

TCU Data Sheet

Hardware Specifications

I/O

- WiFi – 802.11 b/g
 - WEP/WEP2
 - WPA/WPA2
 - Simultaneous AP & client mode
- Bluetooth – 2.1+EDR
 - PAN
 - Handsfree
 - A2DP
- CAN Bus (2)
 - High Speed
 - Low Speed
- Ethernet
 - 10/100
- USB
 - OTG
- GPS
 - USGPS
 - GLONASS
- CDMA
 - 1xRTT
 - EVDO-0
 - EVDO-A
 - LTE Ready
 - GSM/HSDPA Ready
- Cellular Voice
 - TTY (ecall)
 - Voice

Integrated Antennas on PCB

- Bluetooth
- WiFi
- GPS
- Cellular

Autonet has developed a next generation Telematics Control Unit (TCU) designed specifically for the Automotive OEM environment. Autonet's ground breaking TCU provides connectivity for embedded applications in the head unit or standalone applications that can be accessed from a Smartphone or Desktop.



Software

Autonet Mobile's platform is based upon an embedded Linux Operating System that provides a unique automotive grade platform for delivering reliable and secure connectivity solutions.

Key Software Features include:

- DHCP Server
- DNS Server
- NAT/Port Forwarding
- Media Servers
 - DLNA
 - UPNP
 - DAAP
- VPN Passthru
 - IPSEC
 - SSL
- Unified File System
- Traffic Shaping
- QoS
- Captive Portal
- eCall
- Car Diagnostics
- Device Authentication
- User Authentication
- Web Cache
- Content Prefetching
- Content Filtering
- Content Prioritization
- Event Manager
- Remote Software updates
- TRU Technology
 - TRU Session Management
 - TRU Link Management
 - TRU Network Management
 - TRU Content Management

Hardware Specifications

Optional Connectors for external antennas

- Cellular
- GPS
- Small foot print
 - Width – 70mm
 - Length – 140mm
 - Height – 15mm
- 1GB NAND
- 128MB RAM
- ARM 11 - 532 MHz Processor
- Standard automotive interior operating temperature range:
 - -40 °C to +85 °C
- Multiple Power Modes
 - Normal Power
 - Low Power
 - Polling
 - Extended Polling
 - Sleep
- CAN Secured
 - Isolated CAN CPU
 - All CAN messages authenticated



Managed Platform

From anywhere on the Internet we'll give you the ability to monitor and troubleshoot everything that is going on with the TCU. You'll have the ability to remotely configure your device throughout TRU Manager, or you can do it locally.

Our TRU Manager is always online monitoring and troubleshooting your network connection for you. Our TRU algorithm is constantly monitoring network statistics and signals and automatically adjusting so that you always have the best network connectivity possible. Non-managed solutions and cellular data cards aren't capable of this and they force the user to constantly re-connect and make adjustments on their own. Autonet Mobile's fully managed solution gives you what you want: A network that works reliably and a support team that's here to help.

Applications

Autonet's TCU is designed to support applications developed by Autonet, the OEM or third parties. Autonet's TRU content management system allows new applications and services to be added to the TCU seamlessly. Some sample applications are:

In Car

eCall – emergency services
Location Based Services
WiFi Hotspot
Entertainment

Desktop/Laptop

Parental Controls (geofencing, speed alerts, tracking)
Car Health reports
Fleet Management
Driver performance

Smart Phone

Remote Car Control (door lock/unlock, remote start/stop, etc.)
Car Locator
Car Alerts