WR

Product Line-up

Autonomous Mobile Robots
Autonomous Mobile Manipulator Robots
Robot Hand

WONIK ROBOTICS

Product Line-up

01 AMR Payload 300kg

- WR300CV
- WR300LD
- WR300CB
- WR300LF

02 AMR Payload 600kg

- WR600LF

03 AMR Payload 1,000kg

- WR1000LF

04 Autonomous Mobile Manipulator Robots

- Differential wheel
  WR300M-TM, WR300M-RB
- Mecanum wheel
  WR300MM-TM, WR300MM-NU

05 AMR Control System

- WR-ACS

06 Allegro Hand

- Version 4(4 Fingers Hand)
- Version 5(3 Fingers Hand)
- Version 5(4 Fingers Hand)
- Version 5(4 Fingers Hand) Plus

WR300CV

Internal Transportation Platform
with Conveyor System

Specification

Item	Contents	Specifications
Robot Basic Specification	Navigation Type	SLAM
	Dimension(W x L x H, mm)	630 x 825 x 890mm
	Payload(kg)	300kg
	Driving System	Differential Drive
	Wheel(Material, Size)	Urethane, Driving 6"(15cm) x 2, Sub" x 4
	Loading Method	Auto Conveyor
	Equipment Docking Method	Front or Side Docking
Performance	Stop Accuracy	± 20mm
	Docking Accuracy(V Marker)	± 10mm
	Operation Time	12h(No Payload), 10h(Full Payload)
	Minimum Driving Aisle Width	930 mm
	Max Speed(m/sec)	1.2m/sec
	Average Speed(m/sec)	About 0.7m/sec
	Rotating Diameter	1,036mm
	Max. Rotation Speed(radian/sec)	0.5
	Maximum Slope(Max Payload Condition)	Max. 5°
Safety & Sensor Device	Emergency Button	Up to 2ea
	LiDAR	Sick TIM561 or TIM571 2ea
	Camera	Intel Realsense 3D Depth Camera(2ea : Front)
	Minimum Obstacle Detection Size	30mm
Alarm Sound & LED	Alarm	Sound & LED
	Warning & Status Indication	LED & Buzzer
Battery & Charging Station	Battery Type, Capacity	Li-Ion, DC24V / 50Ah
	Battery Monitoring	SOC, SOH, Temp, Remaining Capacity, Available Energy
	Charging Time	About 1~1.5Hr
	Charging Method	Autonomous Docking / Manual
	Charger Power(In/Out)	AC110~220V 10A / DC 29V 45A
	Charging Station Size	575 x 320 x 760mm
Environment	Ambient Operating Temperature(°C)	0 to +40
	Floor Requirements	No Water, No Oil, No Dirt
Communication	Network	WIFI 2.4Ghz, 5GHz LTE/5G Support(Optional)
	Equipment Communication	Hybrid PIO

WR300LD

Internal Transportation Platform
for Semi-Automated Factory

Specification

Item	Contents	Specifications
Robot Basic Specification	Navigation Type	SLAM
	Dimension(W x L x H, mm)	630 x 825 x 1,600mm
	Payload(kg)	300kg
	Driving System	Differential Drive
	Wheel(Material, Size)	Urethane, Driving 6"(15cm) x 2, Sub" x 4
	Loading Method	Manual
	Moving Method	LCD touch
Performance	Stop Accuracy	± 20mm
	Docking Accuracy(V Marker)	± 10mm
	Operation Time	12h(No Payload), 10h(Full Payload)
	Minimum Driving Aisle Width	930mm
	Max Speed(m/sec)	1.2m/sec
	Average Speed(m/sec)	About 0.7m/sec
	Rotating Diameter	1,036 mm
	Max. Rotation Speed(radian/sec)	0.5
	Maximum Slope(Max Payload Condition)	Max. 5°
Safety & Sensor Device	Emergency Button	Up to 2ea
	LiDAR	Sick TIM561 or TIM571 2ea
	Camera	Intel Realsense 3D Depth Camera(2ea : Front)
	Minimum Obstacle Detection Size	30mm
Alarm Sound & LED	Alarm	Sound & LED
	Warning & Status Indication	LED & Buzzer
	Display	LCD Touch
Battery & Charging Station	Battery Type, Capacity	Li-Ion, DC24V / 50Ah
	Battery Monitoring	SOC, SOH, Temp, Remaining Capacity, Available Energy
	Charging Time	About 1~1.5Hr
	Charging Method	Autonomous Docking / Manual
	Charger Power(In/Out)	AC110~220V 10A / DC 29V 45A
	Charging Station Size	575 x 320 x 760mm
Environment	Ambient Operating Temperature(°C)	0 to +40
	Floor Requirements	No Water, No Oil, No Dirt
Communication	Network	WIFI 2.4Ghz, 5GHz LTE/5G Support(Optional)

