

N201 Specifications

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

2nd-gen embodied AI core, fully evolved performance

- **Intelligent power management:** USB power control enables flexible energy optimization
- **System self-healing:** Butler Self-Healing System ensures automated exception recovery
- **High-speed real-time connectivity:** commercial-grade EtherCAT + Xenomai hard real-time core

MS-N201(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	3 × Gigabit Ethernet(supports EtherCAT open source / commercial master) | 1 × GE(pin header)
USB Interfaces	6 × Type-A USB 3.0 @5Gbps (2A current capacity) | 2 × USB 2.0 (pin header)
WIFI	M.2 E-Key 2230 Wi-Fi module, supports 500Mbps Station+AP
5G	M.2 B-Key 3052 5G module
IO	16 × GPIO | 4 × 232/ 485 | 1 × SPI | 1 × I2C
CAN FD	2CAN FD
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	0.76 kg
Dimensions	118mm × 126mm × 42mm(L×W×H)