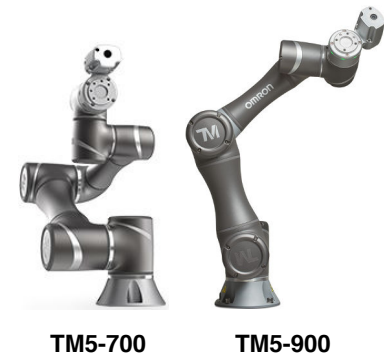


Collaborative Robots

TM5

Collaborative robot for assembly, packaging, inspection and logistics

- Designed to promote a safe and harmonious workplace between humans and machines.
- Easy-to-use graphical programming environment for quick startup and operation.
- Built-in vision-based robot control enables visual servoing, inspection, and measurement operations.
- TMvision and landmark allows truly flexible, fast changeover.
- Plug & Play ecosystem provides the tools and versatility for many manufacturing needs.
- Capability to integrate with mobile robots enables fully autonomous machine tending and logistics handling applications.



Specification

| | | TM5 | | | | | |
|------------------------------------|---------------|--|------------------|------------------|-----------------------|------------------|------------------|
| Product Name | | TM5-700 | TM5M-700 | TM5M-700 SEMI | TM5-900 | TM5M-900 | TM5M-900 SEMI |
| Part Number | | RT6-000700□ | RT6-010700□ | RT6-010701□ | RT6-000900□ | RT6-010900□ | RT6-010901□ |
| Weight (kg) | | 22.1 | | | 22.6 | | |
| Controller Weight (kg) | | 13.5 | 14.5 | 14.5 | 13.5 | 14.5 | 14.5 |
| Max Payload (kg) | | 6 | | | 4 | | |
| Reach (mm) | | 700 | | | 900 | | |
| Mounting | | Wall, Table, Ceiling | | | | | |
| Typical Speed (m/s) | | 1.1 | | | 1.4 | | |
| Joint Range | Joint 1 | ±270° | | | | | |
| | Joint 2, 4, 5 | ±180° | | | | | |
| | Joint 3 | ±155° | | | | | |
| | Joint 6 | ±270° | | | | | |
| Joint Speeds | Joint 1, 2, 3 | 180°/s | | | | | |
| | Joint 4, 5, 6 | 225°/s | | | | | |
| Repeatability (mm) | | ±0.05 | | | | | |
| IP | | IP54 (robot arm), IP32 (control box), IP40 (robot stick) | | | | | |
| Cleanroom Class | | ISO Class 5 | | | | | |
| Operating temperature and humidity | | 0 to 55°C, 85% max. (with no condensation) | | | | | |
| Storage temperature and humidity | | -20 to 60°C, 85% max. (with no condensation) | | | | | |
| Operating and storage atmosphere | | No corrosive gases | | | | | |
| Power Supply | | 100-240 VAC, 50-60 Hz | 22-60 VDC | 22-60 VDC | 100-240 VAC, 50-60 Hz | 22-60 VDC | 22-60 VDC |
| Robot Arm Cable Length | | 3m/12m | 1.5m | 1.5m | 3m/12m | 1.5m | 1.5m |
| I/O Ports | Control Box | Digital In: 16 Digital Out: 16 Analog In: 2 Analog Out: 1 | | | | | |
| | Tool | Digital In: 4 Digital Out: 4 Analog In: 1 Analog Out: 0 | | | | | |
| I/O Interface | | 3 X COM, 1 X HDMI, 3 X LAN, 4 X USB2.0, 2 X USB3.0 | | | | | |
| Communication | | RS232, Ethernet (master), Modbus TCP/RTU (master & slave) | | | | | |
| Integrated Camera | | 5M pixels, color | 5M pixels, color | 5M pixels, color | 5M pixels, color | 5M pixels, color | 5M pixels, color |
| I/O Power Supply | | 24V 1.5A (control box and tool) | | | | | |
| Programming Environment | | TMflow, flowchart based | | | | | |
| SEMI S2 Certified* | | No | No | Yes | No | No | Yes |