WR300CB

Internal Transportation Platform
for Semi-Automated Factory

Specification

Item	Contents	Specifications
Robot Basic Specification	Navigation Type	SLAM
	Dimension(W x L x H, mm)	630 x 825 x 940mm
	Payload(kg)	300kg
	Driving System	Differential Drive
	Wheel(Material, Size)	Urethane, Driving 6"(15cm) x 2, Sub" x 4
	Loading Method	Manual
	Moving Method	LCD touch or Joystick
Performance	Stop Accuracy	± 20mm
	Docking Accuracy(V Marker)	± 10mm
	Operation Time	12h(No Payload), 10h(Full Payload)
	Minimum Driving Aisle Width	930mm
	Max Speed(m/sec)	1.2m/sec
	Average Speed(m/sec)	About 0.7m/sec
	Rotating Diameter	1,036mm
	Max. Rotation Speed(radian/sec)	0.5
	Maximum Slope(Max Payload Condition)	Max. 5°
Safety & Sensor Device	Emergency Button	Up to 2ea
	LiDAR	Sick TIM561 or TIM571 2ea
	Camera	Intel Realsense 3D Depth Camera (2ea : Front)
	Minimum Obstacle Detection Size	30mm
Alarm Sound & LED	Alarm	Sound & LED
	Warning & Status Indication	LED & Buzzer
	Display	LCD Touch
Battery & Charging Station	Battery Type, Capacity	Li-Ion, DC24V / 50Ah
	Battery Monitoring	SOC, SOH, Temp, Remaining Capacity, Available Energy
	Charging Time	About 1~1.5Hr
	Charging Method	Autonomous Docking / Manual
	Charger Power(In/Out)	AC110~220V 10A / DC 29V 45A
	Charging Station Size	575 x 320 x 760mm
Environment	Ambient Operating Temperature(°C)	0 to +40
	Floor Requirements	No Water, No Oil, No Dirt
Communication	Network	WIFI 2.4Ghz, 5GHz LTE/5G Support(Optional)

WR300LF

Internal Cart Transportation
Platform with Hook Lift

Specification

Item	Contents	Specifications
Robot Basic Specification	Navigation Type	SLAM
	Dimension(W x L x H, mm)	630 x 825 x 450mm
	Payload(kg)	300kg
	Driving System	Differential Drive
	Wheel(Material, Size)	Urethane, Driving 6"(15cm) x 2, Sub" x 4
	Loading Method	Lift
Performance	Stop Accuracy	± 20mm
	Docking Accuracy(V Marker)	± 10mm
	Operation Time	12h(No Payload), 10h(Full Payload)
	Minimum Driving Aisle Width	930mm
	Max Speed(m/sec)	1.2m/sec
	Average Speed(m/sec)	About 0.7m/sec
	Rotating Diameter	1,036 mm
	Max. Rotation Speed(radian/sec)	0.5
	Maximum Slope(Max Payload Condition)	Max. 5°
Safety & Sensor Device	Emergency Button	Up to 3ea
	LiDAR	Sick TIM561 or TIM571 2ea
	Camera	Intel Realsense 3D Depth Camera(2ea : Front)
	Minimum Obstacle Detection Size	30mm
Alarm Sound & LED	Alarm	Sound & LED
	Warning & Status Indication	LED & Buzzer
Battery & Charging Station	Battery Type, Capacity	Li-Ion, DC24V / 50Ah
	Battery Monitoring	SOC, SOH, Temp, Remaining Capacity, Available Energy
	Charging Time	About 1~1.5Hr
	Charging Method	Autonomous Docking / Manual
	Charger Power(In/Out)	AC110~220V 10A / DC 29V 45A
	Charging Station Size	575 x 320 x 760mm
Environment	Ambient Operating Temperature(°C)	0 to +40
	Floor Requirements	No Water, No Oil, No Dirt
Communication	Network	WIFI 2.4Ghz, 5GHz LTE/5G Support(Optional)

