum battery life and have a 134 dB budget link, suited for long range applications. Available in LGA format, these pre-certified RF modules provide a TTL RS232 interface, integrated digital and analog I/Os and can easily be integrated into a system, thus reducing development time and cost. ME50-169 is also pin-to-pin compatible with ME50-868 (Wireless M-Bus 868MHz), Telit ZE Family (ZigBee 2007 and PRO stack), NE Family (Mesh low power) and LE Family (basic point to point, broadcast stack).

License-Free System  
for Frequencies <1 GHz

Wireless M-Bus EN13757

Embedded

ME50 - 868  
RF modules

100 Kcps - 25 mW



- WEEE RoHS and WEEE Compliant
- Ultra Low Power Consumption+Std-by Mode
- DOTA - Upgradeable and Configurable Over-the-Air
- Available LGA Format
- TTL RS232 Interface + Digital and Analog I/Os
- 2.54 mm DIP Adapter Available
- M-Bus Compatible

Telit ME50-868 modules are the latest generation of Wireless M-Bus products compliant with EN13757 part 4 and part 5 Wireless M-Bus standard optimized for one- or two-way data exchange with gas, water, heat and electricity meters and concentrators. ME50-868 modules operate in 868MHz band with ultra-low-power for maximum battery life and have the best budget link on the market of 122dB. Available in LGA format, these pre-certified RF modules provide a TTL RS232 interface, integrated digital and analog I/Os and can easily be integrated into a system, thus reducing development time and cost. ME50-868 is also pin-to-pin compatible with Telit ZE Family (ZigBee 2007 and PRO stack), NE Family (Mesh low power) and LE Family (basic point to point, broadcast stack).

IEEE 802.15.4 | ZigBee®

Embedded

IEEE 802.15.4 | ZigBee®

Embedded

ZE 51 - 2.4  
RF modules

250 Kbps - 2.5 mW

ZE 61 - 2.4  
RF modules

250 Kbps - 100 mW



- WEEE RoHS and WEEE Compliant
- Available with Integrated Antenna
- SMD SMD Component
- Embedded In-House ZigBee® PRO stack
- Standard In-House Firmware Available
- Integrated Digital TTL I/Os and Analog Inputs
- DOTA - Upgradeable and Configurable Over-the-Air
- USB Dongle Version Available

The ZE51-2.4 and ZE61-2.4 are compact, SMD, and complete ZigBee®-ready modules based on the Texas Instruments CC2530 System on Chip with 256KB flash memory dedicated for ZigBee profiles or custom applications and are optionally available with an integrated antenna. The ZE51-2.4 supports low power modes up to 2.5mW fully compatible and with the same form factor as ZE61-2.4, the extended version of the low cost ZE51-2.4, having link allocation of 120 dB and 100mW output power. Telit RF Technologies offers the proven world-class in-house ZigBee® PRO stack easy-to-use C-API. All ZE products are available with fully owned IPR (Intellectual Property Rights) and independently developed ZB PRO stack assuring full technical support during development, deployment and maintenance phases as well as possible dedicated customization to reduce the TCO (Total Cost of Ownership) finally providing a real competitive advantage.



Short Range to GSM   GPRS Gateways	Form Factor	Range	Frequency	Radio Data	Output Power	Core	Cellular	Embedded Stack Option	Antenna Option
GG863-SR Gateway	<b>Terminal</b>	up to 4000 m	433, 868, 915 or 2400 MHz	up to 250 Kbps	up to 500 mW	ARM9 200 MHz 128 MB flash/64 MB RAM mit Linux OS	Quad band GSM/GPRS class 10	Mesh, ZigBee or Wireless M-Bus	Removable
<b>License-Free System for Frequencies &lt;1 GHz</b>									
TinyOne®	Form Factor	Range	Frequency	Radio Data	Output Power	Sensitivity (BER < 10 <sup>-3</sup> )	Standby	Embedded Stack Option	Antenna Option
TinyOne® Plus 868 MHz RF modules	<b>Embedded</b>	1500 m	868 MHz	4.8 to 38.4 Kbps	5, 10 or 25 mW	-105	4µA	Mesh & Star	
TinyOne® Plus 868 MHz	<b>Terminal</b>	1500 m	868 MHz	4.8 to 38.4 Kbps	5, 10 or 25 mW	-105	70µA	Mesh & Star	Removable
TinyOne® Pro 868 MHz RF modules	<b>Embedded</b>	4000 m	868 MHz	4.8 to 38.4 Kbps	500 mW	-105	4µA	Mesh & Star	
TinyOne® Pro 868 MHz	<b>Terminal</b>	4000 m	868 MHz	4.8 to 38.4 Kbps	500 mW	-105	70µA	Mesh & Star	Removable
TinyOne® Pro 915 MHz RF modules	<b>Embedded</b>	4000 m	915 MHz	38.4 Kbps	500 mW	-100	4µA	Star	
PowerOne™	Form Factor	Range	Frequency	Radio Data	Output Power	Sensitivity (BER < 10 <sup>-3</sup> )	Standby	Embedded Stack Option	Antenna Option
PowerOne™ 868 MHz RF modules	<b>Compact</b>	16000 m	868 MHz	4.8 and 9.6 Kbps	25 to 500 mW	-115	10µA	Star	
PowerOne™ 868 MHz	<b>Terminal</b>	16000 m	868 MHz	4.8 and 9.6 Kbps	25 to 500 mW	-115	15µA	Star	Removable
LE Family	Form Factor	Range	Frequency	Radio Data	Output Power	Sensitivity (BER < 10 <sup>-3</sup> )	Standby	Embedded Stack Option	Antenna Option
LE50 - 433 RF modules	<b>Embedded</b>	2000 m	433 MHz	Up to 115.2 Kbps	25 mW	-109	1µA (*)	Star	
LE50 - 868 RF modules	<b>Embedded</b>	2000 m	868 MHz	Up to 115.2 Kbps	25 mW	-109	1µA (*)	Star	
NE Family	Form Factor	Range	Frequency	Radio Data	Output Power	Sensitivity (BER < 10 <sup>-3</sup> )	Standby	Embedded Stack Option	Antenna Option
NE50 - 868 RF modules	<b>Embedded</b>	1500 m	868 MHz	Up to 115.2 Kbps	25 mW	-103	1µA (*)	Mesh	
Wireless M-Bus EN13757	Form Factor	Range	Frequency	Radio Data	Output Power	Sensitivity (BER < 10 <sup>-3</sup> )	Standby	Embedded Stack Option	Antenna Option
ME50 - 169 RF modules	<b>Embedded</b>	5000 m	169 MHz	Up to 38.4 Kbps	25 mW	-120	1µA (*)	Wireless M-Bus	
ME50 - 868 RF modules	<b>Embedded</b>	2000 m	868 MHz	Up to 100 Kbps	25 mW	-108	1µA (*)	Wireless M-Bus	
IEEE 802.15.4   ZigBee®	Form Factor	Range	Frequency	Radio Data	Output Power	Sensitivity (BER < 10 <sup>-3</sup> )	Standby	Embedded Stack Option	Antenna Option
ZE51-2.4 RF modules / ZE61-2.4 RF modules	<b>Embedded</b>	1 km/4 km	2400 MHz	250 Kbps	2.5 mW /100 mW	-97/-100	1µA (*)	ZigBee PRO	Integrated

(\*) wake up on interrupt



Distributed by:

We live **m2m**