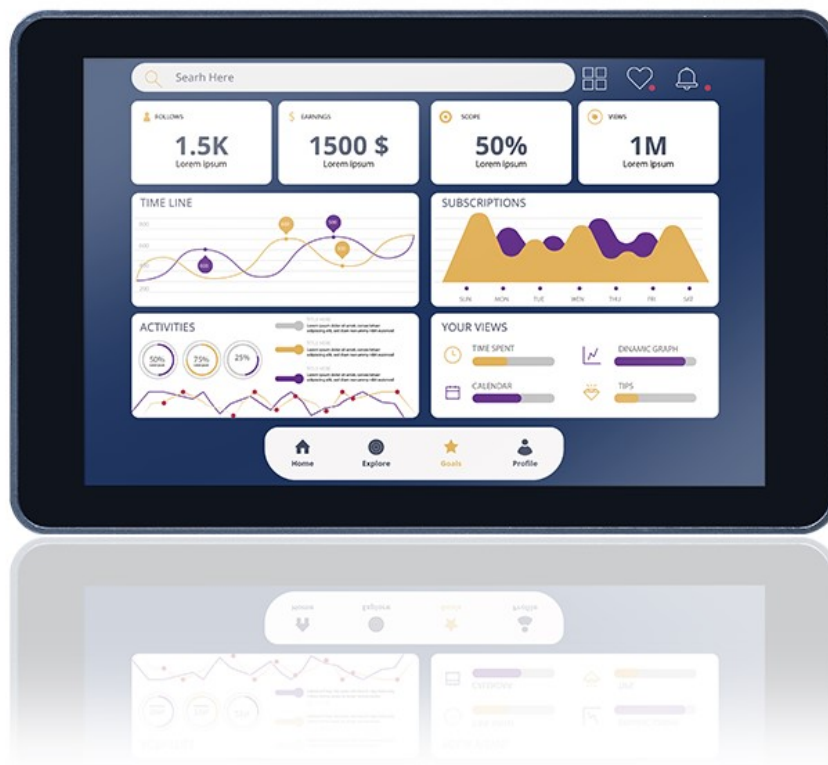# HMI-88-CT080H 8 inch HMI Smart Terminal

■ Over View:

DMI-HMI ARM BASE smart terminal supporting Android and Linux enables the user to develop their own faster, user-friendly and more maintainable system. Besides, it has integrated interfaces with wire or wireless network. The users are able to adopt it smoothly and easily.

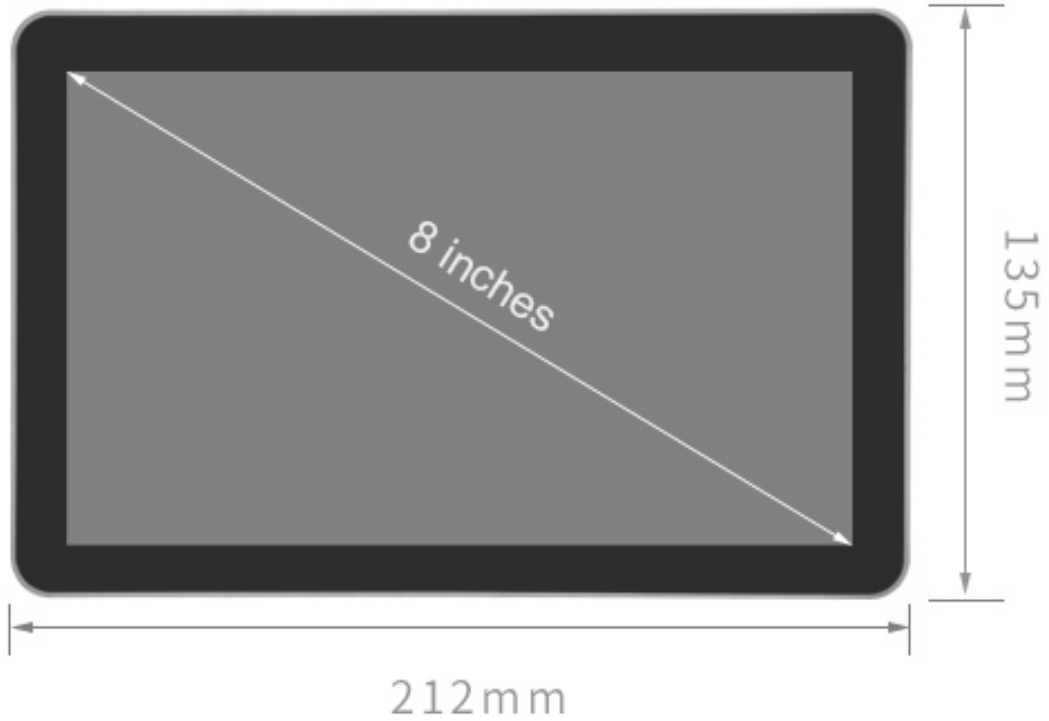The RTOS comes in basic interface (BT series) and complete interface (CT series)