CE

WR600LF

Low-hight and Heavy Rated Load
AMR with Pallet Lift Module

Specification

Item	Contents	Specifications
Robot Basic Specification	Navigation Type	SLAM
	Dimension(W x L x H, mm)	920 x 1,310 x 318mm(/W Lift Module)
	Payload(kg)	600kg
	Driving System	Differential Type
	Wheel(Material, Size)	Urethane, Driving 6"(15cm) x 2, Sub" x 4
	Loading Method	Pallet Lift(Stroke 100mm)
Performance	Stop Accuracy	± 20mm
	Docking Accuracy(V Marker)	± 10mm
	Operation Time	12h(No Payload), 10h(Full Payload)
	Minimum Driving Aisle Width	1,450mm
	Max Speed(m/sec)	1m/sec
	Average Speed(m/sec)	About 0.7m/sec
	Rotating Diameter	1,618mm
	Max. Rotation Speed(radian/sec)	0.5
	Maximum Slope(Max Payload Condition)	Max. 3.0°
Safety & Sensor Device	Emergency Button	Up to 2ea
	LiDAR	Sick Nano Scan3 Safety System(2ea)
	Camera	Intel Realsense 3D Depth Camera(2ea : Front & Rear)
	Minimum Obstacle Detection Size	30mm
Indicator	Alarm	Sound & LED
	Warning & Status Indication	LED & Buzzer
Battery & Charging Station	Battery Type, capacity	Li-Ion, DC50V 50Ah(Detachable)
	Battery Monitoring	SOC, SOH, Temp, Remaining Capacity, Available Energy
	Charging Time	About 1~1.5Hr
	Charging Method	Autonomous Dock / Manual
	Charger Power(In/Out)	AC110~220V 10A / DC 59V 45A
	Charging Contact Type	Automatic Sliding Push Type
	Charging Station Size	705 x 400 x 450mm
Environment	Ambient Operating Temperature(°C)	0 to +40
	Floor Requirements	No Water, No Oil, No Dirt
Communication	Network	WIFI 2.4Ghz, 5GHz LTE/5G Support(Optional)

WR1000LF

Low-hight and Heavy Rated Load
AMR with Pallet Lift Module

Specification

Item	Contents	Specifications
Robot Basic Specification	Navigation Type	SLAM
	Dimension (W x L x H, mm)	956 x 1,350 x 318mm(/W Lift Module)
	Payload(kg)	1,000kg
	Driving System	Differential Drive
	Wheel(Material, Size)	Urethane, Driving 8"(20cm) x 2, Sub" x 4
	Loading Method	Pallet Lift(Stroke 100mm)
Performance	Stop Accuracy	± 20mm
	Docking Accuracy(V Marker)	± 10mm
	Operation Time	12h(No Payload), 10h(Full Payload)
	Minimum Driving Aisle Width	1,450mm
	Max Speed(m/sec)	1.0m/sec
	Average Speed(m/sec)	About 0.7m/sec
	Rotating Diameter	1,618mm
	Max. Rotation Speed(radian/sec)	0.5
	Maximum Slope(Max Payload Condition)	Max. 5°
Safety & Sensor Device	Emergency Button	Up to 2ea
	LiDAR	Sick Nano Scan3 Safety System(2ea)
	Camera	Intel Realsense 3D Depth Camera(2ea : Front)
	Minimum Obstacle Detection Size	30mm
Alarm Sound & LED	Alarm	Sound & LED
	Warning & Status Indication	LED & Buzzer
Battery & Charging Station	Battery Type, Capacity	Li-Ion, DC24V / 50Ah
	Battery Monitoring	SOC, SOH, Temp, Remaining Capacity, Available Energy
	Charging Time	About 1~1.5Hr
	Charging Method	Autonomous Docking / Manual
	Charger Power(In/Out)	AC110~220V 10A / DC 29V 45A
	Charging Contact Type	Automatic Sliding Push Type
	Charging Station Size	705 x 400 x 450mm
Environment	Ambient Operating Temperature(°C)	0 to +40
	Floor Requirement	No Water, No Oil, No Dirt
Communication	Network	WIFI 2.4Ghz, 5GHz LTE/5G Support(Optional)

