

TREK-20

Android computing box for robust computing in harsh environments



Features

- Qualcomm® Snapdragon™ 660 with Android 10
- IP54-rated computing box with IP cover
- Compact Size for Installation Flexibility
- 9~36V input range for 12/24V power



Introduction

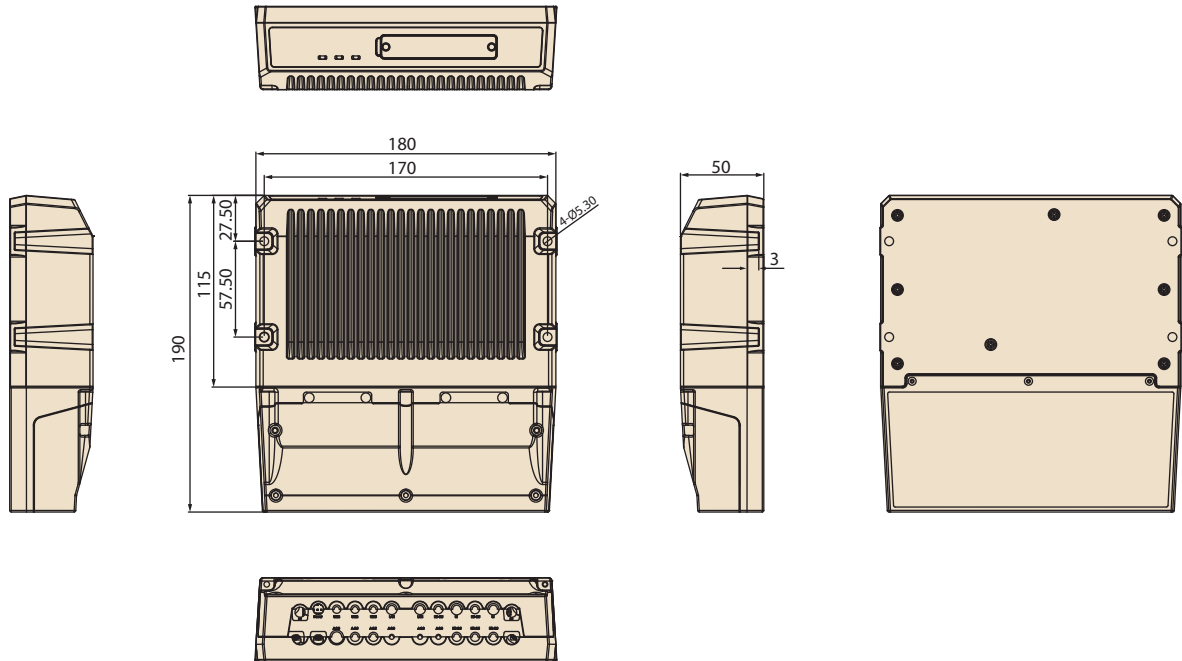
TREK-20 is a compact ARM-based computing box equipped with Qualcomm® Snapdragon™ 660 SoC, WLAN, Bluetooth, and WWAN modules offer enhanced connectivity making TREK-20 ideal for automation, logistics and fleet management. Moreover, wide operating temperature range (-20 ~ 60 °C), support 9~36V input range for 12/24V power, and compliance with MIL-STD-810G and 5M3 shock/vibration standards ensures TREK-20 can withstand operation in harsh environments.

