

Wall-Mounted ARM Quad-Core Cortex-A53 Industrial Intelligent Gateway

MBOX-MooGate 700 Series

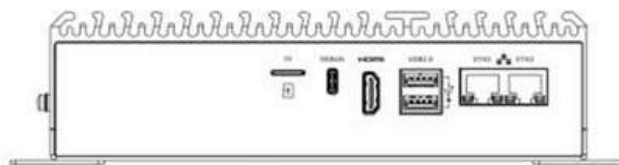


Features

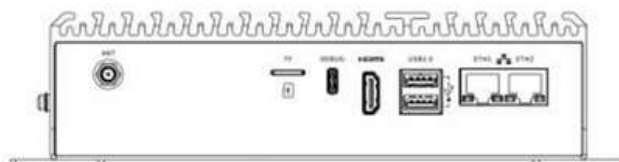
- 2*Gigabit electrical ports, 6*isolated RS485 +2 isolated RS232/485, 2 *isolated CAN2.0, 16 *I/O (8 DI + 8 DO),1 HDMI 1.4 and 2 USB2.0 HOST, 1*TF card slot: maximum 256GB
- Optional 4G cellular network
- Optional Wi-Fi (802.11 b/g/n) + Bluetooth (BLE 5.1)
- Quad-core 64-bit ARM Cortex-A53@1.8GHz processor
- Maximum 4GB DDR4 + 32GB eMMC (standard 2GB +16GB)
- Built-in mature equipment remote maintenance software system, supporting multiple protocols, fast docking with the privately deployed Mix Connect platform, VPN one-click construction of PLC Remote maintenance channel for devices
- Supports secondary development by users, optionally supports built-in Modbus gateway, CAN gateway, IO gateway functions
- Supports Docker, secondary development and deployment of own programs quickly
- Ubuntu system, supports apt package manager
- Supports 1-way DC12~48V wide voltage, non-polarity input
- Supports-40 °C ~+75 °C industrial environment, IP40 protection

Rear View:

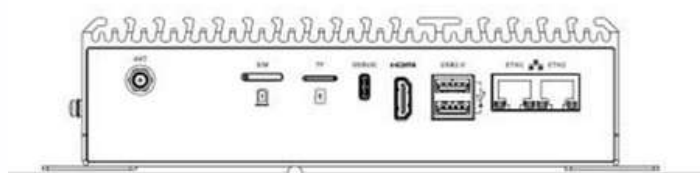
MooGate700



MooGate700-W



MooGate-4G



Technical Specifications

Model No.	MBOX-MooGate 700 Series
Processor	Quad-core 64-bit ARM Cortex-A53, clocked at 1.8GHz
OS	Ubuntu 20.04 (Linux-5.10.198 kernel or Linux-RT-5.10.198 real-time kernel optional)
Memory	2GB DDR4(up to 4GB optional)
Storage	16GB eMMCMaximum32GB optional TF card:Maximum256GB optional
Interface	
Ethernet Port	2* 10/100/1000Base-T(X) auto-sensing copper ports, supporting full/half duplex, auto MDI/MDI-X
Cellular network interface (optional)	Antenna interface: 1, SMA-K (external thread and internal hole) SIM holder: Nano SIM card slot
GNSSinterface (optional)	Antenna interface: 1, SMA-K (external thread inner hole)
Wi-Fi+Bluetooth (optional)	Antenna interface: 1, RP-SMA-K (external thread and internal pin) Standard: IEEE 802.11b/g/n + BLE 5.1 Frequency band: 2.4GHz
HDMI interface	1 HDMI 1.4 port, supports 1080p@60Hz video output (does not support audio)

Technical Specifications

USB interface	2 Type-A USB 2.0 ports (HOST)
Serial Port	Serial port type: 6 isolated RS485 + 2 isolated RS232/485 Connection method: 10-bit 3.5mm pitch terminal block Baud rate: 600bps~460800bps Isolation voltage: 3kVDC
CAN interface	Number of channels: 2 isolated CANs Connection method: 10-bit 3.5mm pitch terminal blocks Baud rate: 5kbps~1000kbps Isolation voltage: 3kVDC
DI Digital Input	Number of channels: 8 DI inputs Connection method: 10-bit 3.5mm pitch terminal block Rated voltage: DC12V (DC5~24V) Input type: wet contact PNP (Logic level 0: no external power input; Logic level 1: DC5~24V external power input) Isolation protection: 5kVDC (optocoupler isolation)
DO Digital Output	Number of channels: 8 DO outputs Connection method: 10-bit 3.5mm pitch terminal block Output type: relay output (dry contact) Output mode: normally open Rated load: single channel 5A@AC250V/DC30V
DEBUG interface	1* using Type-C USB interface, for device debugging
Button	Restart or restore factory settings with one click

Technical Specifications

Indicator	Power indicator, running indicator, 4G indicator, WiFi indicator, serial port indicator, electrical port speed and connection/activity indicator light
Power Supply	
Power Input	DC12~48V wide voltage, non-polarity input
Power Output	MooGate700: average $\leq 7.5\text{W@DC24V}$, peak $\leq 9.3\text{W@DC24V}$ MooGate700-W: average $\leq 9.8\text{W@DC24V}$, peak $\leq 13.4\text{W@DC24V}$ MooGate700-4G: average $\leq 8.3\text{W@DC24V}$, peak $\leq 11.0\text{W@DC24V}$
Connection	3-position 5.08mm pitch terminal block with lock
Physical Characteristics	
Dimensions	200×110×55(mm) (excluding mounting ears and connector dimensions)
Installation Method	Desktop or wall mounted
IP Code	IP40
Weight	About 1.15kg (excluding antenna)
Operating Temp	-40°C~+75°C
Storage Temp	-40°C~+85°C

Technical Specifications

Relative Humidity	5%~95% (non-condensing)
EMC	Aluminum alloy housing, IP40IEC 61000-4-2 (ESD): Level 3 (contact discharge $\pm 6\text{kV}$, air discharge $\pm 15\text{kV}$) IEC 61000-4-5 (Surge): Level 3 (power supply: common mode $\pm 2\text{kV}^*$, differential mode $\pm 1\text{kV}$; Ethernet port: common mode $\pm 4\text{kV}$, differential mode $\pm 2\text{kV}$; Serial port, CAN, I/O: common mode $\pm 2\text{kV}$, differential mode $\pm 1\text{kV}$) IEC 61000-4-4 (EFT): Level 3 (power supply: $\pm 2\text{kV}$; Ethernet port, serial port, CAN: $\pm 2\text{kV}$) *Only MaxGate700 power supply supports surge common mode $\pm 2\text{kV}$

Dimensions