WR300M-TM

Autonomous Mobility Platform
with Cobots

Specification

Item	Contents	Specifications
Robot Basic Specification	Navigation Type Dimension(W x L x H, mm) Payload(kg) Driving System Wheel(Material, Size) Manipulator	SLAM 630 x 825 x 680mm(Mobile Platform) 100Kg(Mobile Platform, /w Manipulator) Differential Drive Urethane, Driving 6"(15cm) x 2, Sub" x 4 TM Manipulator(TM12) - Payload : 12kg - Reach : 1,300mm
Performance	Stop Accuracy Docking Accuracy(V Marker) Operation Time Minimum Driving Aisle Width Max Speed(m/sec) Average Speed(m/sec) Rotating Diameter Max. Rotation Speed(radian/sec) Maximum Slope(Max Payload Condition)	± 20mm ± 10mm About 6h 930mm 1.2m/sec About 0.7m/sec 1,036mm 0.5 Max. 5°
Safety & Sensor Device	Emergency Button LiDAR Camera Minimum Obstacle Detection Size	Up to 2ea Sick TIM561 or TIM571 2ea Intel Realsense 3D Depth Camera(2ea : Front) 30mm
Alarm Sound & LED	Alarm Warning & Status Indication	Sound & LED LED & Buzzer
Battery & Charging Station	Battery Type, Capacity Battery Monitoring Charging Time Charging Method Charger Power(In/Out) Charging Station Size	Li-Ion, DC24V / 50Ah SOC, SOH, Temp, Remaining Capacity, Available Energy About 1~1.5Hr Autonomous Docking / Manual AC110~220V 10A / DC 29V 45A 575 x 320 x 760mm
Environment	Ambient Operating Temperature(°C) Floor Requirement	0 to +40 No Water, No Oil, No Dirt
Communication	Network	WIFI 2.4Ghz, 5GHz with External Patch Ant. LTE/5G Support(Optional)

WR300M-RB

Autonomous Mobility Platform
with Cobots

Specification

Item	Contents	Specifications
Robot Basic Specification	Navigation Type Dimension(W x L x H, mm) Payload(kg) Driving System Wheel(Material, Size) Manipulator	SLAM 630 x 825 x 680mm(Mobile Platform) 100kg(Mobile Platform, /w Manipulator) Differential Drive Urethane, Driving 6"(15cm) x 2, Sub" x 4 Rainbow Robotics Manipulator - Payload : 12kg - Reach : 1,300mm
Performance	Stop Accuracy Docking Accuracy(V Marker) Operation Time Minimum Driving Aisle Width Max Speed(m/sec) Average Speed(m/sec) Rotating Diameter Max. Rotation Speed(radian/sec) Maximum Slope(Max Payload Condition)	± 20mm ± 10mm About 6h 930mm 1.0m/sec About 0.7m/sec 1,036mm 0.5 Max. 5°
Safety & Sensor Device	Emergency Button LiDAR Camera Minimum Obstacle Detection Size	Up to 2ea Sick TIM561 or TIM571 2ea Intel Realsense 3D Depth Camera(2ea : Front) 30mm
Alarm Sound & LED	Alarm Warning & Status Indication	Sound & LED LED & Buzzer
Battery & Charging Station	Battery Type, Capacity Battery Monitoring Charging Time Charging Method Charger Power(In/Out) Charging Station Size	Li-Ion, DC24V / 50Ah SOC, SOH, Temp, Remaining Capacity, Available Energy About 1~1.5Hr Autonomous Docking / Manual AC110~220V 10A / DC 29V 45A 575 x 320 x 760mm
Environment	Ambient Operating Temperature(°C) Floor Requirement	0 to +40 No Water, No Oil, No Dirt
Communication	Network	WIFI 2.4Ghz, 5GHz with External Patch Ant. LTE/5G Support(Optional)

