TECHNICAL SPECIFICATION

ATREYO®
SOLUTIONS THAT SIMPLIFY

Industrial Computer	AIC-1708

Features

- **Cortex-A53 quad core 1.5Ghz**
- **Up to 4GB RAM**
- **4G LTE/GPRS and GNSS) (optional)**
- **WiFi and BL/BLE connectivity**
- **Ethernet 1000Mbps**
- **OS support: Ubuntu Linux**
- **SSD M.2 support (optional)**
- **2 x RS485**
- **4 x USB host**
- **HDMI 2.0 with 4k display support**
- **Wide power supply range up to 36V**
- **Aluminium enclosure, fanless design**

The AIC-1708 is multipurpose Industrial Computer with inbuilt M.2 SSD storage for data. It is based on quad core ARM Cortex-A53 64bit processor. The computer is richly equipped with wireless interfaces. It has WiFi 2.4GHz and 5GHz, 4G LTE/GPRS, Bluetooth 5.0 and GNSS.

This computer in addition to industrial use, due to it is built on an automotive class processor and audio out it can be used as a media controller in vehicles and at communication stations.

Description	Parameter
Processor	
ARM	Cortex A53 quad core
Target frequency	1.5GHz max.
RAM	
Memory size	2GB/4GB– refer model structure chart)
Memory type	LPDDR4
Graphics	
HDMI	HDMI 2.0
Graphics processor	G31 MP2;Supports OpenGL ES3.2, Vulkan 1.1, OpenCL 1.2
Support	Video processor: H.265 video decoder 4K@30fps, H.264 video decoder 4K@30fps, VP9 video decoder 720p@30fps,

Description	Parameter
	H.264 video encoder 1080p@60fps, MJPEG/JPEG Baseline encoder 4K@15fps
Internal storage	
eMMC	16/32/64GB (optional 8GB)
SD card	microSD card
USB	
USB port number	4
USB type	USB 2.0
Connector	USB type A (horizontal)
Protection	IEC 61000-4-2 level 4: – 15 kV (air discharge) – 8 kV (contact discharge)
USB overload	2A (common for 4 ports)

Description	Parameter
Serial interface	
Port number	2
Interface type	RS485
Data rate	600bps ~ 921600bps
Signals	A and B
Connector	Pluggable screw socket
Protection	IEC 61000-4-2 level 4: – 15 kV (air discharge) – 8 kV (contact discharge) MIL STD 883C-method 3015-6: class 3. (human body model)
SSD parameters[1]	
SSD number	1
SSD type	M.2 SATA (for capacity refer model structure chart)
Internal interface type	SATA
LTE/GSM interface[2]	
Band LTE FTD	B1/B3/B5/B8
Band LTE TDD	B34/B38/B39/B40/B41
Band GSM	900/1800MHz
GPRS slot	Multi-slot class 12/10
Link	GPRS class 12: max. 85.6 kbps (downlink/uplink)
Power	Compliant to GSM phase 2/2+ – Class 4 (2 W 900MHz) – Class 1 (1 W 1800MHz)
SIM card	MicroSIM, push-pull type holder 3V/1.8V
Antenna connector	SMA female
GNSS[3]	
GNSS systems	GPS, BDS, Galileo, GLONASS, QZSS
Antenna connector	SMA female
Ethernet	
Number	1
Type	1-CH 10/100/1000M
Ethernet connector	RJ45 with LED indicators
WiFi	
Data speed	Up to 150Mbps
Bands	2.4GHz and 5GHz, 20MHz/40MHz
Frequency 2.4GHz ISM	2.400 GHz – 2.497 GHz (2.4Ghz ISM band)
Frequency 5GHz ISM	4.900 GHz – 5.845 GHz
Standards	802.11a/b/g/n/ac/ax

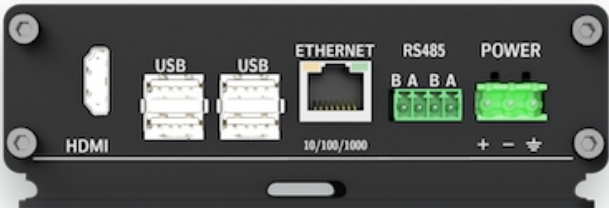| Description	Parameter
Modulation schemes	BPSK, QPSK, 16 QAM, 64 QAM, 1024 QAM
Security	WEP, TKIP, and AES, WPA, WPA2
Bluetooth and BLE	
Bluetooth standard	BT 5.0, 3Mbps
Number of channels	BR/EDR: 79 channels, BLE 40 channels
Frequency range	2402MHz – 2480MHz
Modulation	FHSS, GFSK, DPSK, DQPSK
System Functions Indicators	
Indicators	ACT – activity, LTE, SDD, ON
System	
Operating systems	Ubuntu Linux
Booting source	eMMC
Power supply	
Power Voltage range	6-36V DC
Power consumption	8W average with SSD storage
Connector	3 pin (+, -, earthing) pluggable screw socket
Protection	Surge
	Reverse polarity
Physical characteristics	
Installation	Clamp
Housing	Aluminium
Weight	600g
Dimensions	135mm x 116mm x 38mm
Environmental specification	
Operating temp.	-25 ~ 75°C (-13 ~ 167°F)
Storage temp.	-40 ~ 85°C (-40 ~ 185°F)
Ambient RH	5% to 95% (non-condensing)

1 In 'IS' models only
2 AIC-1708-XX-XX-LT-IN basic model specifications. For EU and global models please contact support.
3 Only models with LTE module

Computer

Selected model list

Models	Hardware Options[4]									
AIC-1708	Internal Memory			RAM		SSD			Cellular	
	16GB	32GB	64GB	2GB	4GB	128GB	480GB	1TB	GPRS	LTE
AIC-1708-16G-2G	√			√						
AIC-1708-16G-2G-IS128G	√			√		√				
AIC-1708-16G-2G-IS128G-LT-EU	√			√		√			√	√
AIC-1708-16G-2G-LT-EU	√			√					√	√
AIC-1708-64G-4G			√		√					
AIC-1708-64G-4G-IS480G			√		√		√			
AIC-1708-64G-4GL-IS480G-LT-EU			√		√		√		√	√
AIC-1708-64G-4-LT-EU			√		√				√	√

Table with model structure for ordering

Ordering Structure
Model example   AIC-1708- 32G- 4G-IS- 256G- LT- EU

Base model name

AIC-1708

Internal memory

8G, 16G, 32G, 64G (size of internal eMMC in GB)

RAM memory

2G, 4G (size of RAM in GB)

Internal storage

IS

SSD size

128G, 256G, 480G, 1T, 2T

Cellular communication modem

LT (LTE communication modem present)

LTE/GSM module regional information

IN (certification of LTE module for India)
EU (certification of LTE module for Europe)
GL (global certification of LTE module)

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4 Other option available on special order, please refer to ordering structure chart

For more details
scan QR code

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