TREK-733L

RISC All-in-One Light duty Mobile Data Terminal

TAIWAN EXCELLENCE 2016

Features

- NXP (Freescale) i.MX6DL Dual Core Cortex-A9 1.0 GHz SOC, 1GB DRAM, 4GB eMMC with Android 4.4.2
- 7" WSVGA (1024 x 600) LCD with capacitive touch screen
- Built-in 4G LTE, WLAN/BT and GNSS include Beidou support. Support external antenna via SMA with better sensitivity for 4G LTE and GNSS.
- Built-in battery pack (3.6V, 2400mA) as UPS for emergency status include notification to backed office and data backup
- Design for vehicle 12/24V power system and MIL-STD-810G shock/vibration standard
- One analog video input to dedicated video processor for real-time display application
- Multiple isolation Digital Input/Output interface and support vehicle speed line input for distance measurement
- Excellent noise suppression technology for built-in voice recognition application
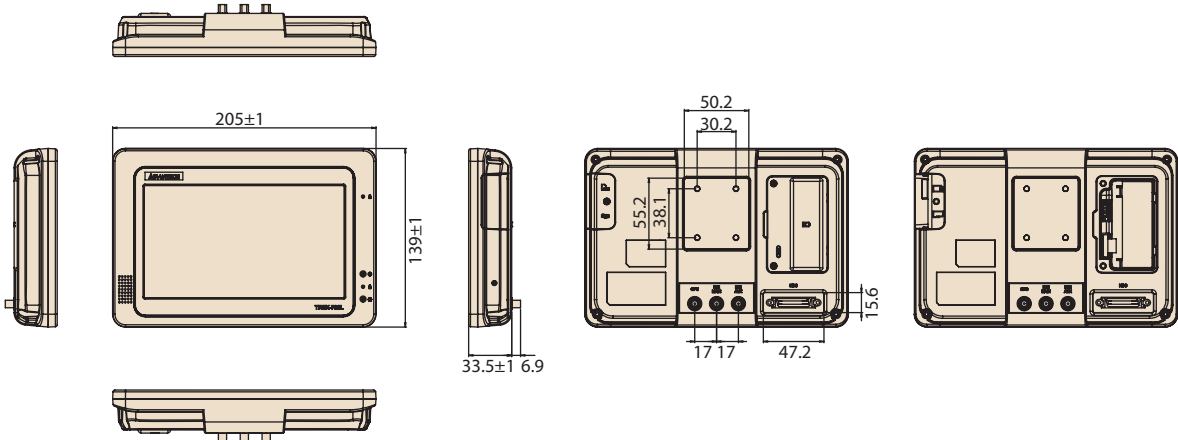
Introduction

TREK-733L is an ARM based Android 4.4.2 platform with 7" display and capacitive touch screen all-in-one light duty mobile data terminal (MDT). With 1.0 GHz processor, 1GB DRAM and rich wireless communication interface include 4G LTE and WLAN/BT provide high speed data exchange with performance required by fleet management company. It offers a built-in battery to backup any emergency condition (UPS). MIL-STD-810G rated can be satisfied by most light duty vehicle shock/vibration environment. GNSS with 4G LTE can be used for location and route optimization, and the option for Beidou can cover most global navigation satellite system. There are three external antenna SMA ports for critical outdoor application to have better sensitivity and performance.

