

# TREK-753



## 7" Mobile Data Terminal with Intel® Atom™ Z510PT/Z520PT Processor

### Features

- 7" WVGA LCD with 5 programmable adjustable brightness hot keys
- Windows® Embedded Standard (WES) 2009, WinCE6.0 and Ubuntu Linux 10.04
- Supports analog video input & CAN2.0b with J1939 protocol
- Supports CDMA/HSDPA/GPRS, GPS, WLAN, BT communications
- 12 V/24 V option: 6 ~ 36 V input range compliant to ISO7637-2 & SAE J1113 standards
- 48 V option: 18 ~ 58 V input range for specific applications
- Fanless and ruggedized aluminum chassis, able to work under -30 ~ 60° C temperature range



## Introduction

TREK-753 is a new generation, all-in-one 7" mobile data terminal with touchscreen, with a compact design for commercial vehicles. With an Intel® Atom™ Z510PT/Z520PT processor, the system is high performing with wired connections like Gigabit Ethernet & CAN2.0b with J1939 protocol support; users can also connect to network services using easily with CDMA/ HSDPA/ GPRS/ GPS/ WiFi/ BT options. Focused on the automotive market, TREK-753 is designed with vehicle power which is compliant with ISO7637-2 & SAE J1113, ensuring the system is more stable during engine starts. Die casting and a ruggedized chassis not only provide more capabilities in a wide range of temperatures (-30 ~ 60° C), but TREK-753 is also suitable for harsh environments subject to shock (100 G, 6 ms) and vibration.