DMA-HMI ARM BASE which comes in several sizes of LCD +capacitance TP (8.0,10.1, 13.3 inches) connects and coordinates main board with more flexible design and display.
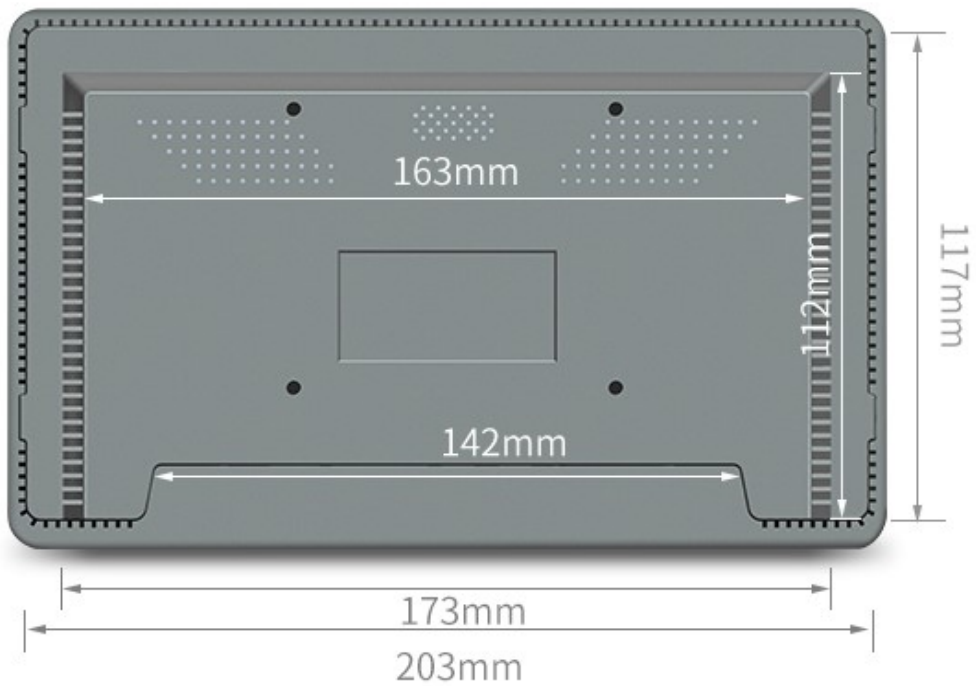
■ Outside View:

● HMI88AN-CT080H-C4-8-SC：

Chang Ying Technology Co., Ltd

11F-2, No.386, Shizheng Rd., Xitun Dist., Taichung City 407

Tel：04-22516589　　　　Fax：04-22518358　　　　Tax ID：24585448

■ **HMI Interface:**（Take HMI88AN-CT080H-C4-8-SC as an example）

135mm

212mm

Front

163mm

117mm

112mm

142mm

173mm

203mm

Back

Side
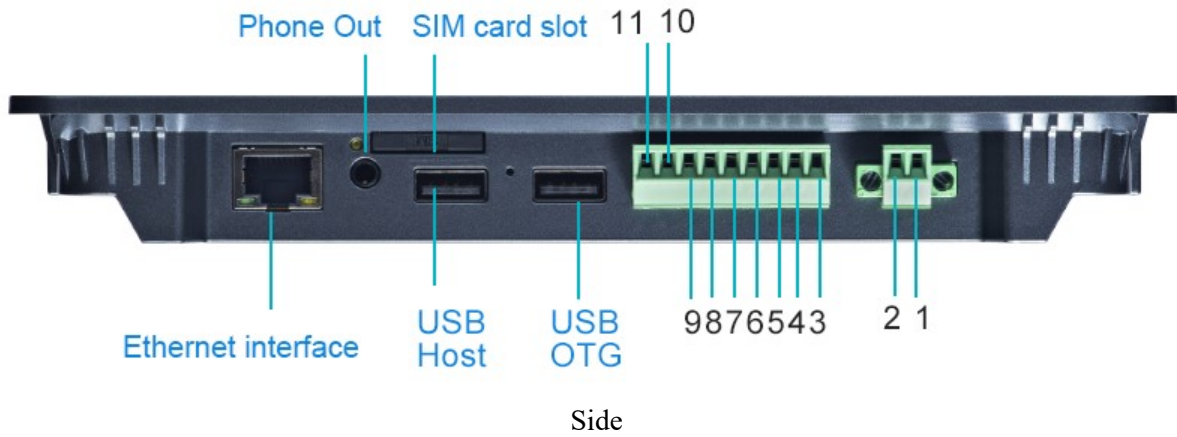
The default definition is as follows:

pin	definition	pin	definition
1	Power ground	7	RS232-RXD3
2	+12	8	RS232-TXD3
3	GND	9	GND
4	RS485-B	10	RS232-RXD1
5	RS485-A	11	RS232-TXD1
6	GND		

Dimension Drawing: （HMI88AN-CT080H-C4-8-SC）
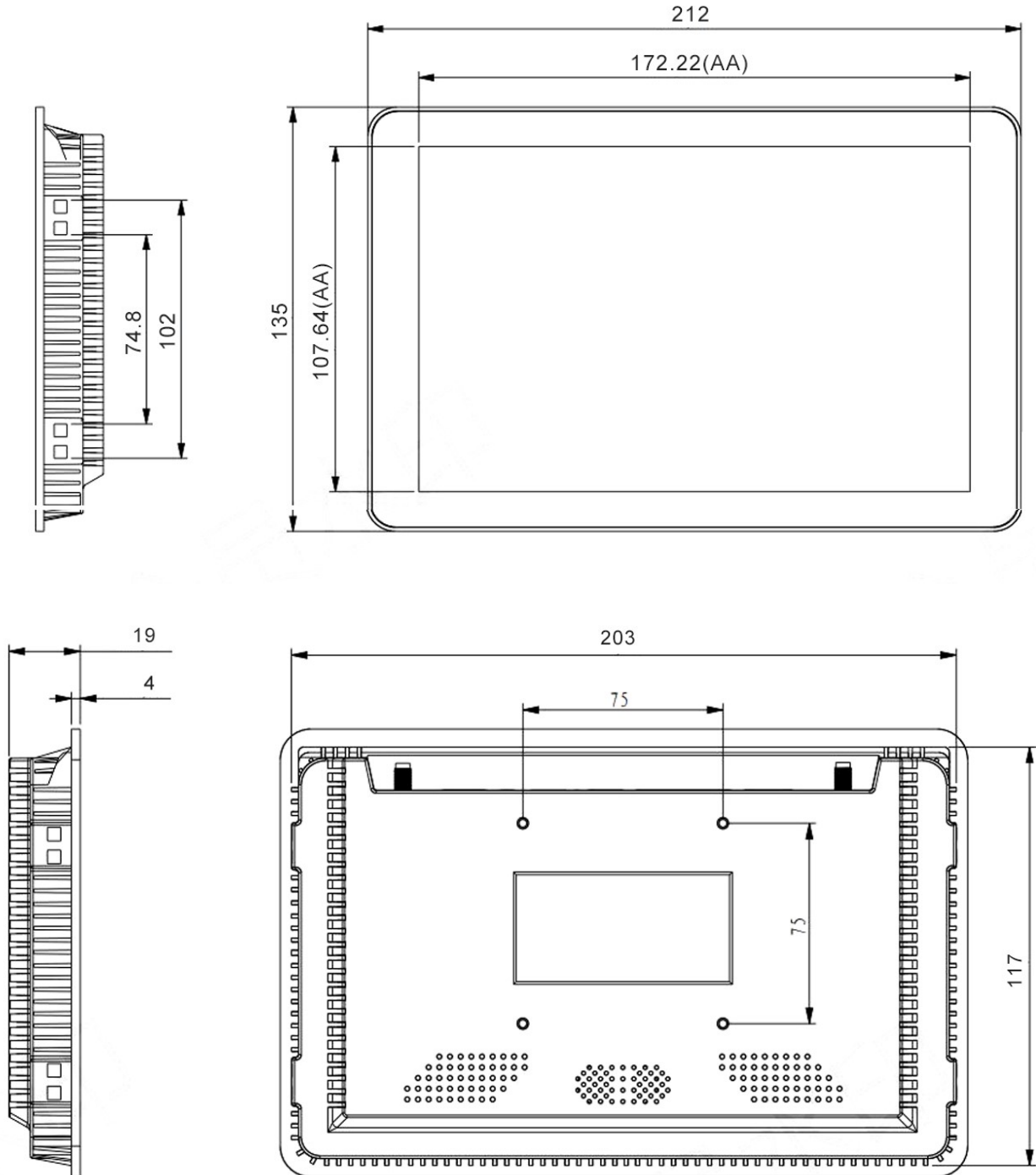
■ Hardware Specification