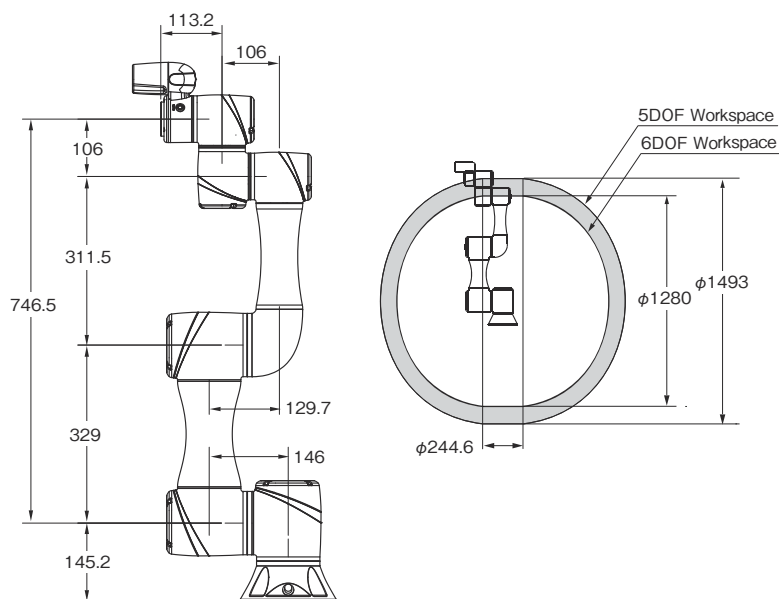
* SEMI safety SEMI safety guidelines are issued by an industry association with the same name: SEMI (Semiconductor Equipment and Materials International), which is the central global network of manufacturers of micro- and nano-electronics industries.

* SEMI S2 is the most well-known standard in semiconductor manufacturing equipment for Environmental, Health, and Safety (EHS).

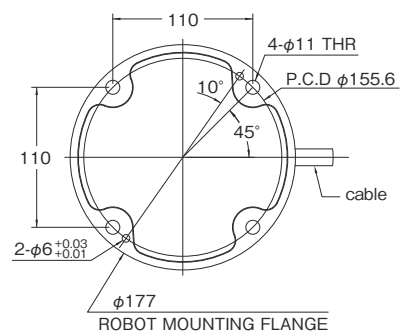
Dimensions

(Unit: mm)

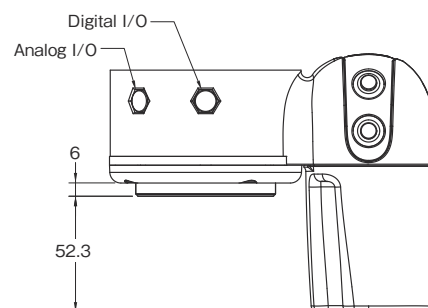
TM5-700



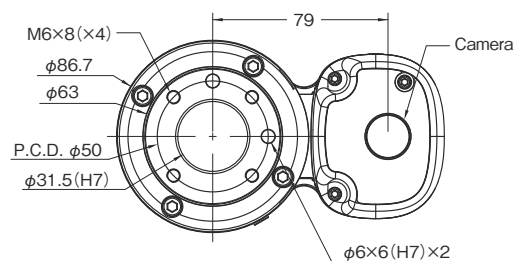
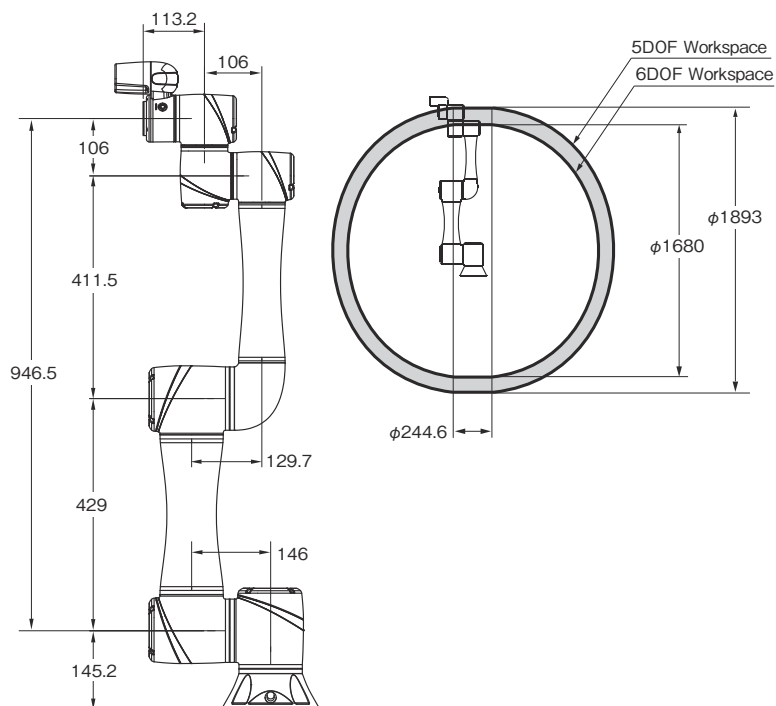
Footprint



