











License-Free System for Frequencies <1 GHz

Terminal

TinyOne™ Pro 868 MHz

38.4 Kbps - 500 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 Pro with -Plus
-  IP67 Casing
-  Standby: 70µA
-  Complete Terminal with 6-40V Power Supply

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

Performance

- Range: 4,000 m
- Output Power: 500 mW
- Serial Data Rate: Up to 115.2 Kbps
- Radio Data Rate: 4.8 to 38.4 Kbps
- Sensitivity (CER < 10⁻³): -105 dBm

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 64 x 40 mm (casing only)
 - 200 x 64 x 40 mm (with antenna and connector)
- Temperature: -40°C to +85°C

Networking

- Frequency: 869.4 - 869.65 MHz
 - Channels: 1 or 10
 - 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: | No |
| ■ 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™ Pro 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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