Mecanum Wheel

WR300MM-TM

Autonomous and Flexible Mobility Platform with Cobots

Specification

Item	Contents	Specifications
Robot Basic Specification	Navigation Type	SLAM
	Dimension(W x L x H, mm)	700 x 950 x 810mm(Mobile Platform)
	Payload(kg)	100kg(Mobile Platform, /w Manipulator)
	Driving System	Mecanum Wheel
	Wheel(Material, Size)	Urethane, Driving 6"(15cm) x 2, Sub" x 4
	Manipulator	TM Manipulator(TM12) - Payload : 12kg - Reach : 1,300mm
Performance	Stop Accuracy	± 10mm
	Docking Accuracy	± 5mm
	Operation Time	About 6h
	Minimum Aisle Width	850mm
	Max Speed(m/sec)	0.6m/sec
	Average Speed(m/sec)	About 0.5m/sec
	Rotating Diameter	1,038mm
	Max. Rotation Speed(radian/sec)	0.5
	Maximum Slope(Max Payload Condition)	Max. 2°
Safety & Sensor Device	Emergency Button	Up to 2ea
	LiDAR	Sick Nano Scan3 Safety System(2ea)
	Camera	Intel Realsense 3D Depth Camera(2ea : Front & Rear)
	Minimum Obstacle Detection Size	30mm
Indicator	Alarm	Sound & LED
	Warning & Status Indication	LED & Buzzer
	Display	LCD Touch
Battery & Charging Station	Battery Type, Capacity	Li-Ion, DC50V / 50Ah
	Battery Monitoring	SOC, SOH, Temp, Remaining Capacity, Available
	Charging Time	About 1~1.5Hr
	Charging Method	Need with Battery Change Unit Automatic Change time : about 50s Replacable Battery / Manual
	Charger Power(In/Out)	AC110~220V 10A / DC 59V 45A
Environment	Ambient Operating Temperature(°C)	0 to +40
	Floor Requirements	No Water, No Oil, No Dirt
Communication	Network	WIFI 2.4Ghz, 5GHz with External Patch Ant. LTE/5G Support(Optional)

Mecanum Wheel

WR300MM-NU

Autonomous and Flexible Mobility Platform with Cobots

Specification

Item	Contents	Specifications
Robot Basic Specification	Navigation Type	SLAM
	Dimension(W x L x H, mm)	700 x 950 x 810mm(Mobile Platform)
	Payload(kg)	100kg(Mobile Platform, /w Manipulator)
	Driving System	Mecanum Wheel
	Wheel(Material, Size)	Urethane, Driving 6"(15cm) x 2, Sub" x 4
	Manipulator	NEUROMEKA Nuri12 - Payload : 12kg - Reach : 1,434mm
Performance	Stop Accuracy	± 10mm
	Docking Accuracy	± 5mm
	Operation Time	About 4h
	Minimum Aisle Width	850 mm
	Max Speed(m/sec)	0.6m/sec
	Average Speed(m/sec)	About 0.5m/sec
	Rotating Diameter	1,038mm
	Max. Rotation Speed(radian/sec)	0.5
	Maximum Slope(Max Payload Condition)	Max. 2°
Safety & Sensor Device	Emergency Button	Up to 2ea
	LiDAR	Sick Nano Scan3 Safety System(2ea)
	Camera	Intel Realsense 3D Depth Camera(2ea : Front & Rear)
	Minimum Obstacle Detection Size	30mm
Alarm Sound & LED	Alarm	Sound & LED
	Warning & Status Indication	LED & Buzzer
	Display	LCD Touch
Battery & Charging Station	Battery Type, Capacity	Li-Ion, DC50V / 50Ah
	Battery Monitoring	SOC, SOH, Temp, Remaining Capacity, Available
	Charging Time	About 1~1.5Hr
	Charging Method	Need with Battery Change Unit Automatic Change time : about 50s Replacable Battery / Manual
	Charger Power(In/Out)	AC110~220V 10A / DC 59V 45A
Environment	Ambient Operating Temperature(°C)	0 to +40
	Floor Requirements	No Water, No Oil, No Dirt
Communication	Network	WIFI 2.4Ghz, 5GHz with External Patch Ant. LTE/5G Support(Optional)

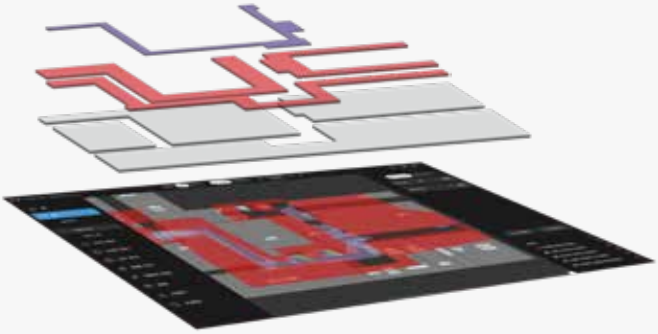
WR-ACS

AMR 실시간 통합 관제 시스템은 최대
100대의 로봇을 실시간으로 관제하고 제어하며,
ERP/MES 등 상위 시스템과 연동하여 효율적인
운영관리가 가능합니다.