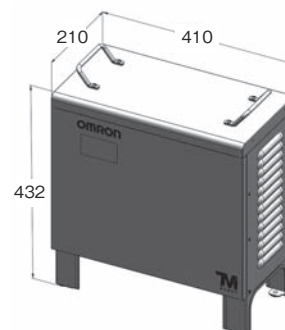
Flange



TM5-900



Control Box



Collaborative Robots

TM12/14

Collaborative robot for assembly, packaging, inspection and logistics

- Designed to promote a safe and harmonious workplace between humans and machines.
- Easy-to-use graphical programming environment for quick startup and operation.
- Built-in vision-based robot control enables visual servoing, inspection, and measurement operations.
- TMvision and landmark allows truly flexible, fast changeover.
- Plug & Play ecosystem provides the tools and versatility for many manufacturing needs.
- Capability to integrate with mobile robots enables fully autonomous machine tending and logistics handling applications.



TM12

TM14

Specifications

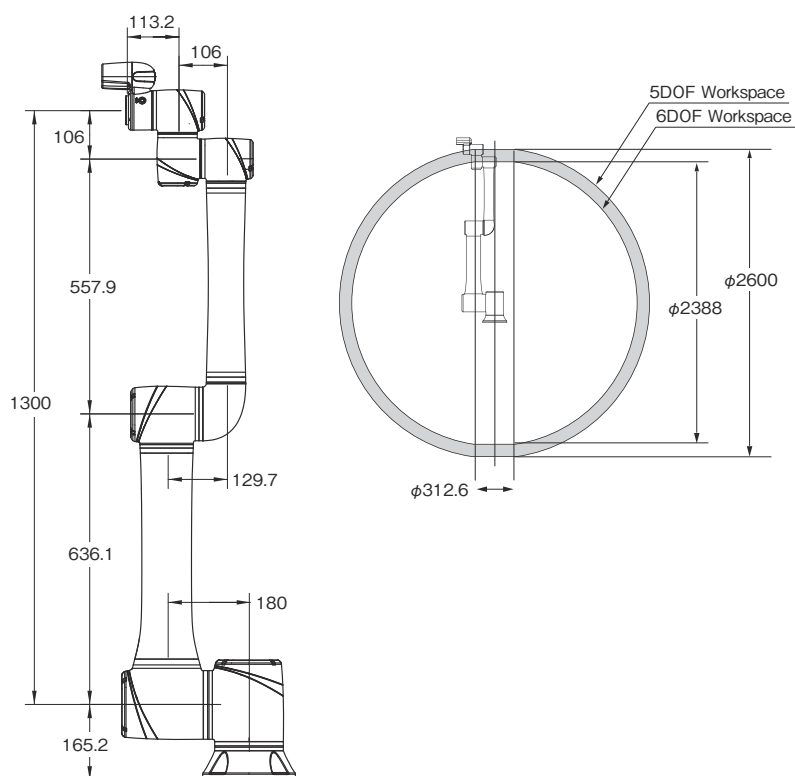
| | | TM12 | | | TM14 | | |
|------------------------------------|---------------|--|------------------|------------------|-----------------------|------------------|------------------|
| Product Name | | TM12 | TM12M | TM12M SEMI | TM14 | TM14M | TM14M SEMI |
| Part Number | | RT6-100130□ | RT6-110130□ | RT6-110131□ | RT6-200110□ | RT6-210110□ | RT6-210111□ |
| Weight (kg) | | 33.3 | | | 32.6 | | |
| Controller Weight (kg) | | 13.8 | 14.5 | 14.5 | 13.8 | 14.5 | 14.5 |
| Max Payload (kg) | | 12 | | | 14 | | |
| Reach (mm) | | 1300 | | | 1100 | | |
| Mounting | | Wall, Table, Ceiling | | | | | |
| Typical Speed (m/s) | | 1.3 | | | 1.1 | | |
| Joint Range | Joint 1 | | | | ±270° | | |
| | Joint 2, 4, 5 | | | | ±180° | | |
| | Joint 3 | ±166° | | | ±163° | | |
| | Joint 6 | | | | ±270° | | |
| Joint Speeds | Joint 1, 2 | | | | 120°/s | | |
| | Joint 3 | | | | 180°/s | | |
| | Joint 4, 5 | 180°/s | | | 150°/s | | |
| | Joint 6 | | | | 180°/s | | |
| Repeatability (mm) | | ±0.1 | | | | | |
| IP | | IP54 (robot arm), IP32 (control box), IP40 (robot stick) | | | | | |
| Cleanroom Class | | ISO Class 5 | | | | | |
| Operating temperature and humidity | | 0 to 55°C, 85% max. (with no condensation) | | | | | |
| Storage temperature and humidity | | -20 to 60°C, 85% max. (with no condensation) | | | | | |
| Operating and storage atmosphere | | No corrosive gases | | | | | |
| Power Supply | | 100-240 VAC, 50-60 Hz | 22-60 VDC | 22-60 VDC | 100-240 VAC, 50-60 Hz | 22-60 VDC | 22-60 VDC |
| Robot Arm Cable Length | | 3m/12m | 1.5m | 1.5m | 3m/12m | 1.5m | 1.5m |
| I/O Ports | Control Box | Digital In: 16 Digital Out: 16 Analog In: 2 Analog Out: 1 | | | | | |
| | Tool | Digital In: 4 Digital Out: 4 Analog In: 1 Analog Out: 0 | | | | | |
| I/O Interface | | 3 X COM, 1 X HDMI, 3 X LAN, 4 X USB2.0, 2 X USB3.0 | | | | | |
| Communication | | RS232, Ethernet(master), Modbus TCP/RTU (master & slave) | | | | | |
| Integrated Camera | | 5M pixels, color | 5M pixels, color | 5M pixels, color | 5M pixels, color | 5M pixels, color | 5M pixels, color |
| I/O Power Supply | | 24V 1.5A (control box and tool) | | | | | |
| Programming Environment | | TMflow, flowchart based | | | | | |
| SEMI S2 Certified* | | No | No | Yes | No | No | Yes |

