

# Embedded Industrial PC

Embedded computer solutions for a wide range of industrial applications.

**7" PC-701 / PC-702**

ISO 7637-2 • Aluminum Alloy



As a part of industrial control system, achieve better management for engineers and managers

- Convenient embedded mounts
- Capacitive touch screen with G+G tech
- Rich & high-performance interface

### Smart connection and communication

PC-701 & PC-702 is a 7" smart and rugged industrial touch PC , integrates rich function like WIFI, 4G LTE, Bluetooth for wireless communication; HDMI Output, USB Host and LAN ports for various real-time transmission; Besides, it configured with standard professional interface: 2 RS232 & CAN/ GPIO ports for different industrial applications.

### System support

PC701: Linux Debian 8.0/ Android 5.1.1  
PC702: Windows 10, 32-bit (unactivated)

### Powerful CPU

PC701: NXP i.MX 6DualLite 800MHz processor  
PC702: Intel Atom Z8350 1.44GHz

### Screen

7" IPS panel with LED backlight and HD1280×800 physical resolution

### Touch

10 points Multi-touch capacitive screen with friendly user experience

### Power Consumption

Normal mode: ≤10W  
Standby mode: ≤5W

### Multi Mounting

75mm VESA mounting support

### Power Over Ethernet (PoE)

Describes of any several standardized or ad-hoc system which pass electrical power along with data on Ethernet cabling LAN-2 supports PoE optional.

### HDMI 1.4 OUT

Support up to 720p

### RS232

A form of serial data transmission, it is used to talk to other modules, such as HMI, computers or drives...

### RS485/RS422

It could communicate to multiple devices even with faster transmission speed and longer cable length, which is widely used in Industrial Control Systems.

### CAN

The CAN bus protocol allows ECUs to communicate with each other without complex dedicated wiring in between.

### GPIO

Stands for General-purpose input/output, it is popular in controlling digital signal behavior on an integrated circuit or electronic circuit by acting as input or output at run time.

### Wi-Fi

802.11a/b/g/n, 2.4GHZ

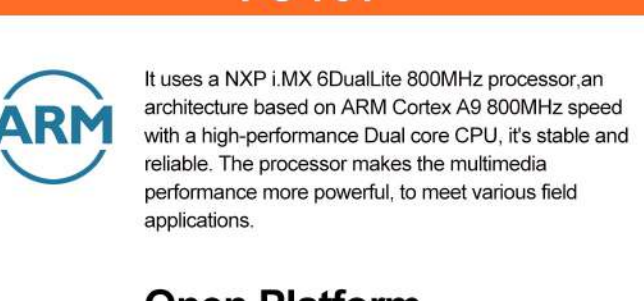
### Bluetooth

Bluetooth 4.0 2402MHz-2480MHz

### Cellular Connection

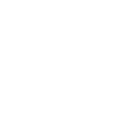
LTE, DC-HSPA+, WCDMA, GSM

## Performance

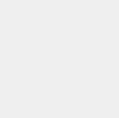


### PC-701

### PC-702



It uses a NXP i.MX 6DualLite 800MHz processor, an architecture based on ARM Cortex A9 800MHz speed with a high-performance Dual core CPU, it's stable and reliable. The processor makes the multimedia performance more powerful, to meet various field applications.



It uses an Intel Atom Z8350 1.44GHz processor which is based on X86 architecture. Windows 10 runs great on the reliable industrial level Intel Core CPU, with excellent computing and processing capabilities and its low power consumption make it play an important role in industrial management.

### Open Platform

- SmartEmbedded system provides full-line R&D technical services including system structure design, PCB design, hardware design & software design, as well as system integration.

### High Efficiency

- Embedded Computer solutions offer a secure and energy-efficient processing foundation for electronic devices. That are highly specified by customers' needs

### Lower Consumption

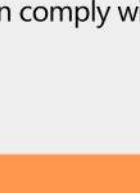
- Consumption even no more than 10W, is able to enhance productivity and cost effectiveness. With the lower temperature on its metal housing, it create a great distribution to industrial safe.

### Multiple tasks

- Based on the Windows 10 OS, to make the device to run multiple interface and programs simultaneously. It is convenient for the operator to monitor and control the manufacturing process in various industrial fields.



