











## License-Free System for Frequencies <1 GHz

### Terminal

## TinyOne™ Plus 868MHz

38.4 Kbps - 25 mW



-  ETSI Certified Device
-  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™ Plus with -Pro
-  IP67 Casing
-  Standby: 70µA
-  Complete Terminal with 6-40V Power Supply

The TinyOne™ Plus IP67 terminal is a complete ETSI certified 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 fixed or 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™ Plus is compatible with the extended 500 mW TinyOne™ Pro, for backbone network topology and is upgradeable over-the-air.

#### Performance

- Range: 1,500 m
- Output Power: 25 mW
- Serial Data Rate: Up to 115.2 Kbps
- Radio Data Rate: 4.8 to 38.4 Kbps
- Sensitivity (BER <math>< 10^{-3}</math>): -105 dBm (at 4.8 Kbps)

#### Power Requirements

- Power Supply: 6 - 40 V
- Terminal Consumption at 12 V:
  - Rx: 20 mA
  - Tx: 250 mA
  - Std-by : 70 µA

#### Physical Properties

- IP67 casing:
  - 100 x 62 x 40 mm (casing only)
  - 200 x 62 x 40 mm (with antenna and connector)
- Temperature: -40°C to +85°C

#### Networking

- Frequency: 868 - 870 MHz
- Channels: 8
- Modulation: GFSK
- Serial Interface: RS232, RS422, RS485
- 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
- Listen Before Talk: Yes
- Download Over-the-Air: Yes

#### Order-No.

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





**Optional Features**

- TinyOne™ Plus 868 MHz terminals are available:
  - (a) in metallic IP67 casing with fixed antenna
  - (b) in metallic IP67 casing with removable antenna



(a)



(b)



(a)

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