* SEMI S2 Certified* SEMI safety guidelines are issued by an industry association with the same name: SEMI (Semiconductor Equipment and Materials International), which is the central global network of manufacturers of micro- and nano-electronics industries. SEMI S2 is the most well-known standard in semiconductor manufacturing equipment for Environmental, Health, and Safety (EHS).

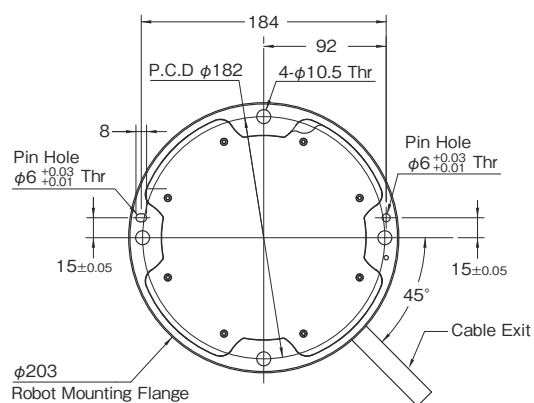
Dimensions

(Unit: mm)

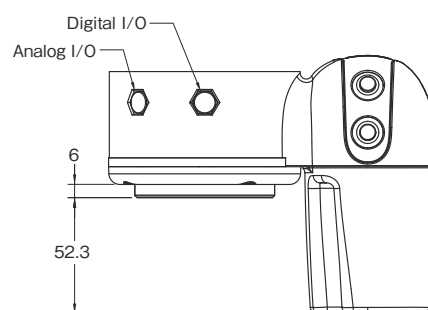
TM12



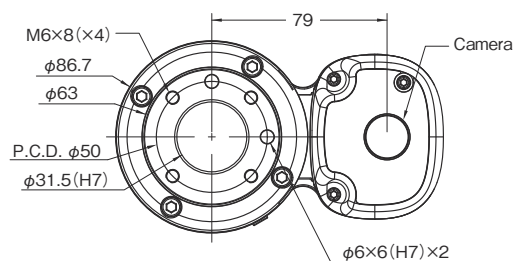
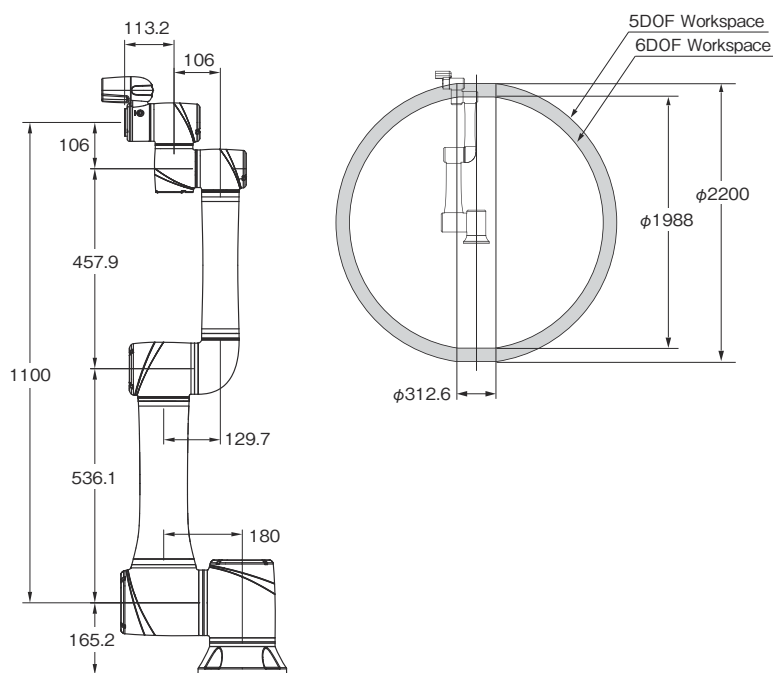
Footprint



