

TREK-723

RISC All-in-One Mobile Data Terminal



Features

- TI Cortex-A8 AM37XX Series SOC; Supports WinCE6.0
- 7" WVGA LCD with strengthened resistive touchscreen
- Vehicle diagnostics interface with CAN (Raw CAN, J1939) protocol
- Built-in GNSS, Bluetooth, and WWAN modules
- Intelligent vehicle power management system supports ignition on/off/delay functions, wake-up event control, and system health monitoring and diagnostics
- Wide working temperature range (-20 ~60° C), supports 12/24V vehicle power (ISO7637-2) and shock and vibration tolerant (MIL-STD-810G and 5M3)

Introduction

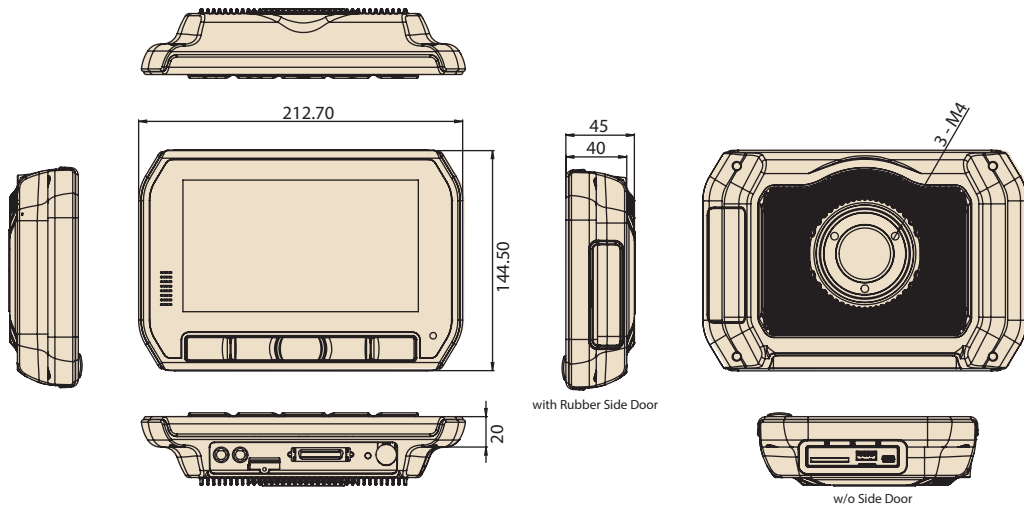
TREK-723 is an all-in-one RISC platform with 7" display Mobile Data Terminal (MDT). The radio frequency options and programmable function keys make TREK-723 suitable for local fleet management, especially small truck, local delivery, government fleet and taxi. It is designed with vehicle power compliant to ISO7637-2 & SAE J1113 ensuring stability in cars with fluctuating power. With suspend/wakeup features, TREK-723 supports a 24/7 monitoring mechanism with periodic, digital input & WWAN wakeup.

Specifications

Core	Processor	TI Cortex-A8 AM3703 (Single Core, 800MHz); AM3715 (Single Core, 1GHz) by project-based ¹	
	Memory	256MB LPDDR on board; 512MB by project-based ¹	
	Graphic	POWERVR SGX™ Graphics Accelerator of OpenGL ES 1.1/2.0, OpenVG1.0 by project-based ¹	
	O.S	WinCE6.0 & Android 4.0 by project-based	
Storage	eMMC	2GB on board, support system boot up	
	SD Card	1 x external accessible push-push type SD slot with cover	
Display	Type	7" industrial grade TFT LCD	
	Resolution	WVGA (800 x 480)	
	Brightness (cd/m ²)	400 cd/m ² (typical)	
	View Angle (H/V)	140/120	
	Contrast Ratio	500	
Touchscreen	Backlight Life (Hrs)	20K	
	Type	4-wire analog resistive	
Sensor	Transparency	80% ± 3%	
	Light-Sensor	Sensitive to visible and infrared light	
I/O	Function Key	5 x programmable function keys with green LED	
	Reset Button	1 x Reset button (Bottom side)	
	Standard I/O Port		1 x USB Client Mini-B (Right side)
			1 x USB 2.0 Host Type A (Right side)
			1 x SIM Card Slot (Bottom side)
	Extended I/O Port (P/N: 1700020042)		1 x MIC/Mono Line In
			1 x Stereo Line Out
		1 x CVBS Input	
		1 x Y/C Input	
RF		1 x USB 2.0 Host	
		2 x 4-wire RS-232	
		2 x Isolated DI (Dry contact)	
		2 x Isolated DO (Open collector output, driving by replay)	
		1 x CAN Bus 2.0A/B (Support Raw CAN, J1939)	
RF	Bluetooth	Bluetooth V2.1 + EDR	
	WWAN	HSPA+/UMTS, GSM/GPRS/EDGE: Cinterion PH8 via B2B connector	
	GNSS	Built-in u-Blox LEA-6S module, support AGPS	
	Antenna	Default all antennas are internal and support external ³	

Dimensions

Unit: mm



Specifications Cont.

Power	Voltage input	Supports 12/24 V car power system. (6V ~ 36V wide DC input, ISO 7637-2 & SAE J1113 compliant.)
	Intelligent Vehicle Power	System power on/off/suspend management (e.g. Programmable Ignition On/Off Time delay) Support Wake up Events: - Alarm (RTC) Wake up. - Wake up by Call/SMS. System power protection System healthy monitoring and diagnostic (e.g. Programmable Car_Battery_Low Protection)
Mechanical	Dimensions (W x H x D)	213 x 145 x 45 mm
	Weight	850 grams
Environment	IP Rating	IP54 (except I/O plate at the bottom)
	Vibration/Shock	MIL-STD-810G, EN60721-3(5M3)
	EMC	CE, FCC, CCC
	Safety	UL/cUL, CB
Environment	Vehicle Regulation	E-Mark (E13) (12V/24V system), SAE J1455, ISO 7637-2, SAE J1113
	RF Regulation	CE (R&TTE), FCC ID, PTCRB
	Operating Temperature	-30° C ~ 70° C
	Storage Temperature	-30° C ~ 80° C

Ordering Information

Part Number	Description
TREK-723R-A1E	TREK-723 barebone
TREK-723R-HBCEA1E	TREK-723 A1 w/ 800MHz, 256MB, CE6, HSPA+GPS (int. ant), BT

Optional Items

Part Number	Description
1700020042	A Cable MDR 40P/USB-A(M)+Audio Jack*2+DC Jack+BN
9666074302E	19V adapter for TREK-723 test purpose
RAM-MOUNT-02	VESA RAM mount w/2.5" DIA. base, 1.5" ball
RAM-MOUNT-07E	75mm VESA base, RAM-202U, and socket ARM
RAM-MOUNT-09E	clamp base, RAM-202U, and socket ARM