

USER MANUAL

12.3-inch Rugged Embedded Computer



Important Safety Instructions

Read these safety instructions carefully:

- It should avoid the humidity and extreme temperature when being used.
- Avoid prolonged exposure of the unit to direct sunlight or strong ultraviolet light.
- Do not drop the unit or let it be in any place with severe shock / vibration.
- Please avoid the collision as the LCD screen is very easy to be scratched. Do not use any sharp object to touch the screen.
- Please turn off the power and unplug the power cable before cleaning the device, then wipe it with a moist and soft cloth.
- Never attempt to disassemble or repair the machine, otherwise the unit may be damaged.
- Do not place your unit or accessories together with other flammable liquids, gases, or other explosive materials, to avoid danger.

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Chapter 1 Product Description

1.1 Brief Introduction

- 12.3" capacitive touch wide screen, 1280×800 high resolution, with rich color;
- Comply with IP67 rating Waterproof and Dustproof Standard;
- Yocto operating system;
- Nano SD (TF) card and SIM card storage, reliable data reading and convenient daily expansion;
- Wi-Fi 802.11 b/g/n/ac (built-in)
- 4G (built-in)
- Bluetooth 5.0 (built-in)

1.2 Basic Parameters

System	CPU	NXP i. MX 8M Mini, ARM® Cortex®-A53 Quad-Core 1.6GHz processor
	RAM	2G LPDDR4
	ROM	16G Flash
	GPU	3D GPU (1x shader, OpenGL ES 2.0),2D GPU
	OS	Linux
Display	Model No.	agroNave 12W
	Touch	Capacitive touch screen
	LCD	12.3" IPS
	Resolution	1920x720
	NITS	1000
Interface	COM	RS232 × 2
	Nano SIM Card Slot	× 1
	MicroSD Card Slot	× 1
	USB	USB Type-C
	CAN	× 2

Functions	2G/3G/4G	LTE-TDD: B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/ B19/B20/B25/B26/B28 LTE-TDD: B38/B39/B40/B41 WCDMA: B1/B2/B4/B5/B6/B8/B19 GSM: B2/B3/B5/B8
	WIFI	IEEE 802.11b/g/n 2.4GHz IEEE 802.11a/n/ac 5GHz
	Bluetooth	BT 5.2
Others	Power Supply	9-36VDC
	Power Consumption	≤ 18W
	Environment	Dust resistance test: IP6x
		Water resistance test: IPx7
		Operating temperature: -20°C~65°C (-4°F~149°F)
		Storage temperature: -20°C~70°C (-4°F~158°F)

Chapter 2 Extended Cable Definition



DT04-12PA DC 9-36V

DT04-12PA		
1	CAN2_H	EXTENDED CABLE - 10 - 3
2	CAN2_L	EXTENDED CABLE - 10 - 4
3	VBAT-	EXTENDED CABLE - 8 POWER -
4	CAN1_L	EXTENDED CABLE - 10 - 2
5	CAN1_H	EXTENDED CABLE - 10 - 1
6	12V	HIGH SIDE CIRCUIT
7	VBAT+	EXTENDED CABLE - 8 POWER +
8	VBAT+	EXTENDED CABLE - 8 POWER +
9	NOT CONNECTED	-
10	VBAT-	EXTENDED CABLE - 8 POWER -
11	VBAT-	EXTENDED CABLE - 8 POWER -
12	ACC (IGNITION SWITCH)	EXTENDED CABLE - 11

Chapter 3 Accessories

1. Power Cable



Chapter 4 Trouble Shooting

Problem	Problem description	Solution
Unable to boot	Wrong cable connection	Connect Extended cable with device first, and connect the AC end of DC adapter with DC input port of Extended cable, then the other end of DC adapter connect with power plug socket.
	Bad connection	Check every connection and socket of power source
Display Problem	The application reaction time is too long and cannot be activated when clicked.	Please restart your system if the device has any problem as described.
	The screen switching process is delayed and stagnant, causing the screen to fail to switch smoothly	
	Not picture on screen	
	Blurred display	Check whether there is dust on the surface of the display. If yes, please wipe the dust on the surface with a soft cloth that does not drop cotton chips.

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

FCC Caution:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum distance between 20cm the radiator your body: Use only the supplied antenna.