

TTConnect Pro 3677 MATCH

Description

TTConnect Pro 3677 MATCH is a robust telematics control unit for mobile machines for on-edge CAN processing and global bidirectional communication in combination with the Cloud platform. It is fully compatible with the HYDAC MATCH software platform for enhanced efficiency and automation and includes already a MATCH runtime license. The TTConnect Pro 3677 MATCH has three CAN interfaces. It provides 4G mobile connection as well as WIFI and Bluetooth connectivity with external antenna interfaces and a battery. The TTConnect Pro Telematics Control Unit (TCU) 3677 MATCH, 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 +/- 1 mm
Weight	<= 0,190 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)	<= 250 mA
Current Consumption at 24 V (Sleep Mode)	<= 500 µA
Status LEDs	2 (RGB)
Battery capacity	1.15 Ah

Temperature Rating

Operating temperature	-40 to +80 °C (standard mode) - 20 to +60 ° C (battery operation)
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

Connector

Main connector	Micro Timer II, 14 contacts
GSM / UMTS / LTE	Fakra D
Positioning	Fakra C



System Components

- ARM® Cortex® M4 based STM32 (168 MHz)
- 1 MB Program Flash
- 128 MB Data Flash
- 32 KB FRAM
- 1280 KB SRAM
- Real-time clock
- Battery

Interfaces

- 3 x CAN 10 kbit/s to 1 Mbit/s
- eSIM
- 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
- Service interface: Micro USB 2.0 Full Speed Type AB self-powered device

Wireless Connectivity

- 4G / LTE Cat 4 (MHz): 700 (B12, B17) / 750 (B13, B28) / 800 (B20) / 850 (B5) / 900 (B8) / 1700 (B4) / 1800 (B3) / 1900 (B2) / 295 (B1) / 2600 (B7)
- 3G / UMTS / HSPA (MHz): 850 (B5) / 900 (B8) / 1700 (B4) / 1900 (B2) / 295 (B1)
- 2G / GSM / GPRS / EDGE (MHz): 850 / 900 / 1800 / 1900
- Bluetooth: v5.0, v2.1 + EDR (integrated antenna)
- Wi-Fi®: IEEE 802.11 a/b/g/n, 2.4 GHz / 5 GHz (integrated antenna)

Positioning

- GPS / GLONASS / Beidou / Galileo: <= 5m / 1 Hz (CEP 50%, 24 h static, -130 dBm, >6 satellites in view)
- GNSS fix: cold start <= 30 s / warm start <= 1 s

Security

- Encrypted data transmission according to TLS
- Trusted Platform Module
- Bidirectional authentication