Item	Description
Standard	Cortex-A17　RK3288，4 core / 1.8GHz Support 2G/4G DDR3 memory. Standard: 2GB Support 16/32GB iNand Flash. Standard: 16GB eMMC GPU：Mali-T764, Support 2D / 3D image acceleration engine
Display	Support 8.0 inches of LVDS LCD with 16：10, resolution is 1280*800 (Brightness is 300Lum)
TP	Capacitive touch, G+G structure, surface hardness is 6H；5-point touch
Serial port	Standard: RS232*2/RS485*1
Ethernet	1 built-in 1000M Ethernet to achieve remote data transmission andremote table control
WIFI +BT	Embedded dual-band 2.4G WIFI+BT4.0 Bluetooth module(AP6236 module)
USB	USB HOST 2.0 for system update as well as externally connect to mouse, USB flash drive and the device with USB interface.
Audio	Support audio power amplifier that connects to speaker as well as support recording; 3.5mm headset output
4G	Adapt FDD-LTE/TDD-LTE/TD-SCDMA/EDGE/GPRS/GSM wireless terminals with multiple network systems **(optional)**
Other	Independent external RTC clock, built-in large battery capacity, Model: ML621-TZ1
Power & work environment	6V-30V wide-range voltage supply, working temperature: -10℃～70℃ , working humidity：45%-80% RH, Storage temperature：-20℃～70℃
Dimension	212mm x 135mm x 27mm

Software Specification

Item	Descriptions
System	Android
Version	7.1.2
Kernel Version Linux 4.4.143	✓
File format Ext4	✓
4G internet phone Support full Netcom(optional)	✓
WIFI 2.4G	✓
Bluetooth Support 2.0 SPP and 4.0 BLE main mode function	✓
Ethernet Gigabyte Ethernet	✓
Audio Support sound playing and recording	✓
Touch control Support capacitive multi-touch control. 5 points touch controls are set.	✓
USB HOST Support mouse, keyboard and USB drive in HID device	✓
OTG Support ADB debug, MTP review and FT232 USB turning serial port	✓
Serial port Support 3 selections of RS232 and RS485.	✓
G3D drive Support 3D speed up	✓
RTC battery Support design of time with writing /reading reservation	✓
USB Camera Support preview, photo and video recording (optional)	✓
Boot LOGO Support boot LOGO customization	✓
APK installation Support silent installation and normal installation	✓
Reboot Support settings for reboot process. The user can design his own reboot process	✓
SDK development kit Functions mentioned above come with holistic SDK development kit, manual and demo video	✓

Notice:

1. The RS485 function of the HMI only provides the RS485 communication protocol for interface communication on the hardware level. The HMI converts the packet data sent by the UART into RS485 potential signal through the RS485 conversion module, and then communicates with the RS485 device. HMI currently does not provide RS485 upper layer protocols, such as Modbus etc. If you need these feature agreements, please let us know at the time of purchase.

2. The HMI of DMATEK provides google play services, developers can develop applications using the google API and execute at the HMI of the DMATEK.