

N203 Specifications

200 TOPS-level computing power, covering full-size humanoid robots

2nd-gen embodied AI core, fully evolved performance

- **Comprehensive Perception:** Supports 8-channel GMSL2 cameras for high-speed, stable transmission
- **Intelligent Power Management:** USB ports with controllable power for flexible energy optimization
- **System Self-Healing:** Integrated self-healing system for automated exception recovery
- **High-Speed Real-Time Connectivity:** Commercial-grade EtherCAT + Xenomai hard real-time core

MS-N203(Brain)

Item Category	Parameter Details
Core Module	NVIDIA-AGX ORIN 32G	64GB
Computing Power	200 TOPS	275 TOPS
VRAM	32GB	64GB 256-bit LPDDR5 204.8GB/s
Expandable Storage	M.2 2280 NVME SSD Industrial-grade power-loss protection SSD
Output	1 × HDMI OUT(max resolution support: 4096×3024, @30Hz)
Ethernet	2 × Gigabit Ethernet(supports EtherCAT open source / commercial master)	1 × GE (pin header)
USB Interfaces	4 × Type-A USB 3.0 @5Gbps (2A current capacity)	2 × USB 2.0 (pin header)
WIFI	M.2 E-Key 2230 Wi-Fi module (PCIE protocol), supports 500Mbps Station+AP
5G	M.2 B-Key 3052 5G module
IO	16 × GPIO	4 ×232/ 485	I2C	SPI
CAN FD	2 × CAN FD
GMSL	8 × GMSL2
Audio	2 × SPK, 2 × AEC reference, 1 × MIC IN, Integrated with iFlytek Voice Interaction Software (optional)
Power Supply	1 × LCB30PW connector, DC 9V-48V
Power-on Behavior	Auto power-on
Operating Temperature	-20~60°C (industrial grade) relative humidity 95% @40°C (non-condensing)
Storage Temperature	-40~85°C (industrial grade)
Vibration	2 Grms@5~500 Hz, random,1 hr/axis.
Shock	15G,11ms (operation) 30G,11ms(non-operation)
Package Drop	80cm, 3 faces(With Packaging)
OS	Jetpack 6.2.1/ ROS2 DDS/ Linux RT/ Xenomai
Weight	0.62 kg
Dimensions	118mm × 126mm × 46mm(L×W×H)