

License-Free System for Frequencies <1 GHz

Embedded

TinyOne[™] Lite 868 MHz RF modules

100 kcps - 10 mW



TinyOne[™] Lite OEM RF modules are based on Telit's TinyOne[™] concept and are optimized for highly reliable communications and provide ultra-low-power for maximum battery life at a low price for applications ranging from energy management and building control to machine health monitoring.

Available with or without integrated antenna, these pre-certified SMD RF modules provide a TTL RS232 interface, integrated digital and analog I/Os, work in the license-free ISM band of 868 MHz, and offer the advanced embedded proprietary S-One stack including an optional wireless M-BUS and M-One stack.

These modules are easily integrated into a system, thus reducing development time and cost while providing highly-reliable communications and ultra-low-power for maximum battery life in a wide range of sensor network applications such as those in the growing AMR/AMI market.

Performance

- Range: Up to 700 m
- Output Power: Up to 10mW
- Serial Data Rate: Up to 115.2 Kbps
- Radio Data Rate: Up to 100 kcps
- Sensitivity (CER < 10⁻³): -105 dBm

Power Requirements

- Power Supply: 2.2 to 3.7 V
- Board Consumption at 3.3 V: Rx: 30 mA
 Tx: 40 mA
 Std-by: 2 μA

Physical Properties

- Rectangular 38 x 21 mm, height 3 mm, weight 20 g
- Temperature: -40°C to +85°C

Networking

- Frequency: 868 870 MHz
- Channels: 4 or 12 (Wireless M-bus)
- Modulation: GFSK
- Serial Interface: RS232 TTL (Tx, Rx, Cts, RTS)

Hayes Mode: Yes Transparent Mode: Yes ACK Mode: Yes

Addressed Mode:	Yes
Client/Server Mode:	Yes
Repeater Mode:	No
Mesh Network:	Yes
I/O Copy:	Yes
Wireless M-Bus	Yes
Listen Before Talk:	Yes

Download Over-the-Air: Yes

Order-No.

Please contact your Telit representative for order codes and further information.



Making machines talk.®

Embedded

TinyOne[™] Lite 868 MHz **RF** modules









actual size

■ TinyOne[™] Lite 868 MHz RF modules are available: (a) without integrated antenna

- (b) with integrated antenna
- (c) in DIP version

Optional Features







TinyOne[™] Lite 868 MHz





Demo Kit & Development Tools

Demo kits with development tools are available for testing and to assist with integration into the final application.

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Telit Communications S.p.A. Via Stazione di Prosecco, 5/B I-34010 Sgonico (Trieste), Italy Tel +39 040 4192 200 Fax +39 040 4192 289 E-Mail: EMEA@telit.com www.telit.com

Telit Wireless Solutions Inc. 3131 RDU Center Drive, Suite 135 Morrisville, NC 27560, USA Tel +1 888 846 9773 or +1 919 439 7977 Fax +1 888 846 9774 or +1 919 840 0337 E-Mail: NORTHAMERICA@telit.com www.telit.com

Telit Wireless Solutions Inc. Rua Cunha Gago, 700 - cj 81, Pinheiros São Paulo - SP, 05421001, Brazil Tel +55 11 2679 4654 Fax +55 11 2679 4654 E-Mail: LATINAMERICA@telit.com www.telit.com

Telit Wireless Solutions Co., Ltd. Yh FL, Daewoo Securities Bld. 34-3 Yeouido-dong, Yeongdeungpo-gu Seoul 150-716, KOREA Tel +82 2 368 4600 Fax +82 2 368 4600 E-Mail: APAC@telit.com www.telit.com

[03.2010]