ESD testing comply with IEC61000-4-2 GB-T17626.2



Electrical transient conduction testing comply with ISO 7637-2

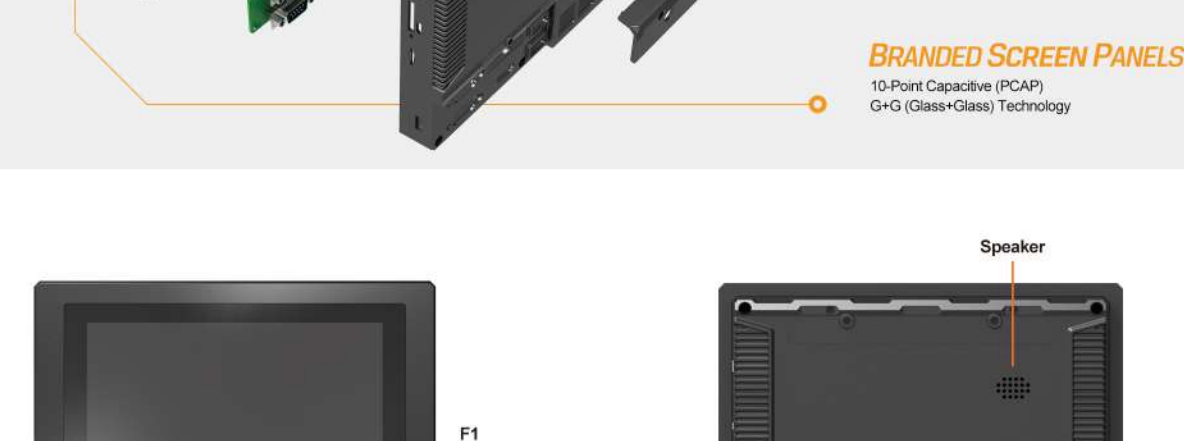


Anti Vibration testing comply with EN 60068-2-6; GB-T2423.10

Certification comply with FCC & CE

## Structure

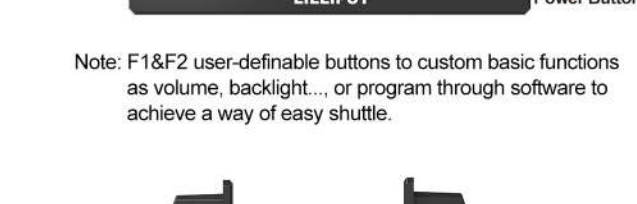
# RUGGED INDUSTRIAL DESIGN



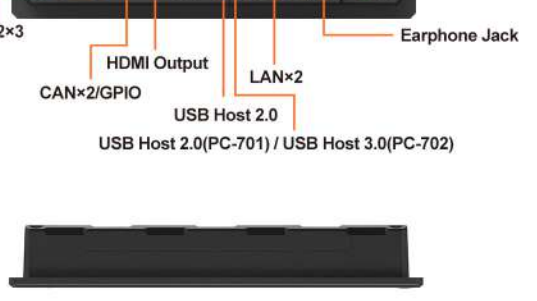
**PCB BOARD**  
8 Layers PCB with 1.60mm Thickness.

**ALUMINIUM DIE CASTING**  
Aluminum Alloy  
Strong and Rugged, Light, Unbody, Shielding

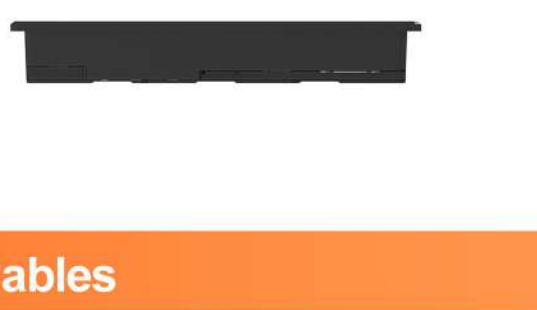
**BRANDED SCREEN PANELS**  
10-Point Capacitive (PCAP)  
G+G (Glass+Glass) Technology



Note: F1&F2 user-definable buttons to custom basic functions as volume, backlight..., or program through software to achieve a way of easy shuttle.



SIM Card Slot  
Micro USB Card Slot (only for PC701)



## Various Extended Cables

### COM1 RS232



IO101 port connects with the included DB9 to RS232 cable to extend as three-way RS232 interfaces.

### COM2 RS232



IO102 port connects with the optional DB9 to RS232/RS485 cable to extend as RS232, RS422 and RS485 three-way communication interfaces.

Note: RS422 and RS232(2) are not available simultaneously, as well as RS485 and RS232(3). It is an alternative option because of using the same way.

### CAN×2 / GPIO



The port compatible with both GPIO and 2×CAN BUS interfaces (only for PC701).

GPIO supports 4-input(24V/5V) and 6-output(1/3.5V/10/12).

CAN1-L (18), CAN1-H (20), CAN2-L (17), CAN2-H (19).

