

TTConnect Pro 10666

Description

TTConnect Pro 10666 is a robust telematics control unit for mobile machines for on-edge CAN processing and global bidirectional communication in combination with the Cloud platform. The TTConnect Pro 10666 has CAN and Ethernet interfaces. It provides 4G mobile connection as well as WIFI, Bluetooth and GNSS connectivity with an external antenna interface and a battery. The TTConnect Pro Telematics Control Unit (TCU) 10666, combined with an advanced cloud platform, delivers a seamless, end-to-end IoT solution for OEMs in the off-highway sector.

Mechanical Specifications

Dimensions	86,6 +/- 1 mm x 123 +/- 1 mm x 36 +/- 2 mm
Weight	<= 0,210 kg
Ingress Protection	IP6K7 (with mounted conn.)

Electrical Specifications

DC power supply	12 V / 24 V +/-50%
Current Consumption at 24 V / 25° C (av. operating)	<= 290 mA
Current Consumption at 24 V (Sleep Mode)	<= 1 mA
Status LEDs	2 (RGB)
Battery capacity	1.15 Ah

Temperature Rating

Operating temperature	-20 to +60 °C (ambient)
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Sensors

Temperature (not calibrated)	-40° to +85 °C
Acceleration (not calibrated)	3 axes, +/- 16 g, 16 bit
Angular rate (not calibrated)	3 axes, +/- 250° / s, 16 bit

Connectors

Main connector	Micro Timer II, 14 contacts
Ethernet connector	M12-Female-Socket, 4-contact, D-coded
GSM / UMTS / LTE Cat 4 Antenna	Fakra D
Positioning	Fakra C



System Components

- Dual-core ARM® Cortex®-A7 (650 MHz)
- 4 GB Flash (2.5 GB available for application)
- 32 KB FRAM
- 512 MB DDR3 RAM
- Real-time clock with backup capacitor: Backup time > 48 h at 25 °C
- Battery

Interfaces

- 3 x CAN 10 kbit/s to 1 Mbit/s (with future firmware: 3 x CAN FD)
- 1 x 100Base-TX Ethernet
- eSIM
- Nano SIM Socket: Optional internal Nano SIM
- 1 x analog IN 12 bit (Terminal 15)
- 3 x analog IN 12 bit, 0 – 15 V
- 1 x digital OUT up to 500 mA, high side

Wireless Connectivity

- 4G / LTE Cat 4 (MHz): B1, B2, B3, B4, B5, B7, B8, B12, B13, B18, B19, B20, B25, B26, B28, B38, B39, B40, B41
- 3G / UMTS / HSPA (MHz): 850 (B5) / 900 (B8) / 1700 (B4) / 1900 (B2) / 2100 (B1)
- 2G / GSM / GPRS / EDGE (MHz): 850 / 900 / 1800 / 1900
- Bluetooth (upcoming): Bluetooth 5.0 and Bluetooth Low Energy, 2,4 GHz, integrated antenna
- Wi-Fi® (IEEE 802.11): a, b, g, n, Dualband 2,4GHz and 5 GHz, integrated antenna

Positioning

- GPS / GLONASS / Beidou / Galileo / QZSS: Singleband 1559..1606 MHz
- Accuracy CEP 50% <= 4m

Security

- Encrypted data transmission according to TLS
- Trusted Platform Module
- Bidirectional authentication
- Secure Boot
- Signed Firmware

