

AMR5000

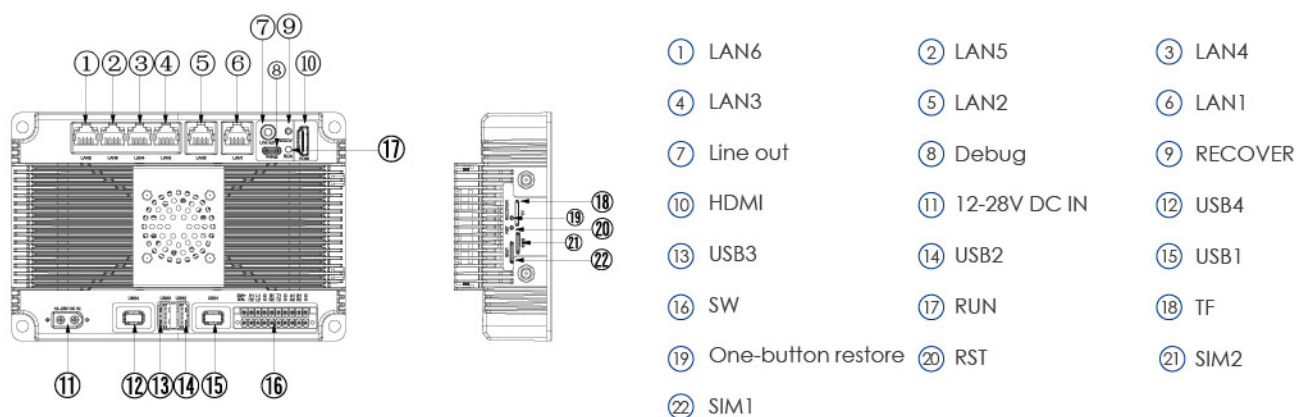
Suitable for AGV+AMR mobile robots, unmanned forklifts, artificial intelligence computing and other fields.

AMR5000-A Product parameter							
Product name		AMR5000-A					
Order number		AMR5000-AXXX					
OS		Ubuntu: 20.04、22.04					
Core motherboard		HXZB-AMR5000					
Clore		Light silver					
Processor (optional)		Jetson Orin Nano series				Jetson Orin NX series	
Memory (optional)		Jetson Orin Nano 4G		Jetson Orin Nano 8G		Jetson Orin NX 8G	
Storage		Storage: M.2 NVMe 256G or above, 1x TF card				Storage: M.2 NVMe 256G or above, 1x TF card	
GPU		A 512-core NVIDIA Ampere architecture GPU equipped with 16 Tensor Cores		1024-core NVIDIA Ampere architecture GPU equipped with 32 Tensor Cores		1024-core NVIDIA Ampere architecture GPU equipped with 32 Tensor Cores	
Maximum GPU Frequency		1020MHz				1173MHz	
NPU		34 TOPS		67 TOPS		117 TOPS	
Display		1x HDMI, 4096*2304@60Hz					
Network		LAN1-LAN2: RTL8211F LAN3-LAN6: The switch communicates with the internal 8111H					
COM		4 x COM (2 x RS-232, 2 x RS-485, With surge isolation protection, built-in 1 TTL signal)					
I/O PORT		USB		4 x USB, 1 x Type-C ,Supports OTG and Debug			
		CAN		2 x CAN(optional)			
Wireless communication		Optional industrial roaming wireless card, support 4G/5G communication					
Expansion slot		1 x full-length Mini PCIe slot; 2 x Nano SIM card slot, dual SIM card dual standby, can install and remove 4G card by itself					
Audio		1 x Line Out					
Recover		Support one key restore system, restore factory Settings					
Intercommunication interface		Reserved rich communication interface, RS232,RS422, CAN, USB, I2C, SMBus expansion bus, can quickly match customer MCU board communication					
Interface		Dedicated on-board power supply interface					
Power-on automatically starts		Supports power-on and startup					
Voltage range		+12-28VDC(with overvoltage, reverse protection function)					
Service line		1 x 2M DC power supply cable					
Apparent dimension		171(W) x 50(H) x 117(D)mm					
Net weight		1.1Kg					
Heat dissipation		No fan, die-cast aluminum integrated heat dissipation					
Installation method (optional)		Embedded					
Working environment		-20~50℃					
Storage temperature		-30~70℃					
Vibration		IEC 60068-2-64					
Mechanical impact		IEC 60068-2-72					