Specifications

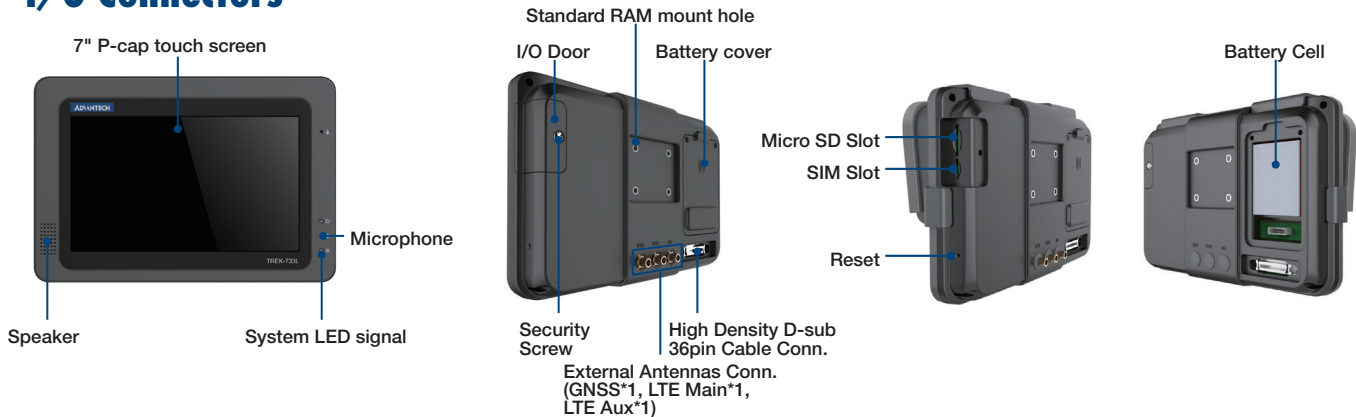|		
Core	Processor	NXP (Freescale) Cortex-A9 i.MX6DL Dual Core 1.0 GHz
	Memory	1GB DDR3 on board
	Graphic	OpenGL® ES 2.0 3D graphics accelerator with a shader and a 2D graphics accelerator
	Operating System	Android KitKat 4.4.2
Storage	eMMC	4GB on board
	SD Card	1 x external accessible push-push type MicroSD slot with cover
Display	Type	7" TFT LCD
	Resolution	WSVGA (1024 x 600)
	Brightness	500 cd/m² (typical)
	Viewing Angle (H/V)	150/145 degree
	Contrast Ratio	700
	Backlight Lifetime	15000 Hrs
Touchscreen	Type	Capacitive 2 points multi-touch (Gesture)
	Construction	Glass-Film-Film
	Transparency	≥85%
Multimedia	Speaker	1 x Internal 2W Speaker
	Microphone	2 x Internal Microphone for Noise Suppression
Sensors	Ambient Light Sensor	Sensitive to visable and infrared light
	Motion Sensor	3-axis ±2g/4g/8g Accelerometer
I/O Interface	Standard I/O Port	1 x MicroSD Slot 1 x SIM Slot
	Extended I/O Port	1 x System Power Input 2 x 2-wire RS-232 1 x USB 2.0 Host 6 x ISO DI (DI1~5 Dry contact; DI6 Wet contact) & 2 x ISO DO (Open collector output, driving by relay) 1 x Analog Video CVBS Input
	LED	1 x LED for Power
	Reset Button	1 x Hardware Reset Switch (Right Side)
Wireless Communication	WLAN/Bluetooth	IEEE 802.11 b/g/n and Bluetooth V4.0 Class 1.5 (Internal Antenna)
	WWAN	Sierra Wireless MC7304 via Mini PCIe Slot for EU - LTE: B1, B3, B7, B8, B20 / HSPA+ UMTS: B1, B2, B5, B6, B8 Sierra Wireless MC7354 via Mini PCIe Slot for US - LTE: B2, B4, B5, B13, B17, B25 / HSPA+ UMTS: B1, B2, B4. B5. B8 / CDMA EVDO: BC0, BC1, BC10 (External Antenna via SMA)
GNSS	Sensitivity	GPS (-161 dBm), GLONASS (-158dBm) with 56-channel & AGPS support and Beidou by project based (External Active Antenna via SMA)
Power System	Voltage Input	Supports 12/24V Car Power System. (9~32V wide DC input)
	Intelligent Vehicle Power Management	System power on/off management Support Wake up Events: - Alarm (RTC) Wake up - Wake up by Call/SMS - Wake up by G-sensor System power protection System monitoring and diagnostic

Dimensions

Unit: mm

Specifications Cont.

Power System	Backup Battery Pack (Option)	3.6V, 2400mAh - 30 Mins for Full Loading Operation - 2 Hrs for Low Power Condition Operation - Charging Time: 3 Hrs
Mechanical	Mounting	AMPS Mounting ARM Compatible
	Dimension (W x D x H)	205 x 139 x 33.5 mm
	Weight	820 g (incl. Battery)
Environment	Operating Temperature	-4 °F to +158 °F (-20 °C to +70 °C)
	Storage Temperature	-4 °F to +158 °F (-20 °C to +70 °C)
	Vibration/Shock	MIL-STD-810G
	Vehicle Regulation	E-Mark (E13) (12/24V System), ISO 7637-2, SAE J1455
	Safety	UL/cUL, CB
	Certifications	CE, FCC, CCC

I/O Connectors

7" P-cap touch screen

Microphone

Speaker

System LED signal

Standard RAM mount hole

I/O Door

Battery cover

Micro SD Slot

SIM Slot

Reset

Battery Cell

Security Screw

High Density D-sub 36pin Cable Conn.

External Antennas Conn.
(GNSS*1, LTE Main*1, LTE Aux*1)

Ordering Information

Part Number	Description
TREK-733L-LWBADA0E	TREK-733L NXP (Freescale) Cortex-A9 i.MX6DL Dual Core 1.0 GHz, 1GB DRAM, 4GB eMMC, Android 4.4.2, LTE MC7304 (Ext. ANT), GNSS(Ext. ANT), WLAN/BT (Int. ANT), Power and I/O Cable
TREK-733L-LWBADB0E	TREK-733L NXP (Freescale) Cortex-A9 i.MX6DL Dual Core 1.0 GHz, 1GB DRAM, 4GB eMMC, Android 4.4.2, LTE MC7354 (Ext. ANT), GNSS(Ext. ANT), WLAN/BT (Int. ANT), Power and I/O Cable

Optional Items

Part Number	Description
BB-HDV100A3	RS-232 to J1708 and J1939 Converter
BB-D99Y	Y Cable of DB15 and Deutschfor 9-Pin for RS-232 to J1708 and J1939 Converter
TREK-MNT-301E	Double square plate with AMPS hole pattern
TREK-MNT-302E	Square plate with AMPS hole pattern & X-type base
TREK-MNT-303E	Square plate with AMPS hole pattern & suction cup base