Specifications

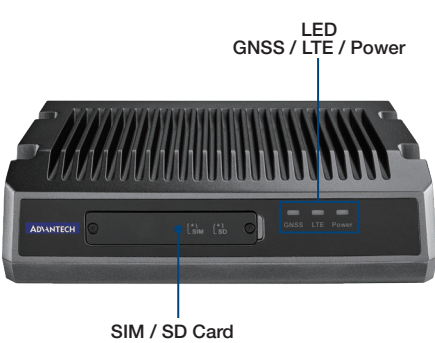
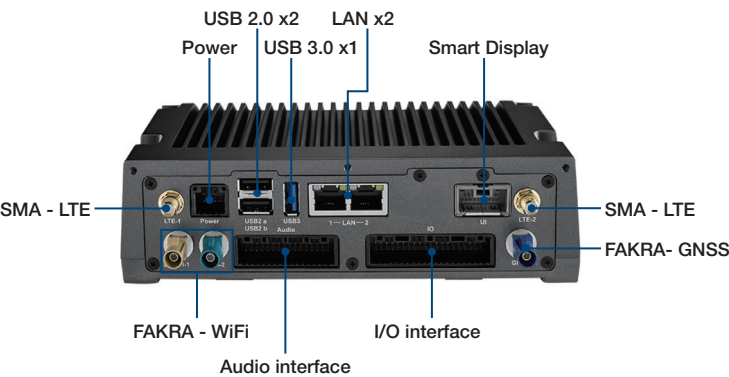
System	Processor	Qualcomm® Snapdragon™ 660 octa-core 2.2 GHz
	Memory	4GB LPDDR4X
	Operating System	Android 10
Storage	eMMC	64GB
	SD Card	MicroSD (up to 128GB/Optional)
LED Indicator	Power status	1 x Red
	GNSS	1 x Blue
	WWAN LTE	1 x Green
I/O	Interface	1 x 12V power output for 7 inch display USB Host 2.0 FPD Link
	Ethernet	2 x 10/100 Mbps
	USB 2.0	2 x USB 2.0 Host
	USB 3.0	1 x USB 3.0 Host
	USB OTG	1 x USB OTG for trouble shooting
	High Density Interface	DI x5 (2DI(Wet contact)+3DI(Dry contact)) DO x4 1 x CANbus (supports raw CAN, J1939, OBD-II/ISO15765, firmware configurable) 1 x USB 2.0 Host 1 x RS-232 TX, RX, RTS, CTS
Wireless Communication	WLAN Bluetooth	IEEE 802.11 a/b/g/n/ac Dual Band 2.4/5GHz and MIMO Bluetooth V5.0 BR/EDR+BLE
	WWAN (Optional)*	LTE FDD: B1/B2/B3/B4/B5/B7/B8/B20/B28(A+B) LTE TDD: B38/B39/B40/B41
GNSS	Satellite System	GPS, GLONASS w/ max 75 channels
Audio		1 x MIC IN 1 x Line Out (drive up to 10w speaker)
Power System	Voltage Input	9~36 input range for 12/24V car power
Mechanical	Dimensions (W x D x H)	180 x 115 x 50 mm (without IP cover) 180 x 190 x 50 mm (with IP cover)
	Weight	0.9kg (without IP Cover) 1.15kg(with IP Cover)
Environment	Operating Temperature	-20 ~ 60 °C
	Storage Temperature	-30 ~ 70 °C
	IP Rating	IP54 with IP Cover
	Certifications	CE, WEEE, ROHS, UKCA, Safety: CB E-Mark (E13) (12/24V System), ISO 7637-2

Dimensions

Unit: mm



Flexible I/O



TREK-20 Display

7" Smart Display Paired with TREK-20



Features

- IP67-rated 7" XGA TFT LCD display capacitive touchscreen
- 1 click single-cable connection paired with TREK-20 Computing Box
- Built-in light sensor for automatic dimming
- Wide working temperature range (-20° C ~ 60° C)
- 16 user-programmable function hotkeys