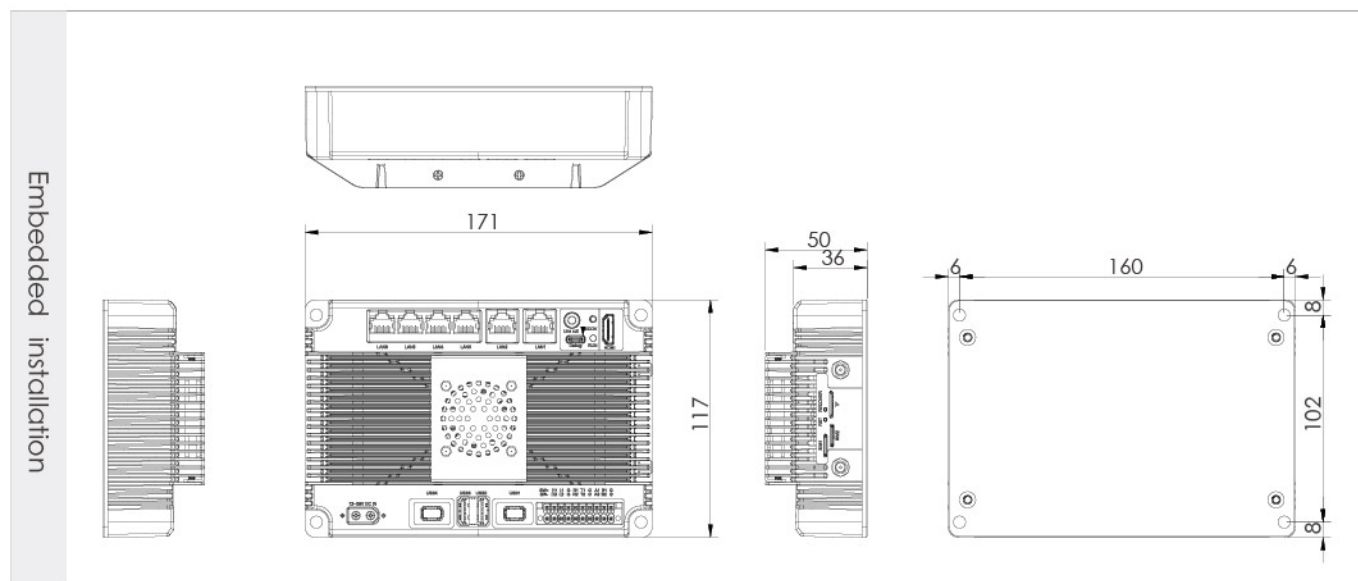
Note: Please contact the sales specialist for details of the specific order number