WR-ACS 주요 특징

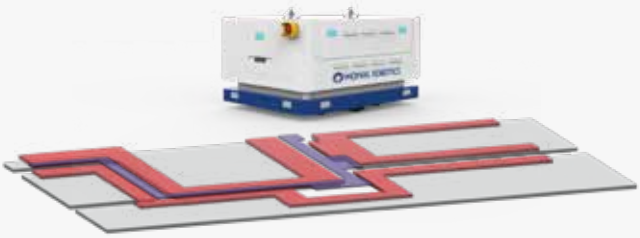
웹 기반 반응형 관제 시스템

AMR 운행 이력과 실시간 상태 모니터링 가능,
운행 내역을 기록하여 데이터 제공



Map Edition 기능

다중 로봇의 교통제어, 경로 이동 등
공장 상황에 맞는 기능 조정 및 편집가능



Geofencing 기반의 다양한 기능 설정

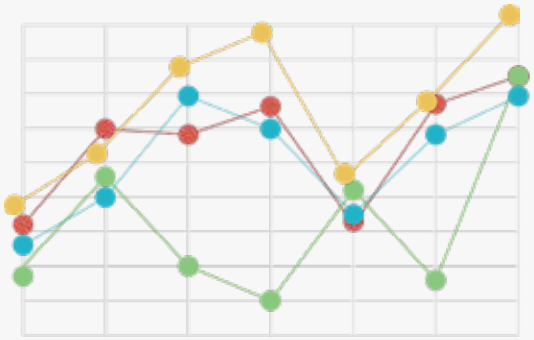
다중 AMR 교통을 실시간 제어하며, 효율적인
관리로 로봇 상태를 파악하고 제어 가능

스크래치 기반 미션 설정

스크래치 프레임워크로 AMR 미션 부여,
간편한 제어로 작업 생산성 향상

운행 이력 및 이슈관리

AMR 운행 이력을 통해 현황을 파악하고, 로봇/유형/날짜별 기록 체계적으로 관리하며 알람을 통해 동작 이력을 확인할 수 있습니다.
이슈 발생 시 원인 분석과 해결 방안을 기록해 문제를 관리하고 재발을 방지합니다.



운행 통계이력

AMR의 일별, 주별, 월별 운영 데이터를 종합적으로 분석하고,
각 로봇의 성공률을 그래프로 시각화하여 제공합니다.

IoT 통합 모니터링 및 제어 시스템

관제 시스템과 연동해 모든 IoT 디바이스를 체계적으로 모니터링하는 통합 시스템을 구축하여, 각 장치의 동작 상태를 실시간으로 확인하고 필요 시 직접 제어할 수 있습니다.

사용자 맞춤형 GUI

AMR을 보다 용이하게 운영하기 위해, 다양한 위젯을 원하는대로 배치하여 사용자 맞춤형 GUI를 생성할 수 있습니다.
AMR 호출, 실시간 알람 및 기타 운영 기능을 손쉽게 관리하며, 인터페이스를 직접 조정할 수 있어 사용자 경험이 향상됩니다.

Allegro Hand V4(4F)

- Light weight and portable anthropomorphic design
- cost-effective dexterous manipulation with applications in research and industry
- Multiple ready-to-use grasping algorithms Capable of handling a variety of object geometries

Specification

Number of Fingers	Four(4) Fingers, Including Thumb	
Degrees of Freedom	4 Fingers x 4 = 16(Active)	
Actuation	Type Gear Ratio Max. Torque Max. Joint Speed	DC Motor 1:369 0.70(Nm) 0.11(sec/60 degree)
Weight	Finger Thumb Total	0.17kg 0.19kg 1.08kg
Joint Resolution	Measurement Resolution(Nominal)	Potentiometer 0.002 deg
Communication	Type Frequency	CAN 333Hz
Payload	5kg	
Power Requirement	12, 24Vdc / 100W	

Allegro Hand V5(3F)

- Multiple ready-to-use grasping algorithms capable of handling a variety of object geometries
- 360-degree omnidirectional pressure-sensitive tactile sensor in the shape of a finger
- 9 independent current-controlled joints (3 Fingers x 3 DOF ea.)

