

Industrial Computer

F4934-A-21.5IL



Introduction

F4934-A-21.5IL is an all-in-one screen is a low-power industrial computer independently developed by the Four-Faith company. Combining the wireless cellular network, routing technology, and industrial computer technology, liquid crystal display together on one industrial computer device. Using Quad-core ARM Cortex-A17 RK3288 processor, supports High-speed computing, can provide a smooth and powerful video experience. Contains 4 USB, 3 RS232, and 1 RS232/RS485, network, audio, and other interfaces, which can be connected to the scanner gun, printer, camera, keyboard, mouse, and other devices. Built-in Android operating system and provide relevant API and development documents.



Industrial-grade Design

- ▶ Use high-performance components
- ▶ Wide power input (DC 9 ~ 24V)
- ▶ 21.5-inch MIPI screen, 1920*1080 HD resolution
- ▶ Built-in Android 5.1 (standard), Android 7.1(optional) operating system
- ▶ Wide operating temperature (0 ~ 50 °C)



Stability & Reliability

- ▶ WDT Watchdog design to ensure system stability
- ▶ Adopt a complete anti-drop mechanism
- ▶ Ethernet interface built-in 1.5KV electromagnetic isolation protection
- ▶ RS232/RS485 interface built-in 15KV ESD protection
- ▶ Built-in 15KV ESD protection for SIM/UIM card interface
- ▶ Antenna interface lightning protection (optional)



Standard & Convenience

- ▶ Power on to enter working status
- ▶ Support 10/100/1000Mbps Ethernet
- ▶ Provide 4 standard USB 2.0 interfaces
- ▶ Provide multiple RS232 or RS485 interfaces
- ▶ Provide dual channels 8-ohm 5W power amplifier interface

Industrial Computer F4934-A-21.5IL



High Performance

- ▶ Open Android environment can develop and install your own applications.
- ▶ Local storage supports TF card (optional)
- ▶ Open Android environment, can develop and install applications by yourself
- ▶ Support PPTP, L2TP, IPSEC, GRE, OPEN VPN and other VPN features
- ▶ Support 802.11 b/g/n WIFI network, and provide multiple encryption methods
- ▶ Provide rich external interfaces to meet customer application needs
- ▶ Support 3G/4G dial-up Internet
- ▶ Support APN/VPDN private network dial-up
- ▶ Support NTP, built-in RTC
- ▶ Support timing restart, timing switch machine function
- ▶ Support multi-LAN/WAN connection methods

Product Specification

Cellular Specification	
Items	Contents
Module	Industrial grade wireless module (Can choose single module, dual module and non-module)
Standard	Support TDD-LTE/FDD-LTE single-module, multi-module or full network communication
Theoretical Bandwidth	FDD LTE (DL 100Mbps, UL 50Mbps) TDD LTE (DL 61Mbps, UL 18Mbps)
TX	< 24dBm
RX	< -109dBm
WIFI Specification	
Items	Contents
Standard	IEEE802.11b/g/n, 2.4G
Bandwidth	IEEE802.11b: 11Mbps
	IEEE802.11g: 54Mbps
	IEEE802.11n: 150Mbps
Encryption	WEP, WPA, WPA2
Power	15 dBm (Maximum)
Sensitive	<-70dBm @ 54Mbps

Industrial Computer F4934-A-21.5IL



Hardware System	
Items	Contents
CPU	Rockchip RK3288
FLASH	8GB eMMC
DDR3	2GB
TF Card	32GB (Optional)
Display Size	21.5 inch
Resolution	1920 x 1080
Touch Screen	Capacitive touch screen
Visibility Angel	85/85/80/80 (L/R/U/D) wide angle
Color	16.7M (6bit)
Response Time	5 ms
Luminance	250 cd m2 (Default) 500 cd m2
Surface Hardness	≥ 6H

Interfaces	
Items	Contents
Ethernet	1 x RJ45 (10/100/1000Mbps) , MDI/MDIX, Built-in 1.5KV electromagnetic isolation protection
Serial	3 x RS232, 1 x RS485, 15KV ESD protection, using standard DB9 terminal, speed rate: 2400-115200bits/s
Indicator	“PWR”, “SYS”, “Online”
SIM/UIM	Standard drawer user card interface, support 1.8V/3V SIM/UIM card, built-in 15KV ESD protection
USB	4 x USB 2.0, 1 x USB 2.0 OTG
TF card	Standard bullet TF card interface, support for various TF cards
Audio	1 speaker interface, 1 mic interfaces
Amplifier	Dual channels 8-ohm 5W amplifier
Display	HDMI: 1920x1080, 1366x768, 1280x720, 1024x768
Antenna	Cellular: two standard SMA antenna connectors, characteristic impedance 50 Ohms WIFI: 1 standard SMA antenna interface, characteristic impedance 50 Ohms
Power	AC 220V (Default) DC 12V

Industrial Computer F4934-A-21.5IL



Physical Properties	
Items	Contents
Shell	Metal shell, shockproof design
Size	533.6mm × 320.9mm × 53.2mm (Without antenna and mounting parts)
Others	
Items	Contents
Working Temp	0 ~ +50°C
Storage Temp	-10 ~ +60°C
Humidity	95% (No condensation)

Topology