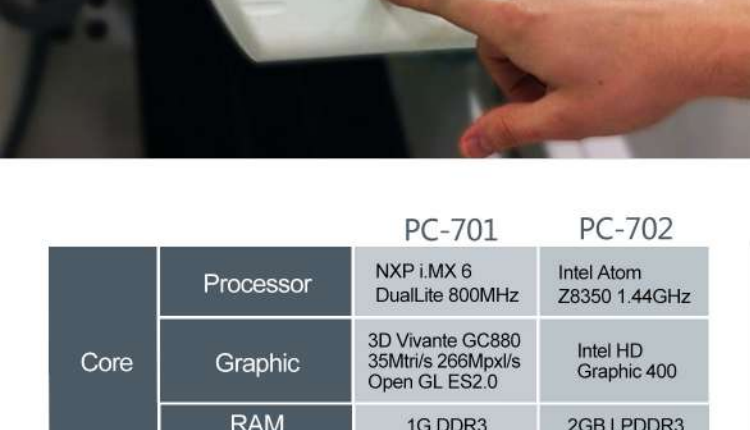
### LAN ×2

LAN Port1 100M Ethernet LAN Port2 100M Ethernet, PoE for optional.

Note: If one LAN port for Internet, the other LAN port for Internet. Both of them need to be customized under Android OS (PC-701).

Only LAN port1 is available when the both LAN ports are using simultaneously under Android OS (PC-701).

## Specification

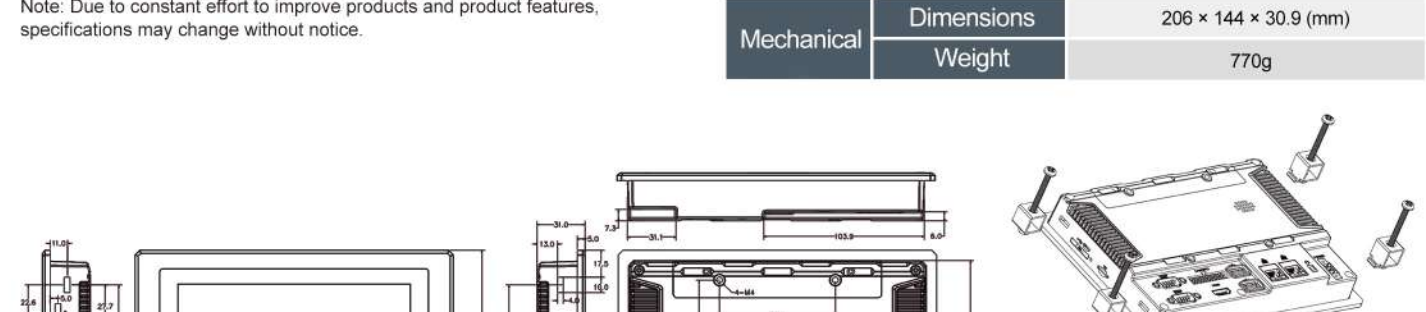


- As one of the important part within industrial management system in different fields, eg. intelligent industrial control system, electric power industry, manufacturing, medical treatment, HMI, port terminal, etc.

	PC-701	PC-702	
Core	Processor	NXP i.MX 6 DualLite 800MHz	Intel Atom Z8350 1.44GHz
	Graphic	3D Vivante GC9880 35Mtri/s 266Mpx/s Open GL ES2.0	Intel HD Graphic 400
	RAM	1G DDR3	2GB LPDDR3
	ROM	8GB	32GB Emmc
	OS	Android 5.1.1 Linux Debian 8.0	Win10, 32-bit (unactivated)
Display	LCD panel	7" LED Backlit	
	Resolutions	1280×800	
	Brightness	400cd/m <sup>2</sup>	
	Contrast Ratio	800:1	
	View Angle	160°/ 160° (H/V)	
Wireless (Optional)	WiFi	802.11a/b/g/n 2.4GHz	
	Bluetooth	4.0 2402MHz-2480MHz	
	Cellular	4G/ 3G/ 2G	

Note: Due to constant effort to improve products and product features, specifications may change without notice.

	PC-701	PC-702
Rich Interface	USB	USB Host 2.0 × 2 USB Host 2.0 × 1 / 3.0 × 1
	TF card	1.8v / 2.95v, up to 128G
	SIM card	1.8v / 2.95v, mini SIM
	HDMI	HDMI 1.4 Output
	GPIO	Input×4, output×6
	CAN	2.0B×2     2.0B×2(Optional)
Mounting	RS232 RS485 RS422	RS232×4 RS232×3+RS485×1(Optional) RS232×3+RS422×1(Optional) RS232×2+RS485×1+RS422×1(Optional)
	LAN	100M×2
Power Supply	Bracket Support	75mm VESA
	DC in	9-36V
	Consumption	≤10W
Environment	PoE (Optional)	Power over Ethernet
	Operating Temp	-20°C - 60°C     -10°C - 60°C
Mechanical	Storage Temp	-30°C - 70°C
	Dimensions	206 × 144 × 30.9 (mm)
	Weight	770g



Mounting Size & Process  
1. VESA 75mm mounts  
2. Standard mounts  
3. VESA 75mm rail slot mounts

