



# ARM6000-C101-C5-2G16-3399-T-A

V1.1

## Industrial Panel Computer



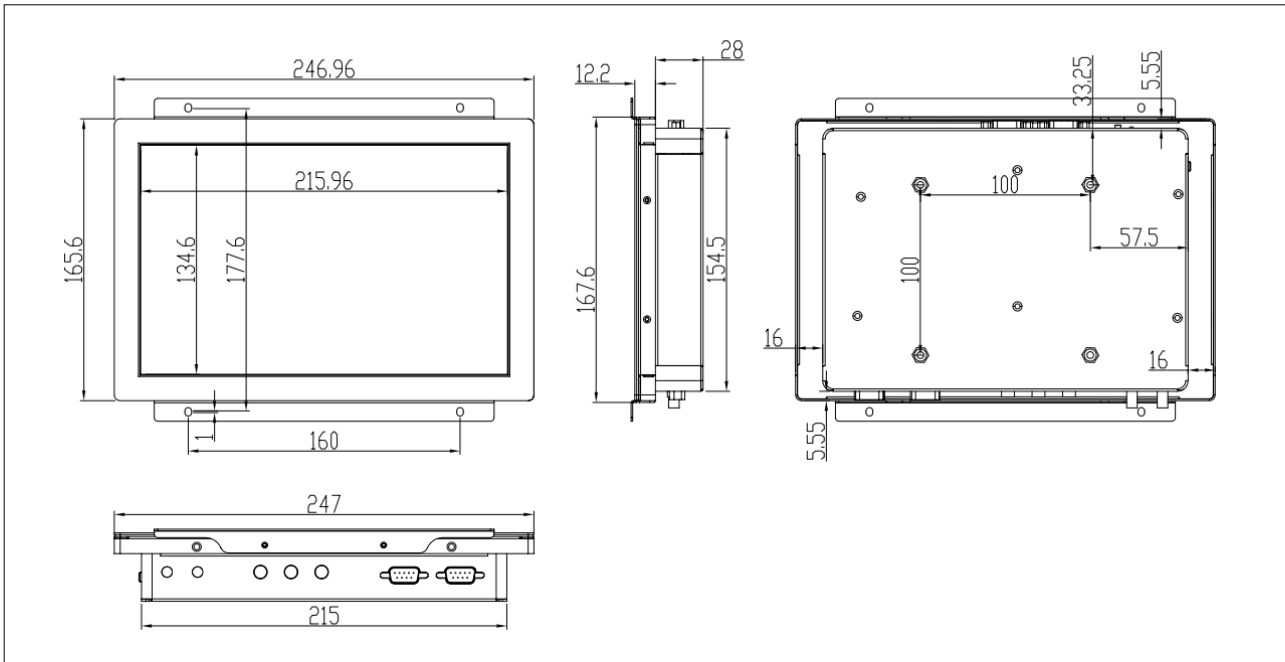
- ◆ Rockchip RK3399
- ◆ Rich I / O interfaces
- ◆ Powerful system customization function