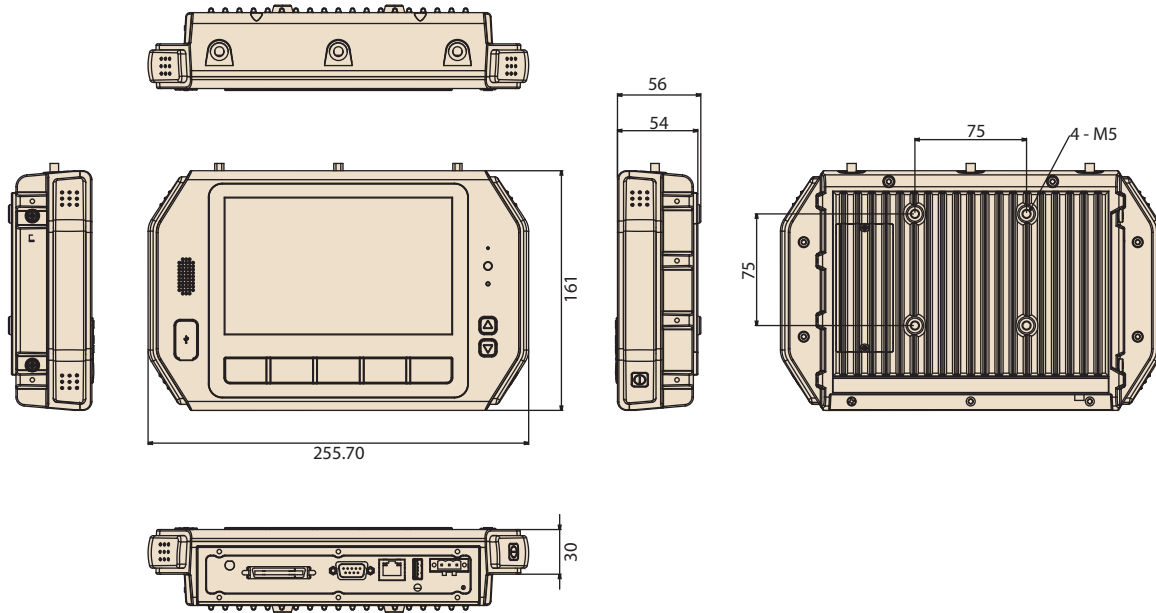
## Specifications

Processor	OS	Windows® Embedded Standard (WES) 2009, WinCE6.0 and Ubuntu Linux 10.04
	CPU	Onboard Intel Atom 1.1 GHz / 1.33 GHz (optional)
	Chipset	Onboard Intel LE82US15EE
	Watch Dog	Yes
	RTC	Yes with one time 200mAh li-ion coin battery
	RAM	1 x 200-pin SODIMM socket supports a memory module of up to 2 GB
	Storage	1 x external accessible type II Compact Flash memory card (bootable device) 1 x SD card with external access for extra capacity (SD function is not available with WinCE6.0)
LCD	Bus Expansion	1 x mini-PCIe slot for built-in WLAN (b/g/n) module 1 x mini-PCIe slot for built-in CDMA/HSDPA (USB 2.0 interface)
	Display Type	7" 16:9 industrial degree TFT color TFT LCD, LED backlight
Touchscreen	Luminance	400 cd/m2 (average with TS)
	Max. Resolution	WVGA 800 x 480, 10% ~ 100% brightness controlled by two hardware buttons on the front panel and a light sensor
I/O Functions	Type	4-wire analog resistive type, continuous resolution, optional support for sunlight readable touchscreen
	COM	3 x COM ports: ▪ 1 x full function RS-232 port supports high speed (up to 1Mb max.) with 12 V/2.5 A I/O plate ▪ 1 x full function RS-232 supports high speed (up to 1 Mb max.) port via high density connector ▪ 1 x RS-485 port via high density connector
	Audio	1 x built-in 2 W speaker on front panel 1 x line-in, 1 x line-out, 1 x microphone input via high density connector
	Function Keys	5 x green lit, programmable function keys, 2 x for LCD back light adjustment
	USB	3 x USB 2.0 ports 1 x rubber door protection at front panel, 1 x type A connector with cable clip, 1 x high density connector
	Video Input (Rear View Monitor)	1 x video input for rear view camera via high density connector
	LAN	1 x 100/1000T Gigabit Ethernet via RJ-45 connector
	Light Sensor	1 x light sensor on front cover for auto LCD backlight adjustment
	DI/DO	4 x isolated digital input & 4 x isolated digital output ports
	CAN Bus	1 x CAN 2.0b with J1939 protocol via high density connector
	J1708	1 x J1708 via high density connector
RF Functions	GPS (Optional)	Built-in 50 channel GPS uBlox LEA-5S with SMA connector for external antenna
	Bluetooth (Optional)	Built-in Class 2 Bluetooth V2.0 + EDR module with internal antenna
	WWAN (Optional)	▪ Built-in Quad-band 900/1800/850/1900MHz GSM/GPRS module Cinterion MC55i with SMA connector for external antenna ▪ Built-in HSDPA module Sierrawireless MC8790V with SMA connector for external antenna ▪ Built-in CDMA module Sierrawireless MC5728 with SMA connector for external antenna
	WLAN (Optional)	Built-in AzureWave AW-NE768 IEEE 802.11b/g/n with SMA connector for external antenna
Power Supply	Input Voltage	▪ 12 V/24 V option supports 6 ~ 36 V car power design with ISO7637-2 & SAE J1113 compliance ▪ 48 V option supports 18 ~ 58 V input for specific applications
	Ignition On/Off LED indicator	Power on delay, default 2 seconds; Power off delay, default 5 seconds; Hardware power off delay, default 30 seconds. SW configurable 1 x yellow LED shows system power ready (on front panel)
Mechanical Design	Material	Aluminum
	Protection	IP54 (except I/O plate), option to support entire system IP54 with additional I/O cover (9668TREK37E)
	Weight	2.2 kg (~4.85 lbs)
	Dimensions (W x H x D)	255.7 x 161 x 56 mm (10.04" x 6.30" x 2.20")
Environmental Specifications	Operating Temperature	-30 ~ 60° C
	Relative Humidity	Compliant to 10 ~ 90% @ 40° C (non-condensing)
	Vibration Shock	MIL-STD-810G (US highway truck), Method 516.5, SAE J1455, Class 5M3 in accordance with DIN EN 60721-3-5
	Certifications	FCC class B (include Part 22 24E), UL, CUL, CE, CCG, CB, E-mark

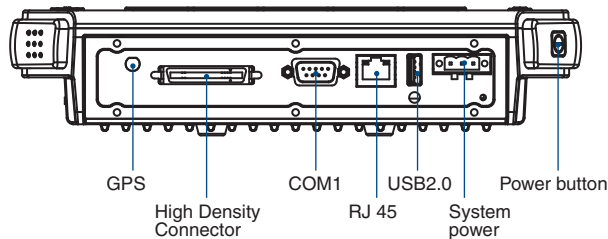
# TREK-753

## Dimensions

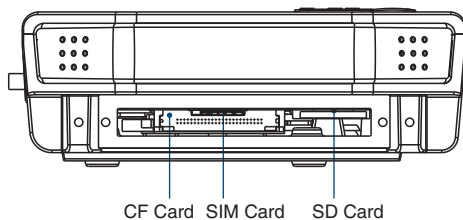
Unit: mm



## Fully Integrated I/O



## Side View



## Ordering Information

Part Number	Description
TREK-753R-0A0E	TREK-753R Bare bone with Z510 1.1 G CPU
TREK-753R-1A0E	TREK-753R Bare bone with Z520 1.3 G CPU
TREK-753S-0A0E	TREK-753R Bare bone with 1.1 G CPU/SR T/S*
TREK-753R-CWBXP0A0E	TREK-753R w/CDMA/GPS/WLAN/BT/1 GB RAM/4 G CF/WES
TREK-753R-HWBXP0A0E	TREK-753R w/HSDPA/GPS/WLAN/BT/1 GB RAM/4 G CF/WES
TREK-753R-GWBXP0A0E	TREK-753R w/GPRS/GPS/WLAN/BT/1 GB RAM/4 G CF/WES

\*Note: SR T/S stands for Sunlight Readable TouchScreen.

## TREK-753 CTOS Kit

Part Number	Description
9668TREK30E	TREK-753R RevA0 GPS kit
9668TREK31E	TREK-753R RevA0 WiFi (Azurewave) kit
9668TREK32E	TREK-753R RevA0 HSDPA kit
9668TREK34E	TREK-753R RevA0 GPRS kit
9668TREK35E	TREK-753R RevA0 AC/DC power kit
9668TREK36E	TREK-753R RevA0 BT module kit

## Accessories

Part Number	Description
1700019307	High density cable (2 meters)
1700019611	Cigarette lighter cable for testing purpose (30cm)
RAM-MOUNT-01	VESA RAM mount w/clamp base 1.5" ball
RAM-MOUNT-06E	VESA RAM mount w/VESA base, 1.5" ball
9668TREK37E	IP54 I/O housing cover for TREK-753

## Данный компонент на территории Российской Федерации

### Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

### Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: [info@moschip.ru](mailto:info@moschip.ru)

Skype отдела продаж:

moschip.ru

moschip.ru\_4

moschip.ru\_6

moschip.ru\_9