Specifications

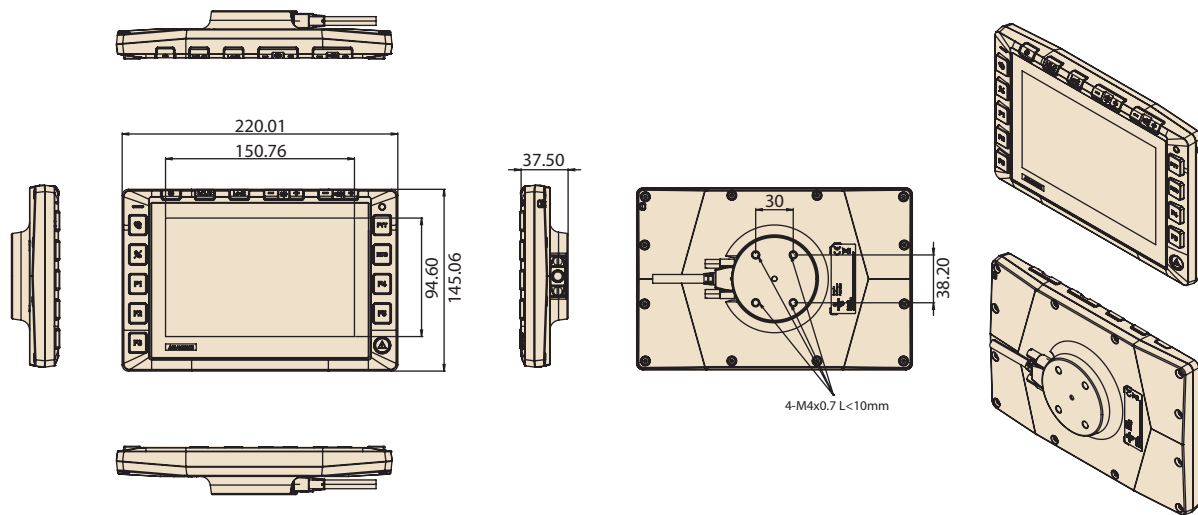
Display	Screen Diagonal	7
	Resolution (H)	1280
	Resolution (V)	800
	Pixels Per Inch, PPI	216
	Color Depth	24-bit
	Viewing Angle (degree)	88/88/88/88 (T/B/L/R)
	Brightness (cd/m ²)	800
	Contrast Ratio	800
Touchscreen	Type and Structure	Capacitive 2-point GFF type
	Thickness - Cover Glass (mm)	1.8
	Mohs Hardness Level	6H
	Impact Protection Level	IK07
	Modes	- Clinical Gloves - Damp Fingers - Stylus
Sunlight Readable	Feature	High Brightness and Anti-Reflective
LED Indicator	Power Status	1 x Green
Buttons	TOP Side Buttons	7 x (w/o backlight)
	-- Power/Reset	1 x Button
	-- Programmable Key Mode 1/2 selection	1 x Button
	-- Programmable Key Lock	1 x Button
	-- Programmable Key Audio Level up	1 x Button
	-- Programmable Key Audio Level down	1 x Button
	-- Programmable Key Brightness up	1 x Button
	-- Programmable Key Brightness down	1 x Button
	LEFT Side Buttons	5 x (w/ backlight and adjustable)
	-- Programmable Key Make/Answer a call	1 x Button
	-- Programmable Key Hand up a call	1 x Button
	-- Programmable Key F1	1 x Button
	-- Programmable Key F2	1 x Button
	-- Programmable Key F3	1 x Button
	RIGHT Side Buttons	5 x (w/ backlight and adjustable)
	-- Programmable Key PTT	1 x Button
	-- Programmable Key RTS	1 x Button
	-- Programmable Key F4	1 x Button
	-- Programmable Key F5	1 x Button
	-- Programmable Key Emergency Call	1 x Button
Sensor	Ambient Light Sensor	YES

Specifications (Cont.)

Rear I/O	Q'ty	x 1
	Interface	USB Host 2.0 (x 1) FPD-Link (x 1) Power In 12V
	-- Connector	HDMI Type
Mechanical	Dimensions (W x D x H)	220mm x 145.06mm x 37.5mm
	Weight	0.7kg
	Mounting	Design compatible with RAM mount
Environment	Operating Temperature	-20 ~ 60 °C
	Storage Temperature	-30 ~ 70 °C
	IP Protection	IEC 60529 Standard IP67
	Salt Water Protection	Yes
	Vibration/Shock	EN60721-3 (5M3) Comply with ETS 300 019-1-5
	Safety	CB
	Certifications	CE

Dimensions

Unit: mm



Ordering Information

Part Number	Descriptions
TREK-20-ALWB1A00	Qualcomm® SDM660, 4GB LPDDR4X, 64GB eMMC, WIF/LTE(EU), Android 10
TREK-20-ALWB1B00	Qualcomm® SDM660, 4GB LPDDR4X, 64GB eMMC, WIF/LTE(US), Android 10
TREK-203C-H000A00	7 inch 1280x800, PCAP touch Display

* Other region by project base

Optional Accessories

Part Number	Descriptions	Q'ty
1700027666-01	DC-Jack Power cable for internal testing	1
1750008818-01	SMA WWAN Antenna Dipole	2
1750008765-01	FAKRA LTE/GPS (GLONASS) combo antenna, 5 m	1
1750008763-01	FAKRA Wi-Fi antenna, 5 m	1
1700031880-01	Audio Cable	1
1700032123-01	HDC Cable	1
1700031542-01	Display Cable	1
RAM-Mount-07E	75mm VESA base, RAM-202U, and socket ARM	1