**Specifications :**

CPU	Provides CPU	Rockchip RK3399 6-core processor, 2 * A72 (up to 1.8GHz) + 4 * A53 (up to 1.4GHz)	
	GPU	Mali-T860 GPU MP4 four core GPU, supports OpenGL ES1.1/2.0/3.0/3.1, OpenVG1.1, OpenCL, DX11,	
Memory	Type capacity	Onboard DDR4 2GB/4GB	
Storage	eMMC	Onboard eMMC 16GB	
	TF	1*TF, Max Support 128GB	
I/O	Ethernet	1 * 10/100/1000Mbps RJ-45 Ethernet Interface On board WiFi, support 2.4G WiFi, support Wi-Fi 802.11b/g/n protocol, Support Bluetooth 5.0	
	Audio	2 * 3.5 phonejack speaker interface (8Ω,6W), 1*MIC IN	
	USB	3*USB2.0, 1*USB3.0	
	MiniPCIE	Support 4G LTE4 / 5G module (Reserved)	
	COM	4*RS232 (DB9), ttyXRUSB1~ttyXRUSB4; COM1/2 can set RS485, COM1 default RS485, COM2 default RS232; COM4 can set TTL, default RS232	
	Display	1×HDMI, Support 4K 60Hz display and HDCP 1.4 / 2.2	
	OTG	1*USB3.0 (USB-A)	
	Key	1*Return	
	Dimensions (W x H x D)	247mm x 167.6mm x 40.2mm	
	Drill Hole Size (W x H)	218.96mm x 137.6mm	
	Installation mode	1.0kgreserve	
	NW	10.1"	
	OS	Operating system	Android 7.1.2, ubuntu 18.04
	Power Supply	Input voltage	DC 12V~24V
Maximum Power		20 Watt	
LCD	LCD Size	10.1" TFT-LCD	
	Resolution	1280 x 800	
	Support Color	16.7MB	
	Active Area (W x H)	215.96mm x 134.60mm	
	Backlight	LED	
	Backlight MTBF	30000hrs	
	Pixel Pitch(H x V)	0.1695 x 0.1695	
	Luminance	350cd/m <sup>2</sup>	
	Contrast Ratio	800:1	
	Viewing Angle	(L) 85/(R)85/ (T) 85/(B)85	
Touchscreen	Touh Type	Multipoint Capacitive Touch Screen	
	Transmittance	>75%	
	Touch Interface	USB	
	Driver Support	Windows 7, Windows 8, Windows 10, Linux, Android	
	Detectable Touch Points	10 Points	
	Surface Hardness	Mohs' Number 7	
	Touch life	100 million times of touch	
Environmental	Operating temperature	-20 ~ 60°C (-4°F~140°F)	
	Storage Temperature	-30 ~ 80°C (-22~ 176°F)	
	Humidity	5~95% (no condensing)	
	Shake	SSD applied: 1.5 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis	
	Shock	SSD applied: 10 G, IEC 60068-2-64, Half-sine wave, 11ms duration	
	EMC	Class B	
	Water-proof	Front panel IP65	

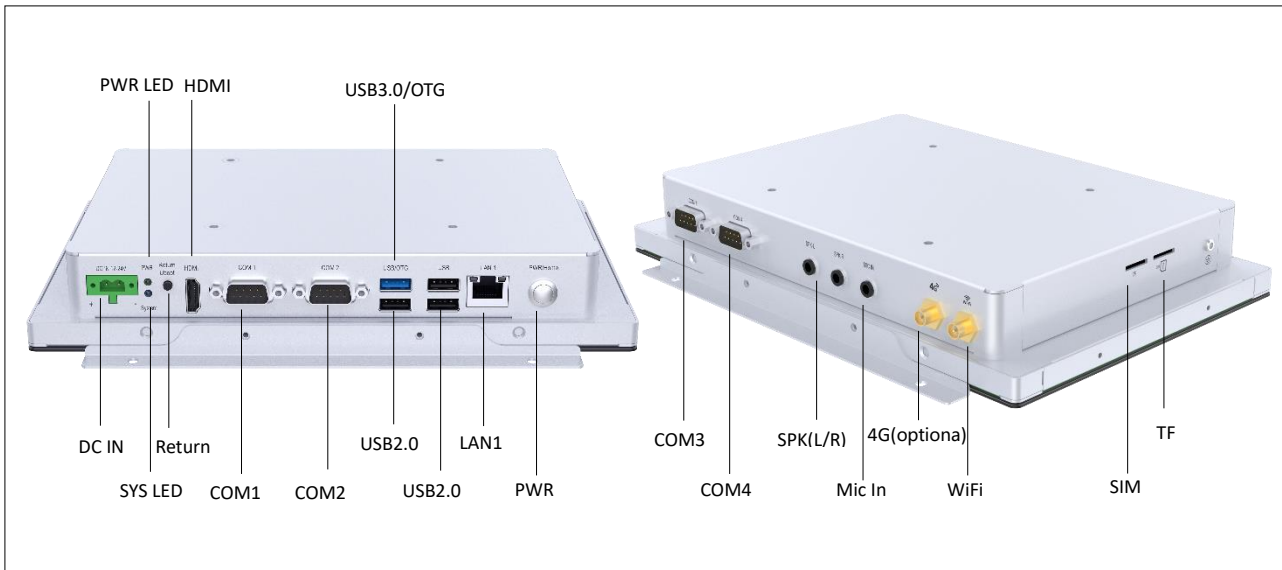


Dimensions: Unit: mm





### Interface diagram:



### Ordering Information:

Number	Product Code	Description
6061500010	ARM6000-C101-C5-2G16-3399-T-A	Rockchip RK3399 6-core /2G Memory/16G eMMC/1*TF/1*SIM/1*OTG/1*LAN/3*USB2.0 1*USB3.0/4*COM/HDMI /2* speaker /10.1" Capacitive touch /1280*800/DC IN 12V~24V