Specification

Number of Fingers	3 Fingers	
Degrees of Freedom	3 Fingers x 3 = 9(Active)	
Actuation	Type	DC Motor
	Gear Ratio	288.35:1 159.59:1 (2nd Joint of a Finger)
	Stall Torque	0.92Nm 1.6Nm (2nd Joint of a Finger)
	Nominal Torque	0.23Nm 0.48Nm (2nd Joint of a Finger)
Payload	12kg(Depending on the Measurement Method)	
Weight	1,400g	
Joint Resolution	0.088deg	
Communication	Type	CAN, RS-485(Planned Support)
	Frequency	500Hz(CAN)
Power Requirement	24.0V / 5.0A / 120W	
Tactile Sensor(Optional)	Pressure Operating Range	30~125kPa
	Color Indicator	Returns '0' at atmospheric pressure(101.3 kPa) Blue: 0~124Pa Cyan: 125~249Pa Green: 250~375Pa Yellow: 376~500Pa Red: 500~24,000Pa
	Temperature Operating Range	-40~85°C
	Pressure Accuracy	6Pa

Allegro Hand V5(4F)

- Multiple ready-to-use grasping algorithms capable of handling a variety of object geometries
- 360-degree omnidirectional pressure-sensitive tactile sensor in the shape of a finger
- 16 independent current-controlled joints (4 Fingers x 4 DOF ea.)

Specification

Number of Fingers	3 Fingers + 1 Thumb = 4	
Degrees of Freedom	4 Fingers x 4 = 16(Active)	
Actuation	Type	DC Motor
	Gear Ratio	288.35:1
	Stall Torque	0.92Nm
	Nominal Torque	0.23Nm
Payload	12kg(Depending on the Measurement Method)	
Weight	1,000g	
Joint Resolution	0.088deg	
Communication	Type	CAN, RS-485(Planned Support)
	Frequency	500Hz(CAN)
Power Requirement	24.0V / 5.0A / 120W	
Tactile Sensor(Optional)	Pressure Operating Range	30~125kPa
	Color Indicator	Returns '0' at Atmospheric Pressure(101.3 kPa) Blue: 0~124Pa Cyan: 125~249Pa Green: 250~375Pa Yellow: 376~500Pa Red: 500~24,000Pa
	Temperature Operating Range	-40~85°C
	Pressure Accuracy	6Pa

Allegro Hand V5(4F) Plus

- Multiple ready-to-use grasping algorithms capable of handling a variety of object geometries
- 360-degree omnidirectional pressure-sensitive tactile sensor in the shape of a finger
- 16 independent current-controlled joints (4 Fingers x 4 DOF ea.)

Specification

Number of Fingers	3 Fingers + 1 Thumb = 4	
Degrees of Freedom	4 Fingers x 4 = 16(Active)	
Actuation	Type	DC Motor
	Gear Ratio	288.35:1 576.7:1(2nd Joint of the Finger Excluding the Thumb)
	Stall Torque	0.92Nm 1.84Nm(2nd Joint of the Finger Excluding the Thumb)
	Nominal Torque	0.23Nm 0.46Nm(2nd Joint of the Finger Excluding the Thumb)
Payload	15kg(Depending on the Measurement Method)	
Weight	1,024g	
Joint Resolution	0.088deg	
Communication	Type	CAN, RS-485(Planned Support) 500Hz(CAN)
	Frequency	500Hz(CAN)
Power Requirement	24.0V / 5.0A / 120W	
Tactile Sensor(optional)	Pressure Operating Range	30~125kPa
	Color Indicator	Returns '0' at Atmospheric Pressure(101.3 kPa) Blue: 0~124Pa Cyan: 125~249Pa Green: 250~375Pa Yellow: 376~500Pa Red: 500~24,000Pa
	Temperature Operating Range	-40~85°C
	Pressure Accuracy	6Pa

WONIK ROBOTICS

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