

TAICENN ODM Customized Product Introduction

Project Name:

Industrial Panel PC for Rail Ultrasonic Inspection applications

Customer ID: A199 (China)

Project Introduction and request:

This project is for Railway & High-speed Rail Ultrasonic Inspection Applications. It is used to monitor the railway crossing status, to assure the safety and security of trains. Together with the technology of IOT (Internet of Things) and Cloud server system, it can fulfill remote monitor, remote acquisition, and remote notification, improve the efficiency of Railway crossing monitoring management.

Project consult and discussion:

After several round negotiation and discussion with our clients, TAICENN decided to ODM design a new solution to this project. Due to the requests on the out-door application environment, so the machine need to be used in wide-temp. situation. Besides, the machine must be full-sealed with aviation connector, to prevent any water, dust, humidity... etc. Also, the brightness should be adjustable, because the machine will be used under strong light. So, the device LCD screen must be special designed. Until now, the client receives the sample, and the feedback is very nice. And we looking for a perfect performance in client's qualification.

Customized solution Specs:

- 1- 19" TFT WXGA LCD, Resolution: 1440 x 900
- 2- Brightness up to 1000 cd/sqm, support brightness adjustable
- 3- High-temp. five-wire resistive touch screen, long durability and good stability
- 4- High-performance Intel I5 processor, 4GB DDR3L Memory, 256GB MLC SSD
- 5- Interface terminal utilize alloy metal water-proof aviation connector, unique hook lock design;
- 6- Fan-less and full-sealed design; IP65 rating protection;
- 7- Special 4U grip in the front panel design.

TAICENN Mode: TPC-R190H-199

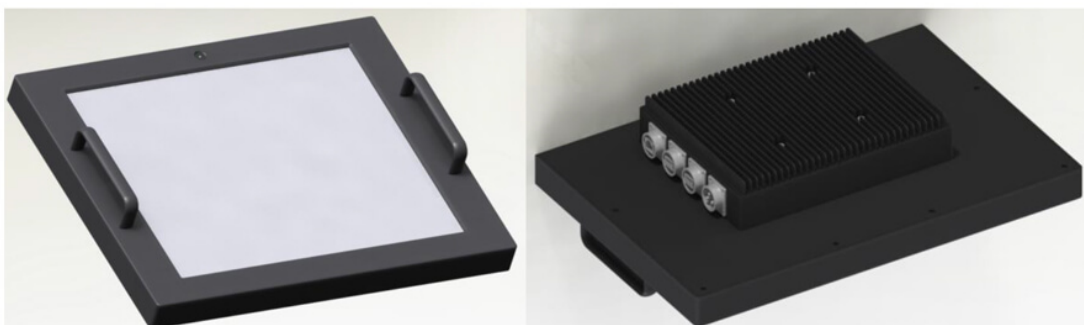
Customer application machines for reference.



Special aviation-connector plug design:

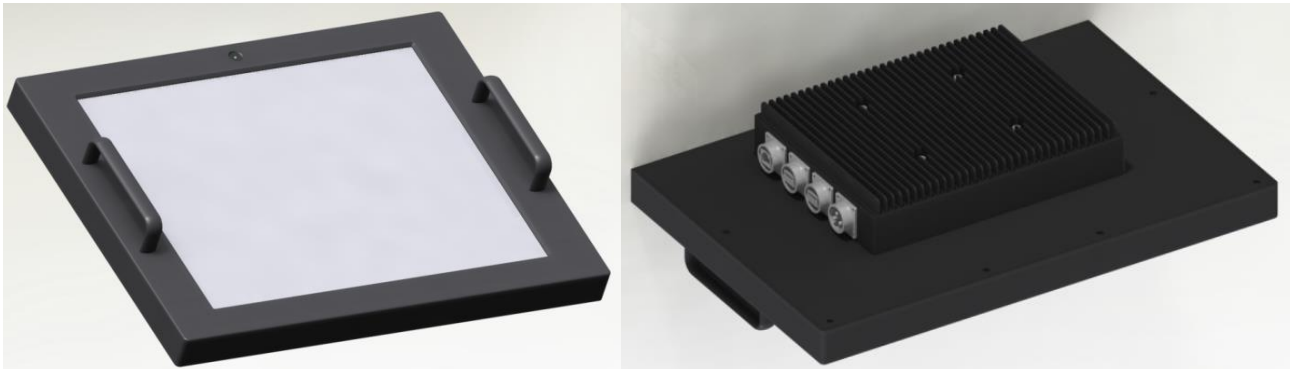


TAICENN Special Designed Product:



Key features:

- 19" TFT WXGA LCD, Resolution: 1440 x 900
- Brightness up to 1000 cd/sqm, support brightness control
- High-temp. five-wire Resistive touch screen, long durability and good stability
- High-performance Intel I5 processor, 4GB DDR3L memory, 256GB MLC SSD
- Interface terminal utilize alloy metal water-proof aviation connector, unique hook lock design; Fan-less and full-sealed design; Ip65 rating protection



Specification

System

Processor	On-board Intel Broadwell I5-5200 U, 2.2Ghz (Max. up to 2.7Ghz)
Memory	Standard with DDR3L 4G, up to 8GB
Storage	Standard with 256GB MLC SSD, can expansion
Display	LVDS screen, resolution 1440 x 900
LAN	1 Intel 10/100/1000 Mbps network interface
USB	2 x USB 3.0 ports
Watchdog	Programmable from 1 to 255 sceonds
I/O	1x 3-cell aviation connector, 1x RJ45 aviation connector,, 2x USB aviation connector

Structure and power

Panel	Aluminum alloy, box construction
Mounting	Standard VESA (100 x 100), M5 screw hole
Cooling	Fan-less design, large-area fin heat sink
Power	DC 12V to 24V power input, 40w consumption
Case size	482.5 x 380 x 90 mm (W x H xD)
Connector	Water-proof aviation connector

Grip	Front 4U grip
Weight	10kg
LCD	
Size/Type	19" TFT WXGA LCD
Resolution	1440 x 900
Display colors	16.7 M
Display area	408.24 x 255.15 (H) x (V)mm
Response time	5 ms
Backlit	LED
Backlit MTBF	80 000 hours
Brightness	1000 cd/sqm
Contrast ratio	1000 : 1
Pixel pitch	0.08265 x 0.24795 mm
Viewing angle	85/85/80/80 (L)(R)(T)(B) (Typ.)

Touch

Size/Type	19" Resistive screen
Touch mode	Stylus pen or Finger
Response time	≤ 15ms
Linearity	≤1.5mm% ; ≤1.5mm%
Operating Force	≤50g
Transparency	> 82%±2%
Fineness	9.5%±2%
Surface hardness	≥3H
Durability	35 million times

Environmental

Working temp.	-15°C~+50°C
Storage temp.	-25°C~+60°C
Relative humidity	10~95%@10°C (No condenstation)
Vibration	50~500Hz, 1.5G, 0.15mm peak to peak
Shock	10G/peak (11 ms sec)

Aviation connector



Dimension