I/O Interface drawing

AMR5000-A



Dimension Installation Diagram



AMR5000-B

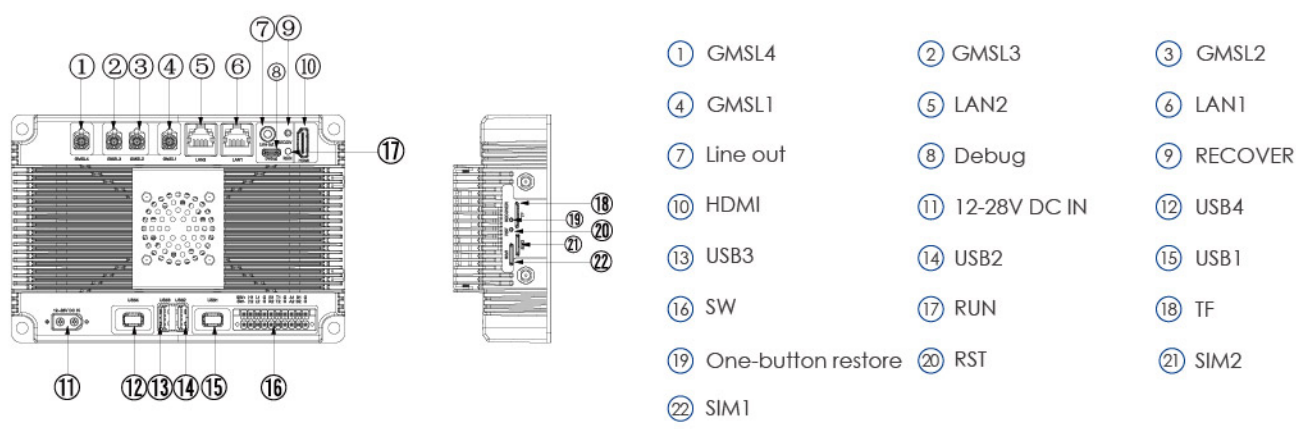
适用于AGV+AMR移动机器人、无人叉车、人工智能计算等领域。

AMR5000-B Product parameter							
Product name		AMR5000-B					
Order number		AMR5000-BXXX					
OS		Ubuntu: 20.04、22.04					
Core motherboard		HXZB-AMR5000					
Clore		Light silver					
Processor (optional)		Jetson Orin Nano series				Jetson Orin NX series	
Memory (optional)		Jetson Orin Nano 4G		Jetson Orin Nano 8G		Jetson Orin NX 8G Jetson Orin NX 16G	
Storage		Storage: M.2 NVMe 256G or above, 1x TF card				Storage: M.2 NVMe 256G or above, 1x TF card	
GPU		A 512-core NVIDIA Ampere architecture GPU equipped with 16 Tensor Cores		1024-core NVIDIA Ampere architecture GPU equipped with 32 Tensor Cores		1024-core NVIDIA Ampere architecture GPU equipped with 32 Tensor Cores	
Maximum GPU Frequency		1020MHz				1173MHz	
NPU		34 TOPS		67 TOPS		117 TOPS 157 TOPS	
Display		1x HDMI, 4096*2304@60Hz					
Network		LAN1-LAN2: RTL8211F 4 x GMSL2					
I/O PORT	COM	4 x COM (2 x RS-232, 2 x RS-485, With surge isolation protection, built-in 1 TTL signal)					
	USB	4 x USB, 1 x Type-C ,Supports OTG and Debug					
	CAN	2 x CAN(optional)					
Wireless communication		Optional industrial roaming wireless card, support 4G/5G communication					
Expansion slot		1 x full-length Mini PCIe slot; 2 x Nano SIM card slot, dual SIM card dual standby, can install and remove 4G card by itself					
Audio		1 x Line Out					
Recover		Support one key restore system, restore factory Settings					
Intercommunication interface		Reserved rich communication interface, RS232,RS422, CAN, USB, I2C, SMBus expansion bus, can quickly match customer MCU board communication					
Interface		Dedicated on-board power supply interface					
Power-on automatically starts		Supports power-on and startup					
Voltage range		+12-28VDC(with overvoltage, reverse protection function)					
Service line		1 x 2M DC power supply cable					
Apparent dimension		171(W) x 50(H) x 117(D)mm					
Net weight		1.1Kg					
Heat dissipation		No fan, die-cast aluminum integrated heat dissipation					
Installation method (optional)		Embedded					
Working environment		-20~50℃					
Storage temperature		-30~70℃					
Vibration		IEC 60068-2-64					
Mechanical impact		IEC 60068-2-72					

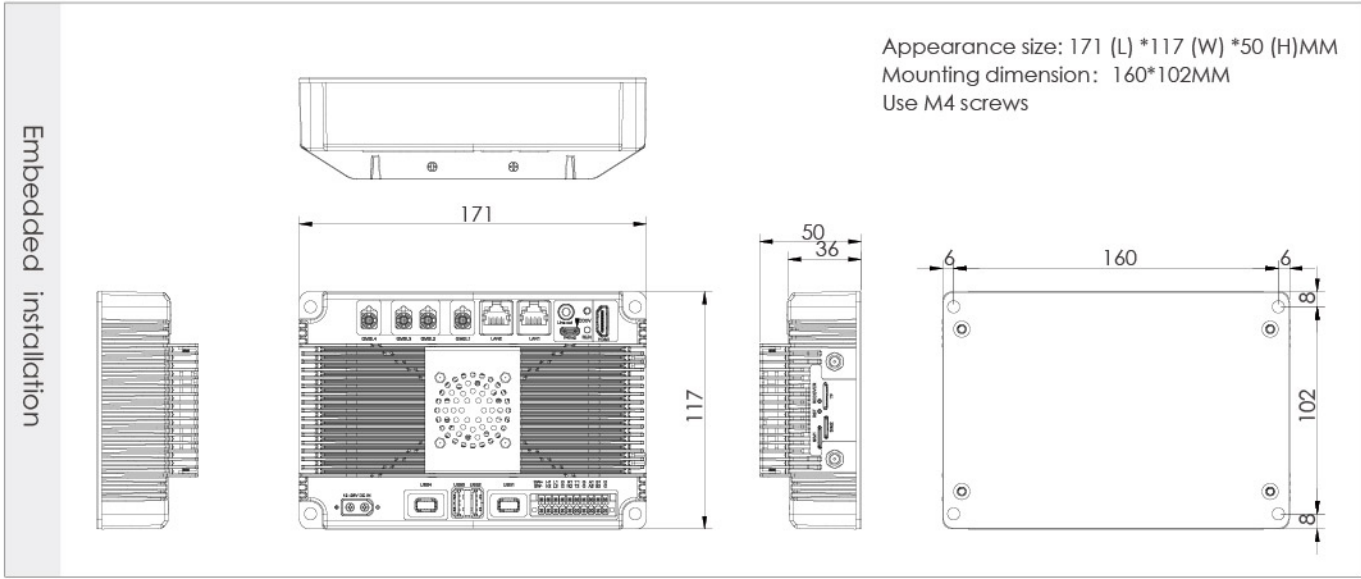
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I/O Interface drawing