### Optional Equipment:

Number	Specifications
5109900013	Qiaowei KPL-040F-v1 40W adapter kit, DC out 12V, with national standard power cord
2081900014	H31box08-09, φ 31 cavity horn Pu side 8 Ω 5W, 38 * 72 * 18.7mm
5040100017	Fibocom L716 4G kit, sucker antenna
5040100018	Fibocom L716 4G kit, paddle antenna
5040600002	Fibocom FG650p-CN-01 5G Kit
2030700017	External antenna-2.4G/5.8G suction cup wifi antenna, L= 3M internal pin

### Nodka Android features

- ◆ Support multiple 4G/5G modules
- ◆ Support 4G/5G routing, with network heartbeat, permanent online
- ◆ Rich system customization functions
- ◆ Hardware watchdog app call
- ◆ Upgrade Android system online, so easy, support remote upgrade
- ◆ Log supports network upload and remote operation
- ◆ Built in software test tool
- ◆ Roo permission function
- ◆ Support screen rotation
- ◆ Support status bar navigation bar on of



**System API:** // Client APP can call the following interfaces to quickly implement functions.

### Timing switch

The system is equipped with timing switch app. At the same time, the customer app can directly call the following code to realize timing restart.

```
Intent it = new Intent();  
    it.setAction("android.intent.action.auto_power_shut"); // Broadcast name  
    it.putExtra("effective", true); // Start or cancel a scheduled operation  
    it.putExtra("power_type", 4); // 1: immediate restart 2 : t immediate shutdown 3: timed shutdown 4 : timed restart  
    it.putExtra("power_time", (String) null); // Turn on time  
    it.putExtra("shut_time", "5:00:00"); // Turn off time  
    sendBroadcast(it);
```

### Hardware watchdog app call

The Android layer of the system has its own hardware watchdog. At the same time, the client application can also call the hardware watchdog. If the hardware or software fails, the hardware watchdog will automatically restart and reset.

```
android.intent.action.NDJ_APP_ALIVE
```

// App sends broadcast to the system and begins to take over dog feeding. If the broadcast is not sent within 10 minutes, the system app stops dog feeding and automatically restarts.

eg: the app starts and sends `android.intent.action.NDJ_APP_ALIVE`, once every 1min.

### System online upgrade remote broadcast

The system is attached with the online upgrade application. If there is a version update, click online upgrade to update the system and support the background broadcast interface. You can call the operation remotely and realize the remote online upgrade of the system.

```
android.intent.action.NDJ_REQUEST_VERSION // After receiving this broadcast, return to this broadcast. The name is "current_version" to get the client version number.  
android.intent.action.NDJ_SYSUPDATE // After receiving this broadcast, automatically compare, download and upgrade the system
```

### Infrared screen firmware online upgrade remote broadcast

The system is equipped with online upgrade app, click upgrade button to update the infrared screen firmware; meanwhile, it supports background broadcast upgrade, remote call operation and remote online firmware upgrade.

```
com.pqlabs.getdevice // After receiving, return the broadcast "com.pqlabs.getdeviceresult", with the string type parameter version, which is the version number of the current firmware  
com.pqlabs.updatefirmwareaction //After receiving, it will automatically find the corresponding firmware from the FTP server and update it
```



### Remote log upload broadcast

The system comes with toolbox log. Click the log upload button to upload the log to the server. At the same time, it supports background broadcast upload and can call the operation remotely.

```
android.intent.action.NDJ_LOG_UPLOAD //After receiving, upload the current log to the network server
```

### Root authority

The system default APP has Root permission

### Open status bar, navigation bar

```
adb shell am broadcast -a action.SHOW_STATUSBAR
```

### Permanently hide status bar, navigation bar

```
adb shell am broadcast -a action.HIDE_STATUSBAR
```

### Revision information:

Edition	Date	Modified by	Content
V1.0	2022.08.09	XuFeng.Wu	First release
V1.1	2022.09.27	XuFeng.Wu	The serial port is adjusted to 4, and the function description of open auto start setting is added