AMR5000-B



Dimension Installation Diagram



AMR5000

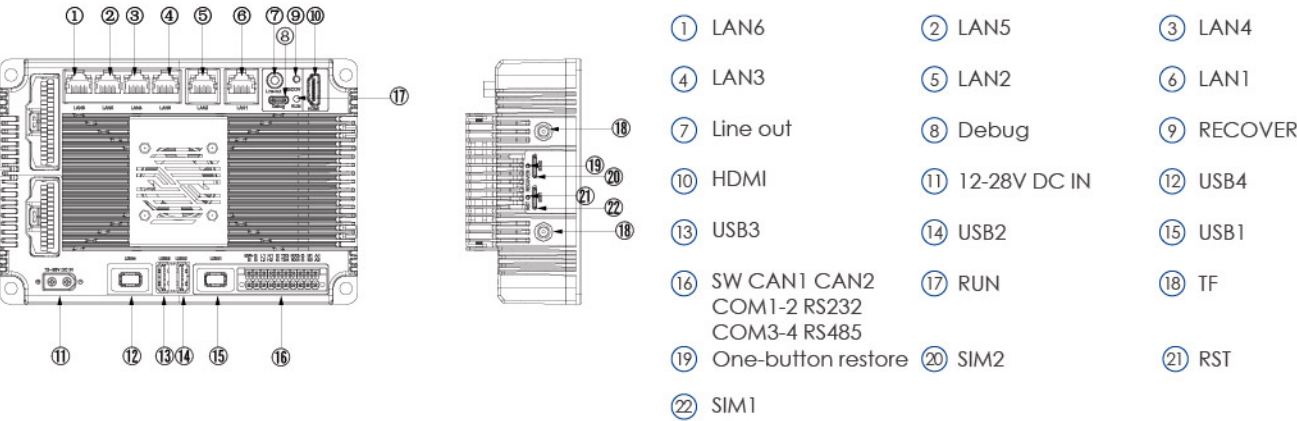
Suitable for AGV+AMR mobile robots, unmanned forklifts, artificial intelligence computing and other fields.

AMR5000-C Product parameter				
Product name		AMR5000-C		
Order number		AMR5000-CXXX		
OS		Ubuntu: 20.04、22.04		
Core motherboard		HXZB-AMR5000		
Clore		Light silver		
Processor (optional)		Jetson Orin Nano series		Jetson Orin NX series
Memory (optional)		Jetson Orin Nano 4G	Jetson Orin Nano 8G	Jetson Orin NX 8G Jetson Orin NX 16G
Storage		Storage: M.2 NVMe 256G or above, 1x TF card		Storage: M.2 NVMe 256G or above, 1x TF card
GPU		A 512-core NVIDIA Ampere architecture GPU equipped with 16 Tensor Cores	1024-core NVIDIA Ampere architecture GPU equipped with 32 Tensor Cores	1024-core NVIDIA Ampere architecture GPU equipped with 32 Tensor Cores
Maximum GPU Frequency		1020MHz		1173MHz
NPU		34 TOPS	67 TOPS	117 TOPS 157 TOPS
Display		1x HDMI, 4096*2304@60Hz		
Network		LAN1-LAN2: RTL8211F LAN3-LAN6: The switch communicates with the internal 8111H		
COM		4 x COM (2 x RS-232, 2 x RS-485, With surge isolation protection, built-in 1 TTL signal)		
I/O PORT	USB	4 x USB, 1 x Type-C ,Supports OTG and Debug		
	CAN	2 x CAN(optional)		
Wireless communication		Optional industrial roaming wireless card, support 4G/5G communication		
Expansion slot		1 x full-length Mini PCIe slot; 2 x Nano SIM card slot, dual SIM card dual standby, can install and remove 4G card by itself		
Audio		1 x Line Out		
Recover		Support one key restore system, restore factory Settings		
MCU board		MCU board parameters: 24 x DI inputs, 16 x DO + 8 x PDO, 2 x CAN		
Interface		Dedicated on-board power supply interface		
Power-on automatically starts		Supports power-on and startup		
Voltage range		+12-28VDC(with overvoltage, reverse protection function)		
Service line		1 x 2M DC power supply cable		
Apparent dimension		171(W) x 50(H) x 117(D)mm		
Net weight		1.1Kg		
Heat dissipation		No fan, die-cast aluminum integrated heat dissipation		
Installation method (optional)		Embedded		
Working environment		-20~50℃		
Storage temperature		-30~70℃		
Vibration		IEC 60068-2-64		
Mechanical impact		IEC 60068-2-72		

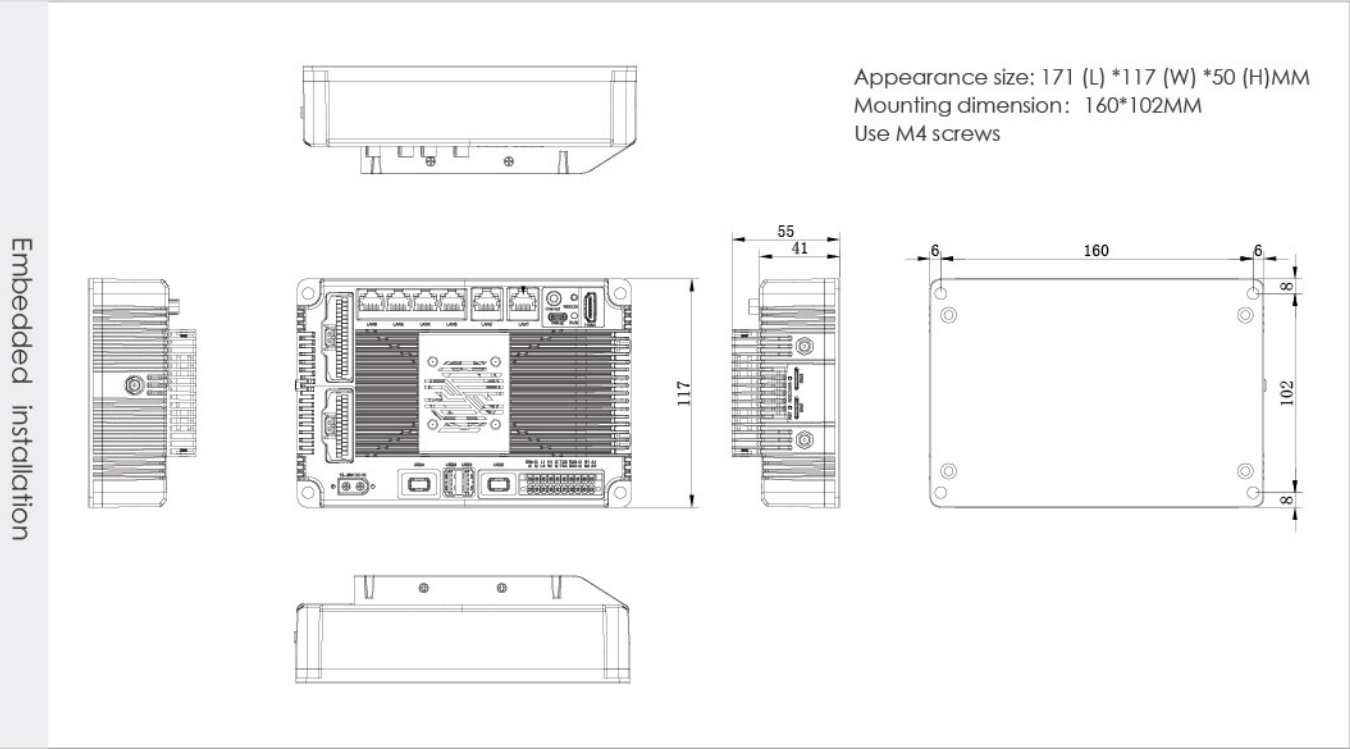
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I/O Interface drawing

AMR5000-C



Dimension Installation Diagram



AMR5000-D

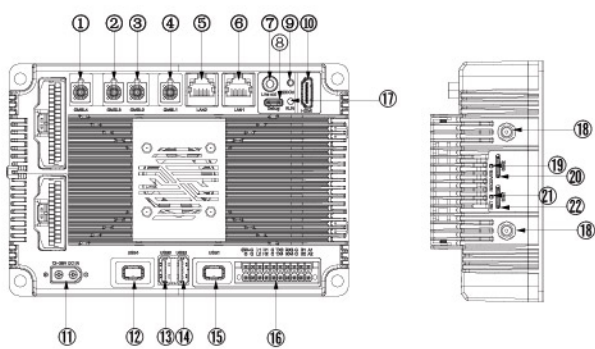
Suitable for AGV+AMR mobile robots, unmanned forklifts, artificial intelligence computing and other fields.

AMR5000-D Product parameter				
Product name		AMR5000-D		
Order number		AMR5000-DXXX		
OS		Ubuntu: 20.04、22.04		
Core motherboard		HXZB-AMR5000		
Clore		Light silver		
Processor (optional)		Jetson Orin Nano series		Jetson Orin NX series
Memory (optional)		Jetson Orin Nano 4G	Jetson Orin Nano 8G	Jetson Orin NX 8G Jetson Orin NX 16G
Storage		Storage: M.2 NVMe 256G or above, 1x TF card		Storage: M.2 NVMe 256G or above, 1x TF card
GPU		A 512-core NVIDIA Ampere architecture GPU equipped with 16 Tensor Cores	1024-core NVIDIA Ampere architecture GPU equipped with 32 Tensor Cores	1024-core NVIDIA Ampere architecture GPU equipped with 32 Tensor Cores
Maximum GPU Frequency		1020MHz		1173MHz
NPU		34 TOPS	67 TOPS	117 TOPS 157 TOPS
Display		1x HDMI, 4096*2304@60Hz		
Network		LAN1-LAN2: RTL8211F 4 x GMSL2		
I/O PORT	COM	4 x COM (2 x RS-232, 2 x RS-485, With surge isolation protection, built-in 1 TTL signal)		
	USB	4 x USB, 1 x Type-C ,Supports OTG and Debug		
	CAN	2 x CAN(optional)		
Wireless communication		Optional industrial roaming wireless card, support 4G/5G communication		
Expansion slot		1 x full-length Mini PCIe slot; 2 x Nano SIM card slot, dual SIM card dual standby, can install and remove 4G card by itself		
Audio		1 x Line Out		
Recover		Support one key restore system, restore factory Settings		
Intercommunication interface		Reserved rich communication interface, RS232,RS422, CAN, USB, I2C, SMBus expansion bus, can quickly match customer MCU board communication		
Interface		Dedicated on-board power supply interface		
Power-on automatically starts		Supports power-on and startup		
Voltage range		+12-28VDC(with overvoltage, reverse protection function)		
Service line		1 x 2M DC power supply cable		
Apparent dimension		171(W) x 50(H) x 117(D)mm		
Net weight		1.1Kg		
Heat dissipation		No fan, die-cast aluminum integrated heat dissipation		
Installation method (optional)		Embedded		
Working environment		-20~50℃		
Storage temperature		-30~70℃		
Vibration		IEC 60068-2-64		
Mechanical impact		IEC 60068-2-72		

Note: Please contact the sales specialist for details of the specific order number

I/O Interface drawing

AMR5000-D



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|--|----------------|-----------|
| ① GMSL4 | ② GMSL3 | ③ GMSL2 |
| ④ GMSL1 | ⑤ LAN2 | ⑥ LAN1 |
| ⑦ Line out | ⑧ Debug | ⑨ RECOVER |
| ⑩ HDMI | ⑪ 12-28V DC IN | ⑫ USB4 |
| ⑬ USB3 | ⑭ USB2 | ⑮ USB1 |
| ⑯ SW CAN1 CAN2
COM1-2 RS232
COM3-4 RS485 | ⑰ RUN | ⑱ TF |
| ⑲ One-button restore | ⑳ SIM2 | ㉑ RST |
| ㉒ SIM1 | | |

Dimension Installation Diagram