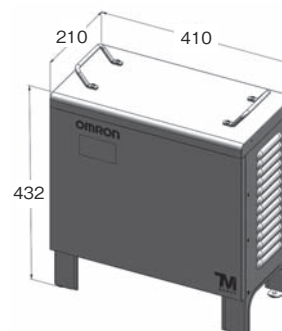
Flange



TM14










Control Box



Accessories & Software

Accessories

| Appearance | Product Name | Description | Remarks | Part Number |
|---|--|---|---|-------------|
|  | Landmark | Robot positioning tool as a reference to the environment. | 2 included with purchase of a robot. | RT6-A000008 |
|  | Mobile Workstation (MWS) | MWS is a convenient tool for users to mount the robot arm on work surface, and store the control box safely within. Users can move the MWS with the robot to different work cells easily. | Compatible with OMRON TM5 only. | RT6-A000010 |
|  | Robot stand | Similar to MWS, the robot stand can be moved with the robot to different work stations easily. | Height adjustable. Compatible with OMRON TM5 only. | RT6-A000009 |
|  | SSD with cable | 128 GB solid state hard drive. | SATA cable included. Recommended for external cameras image logging. | RT6-A000012 |
|  | Kit, calibration set with additional pin | Toolkit for teaching a precise tool center point (TCP) that can be used for manual workspace calibration within TMvision | Required for TCP and manual vision calibration | RT6-A000002 |
|  | Robot stick stand | Mounting fixture for the robot stick. | Can be used on desktops, walls, and MWS. | RT6-A000000 |
|  | Pneumatic control box | Controls the inputs and outputs and monitors air pressure for Kilews screw driving applications. | Compatible with Kilews screw driving solution kit only. Recommended to attach to the robot stand. | RT6-A000015 |

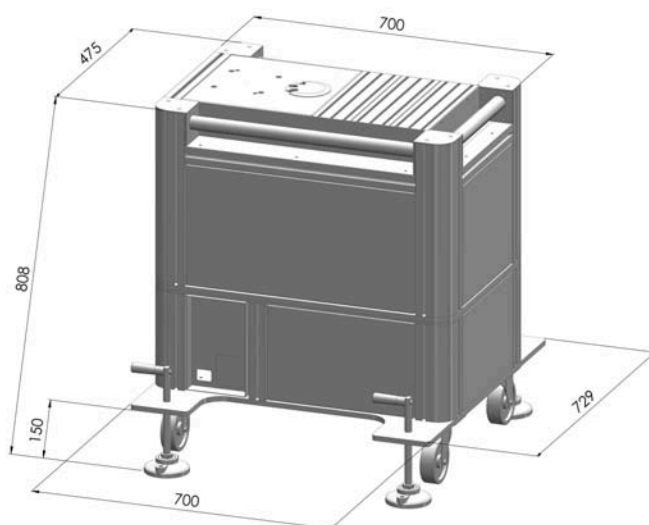
Software

| Product Name | Add-On Product Names | Part Number | Add-On Part Numbers | Remarks |
|---------------|-----------------------------|--------------------|---------------------|--|
| USB Dongle | - | RT6-A000004 | - | Required for all extra software licenses. |
| TMflow | - | N/A, Free Download | - | Software required to control the cobot. |
| | TM Identify & Measure | - | RT6-S100000 | License, add-on to TMflow. Includes: identification of pose variation, specific color area size, subtract reference image, line/circle burr, counting and gauge. |
| | TM External Vision | - | RT6-S100002 | License, add-on to TMflow. Required when using eye-to-hand cameras. |
| | TM OCR | - | RT6-S100003 | License, add-on to TMflow. Includes: Text OCR and Number OCR. |
| TMflow Editor | - | RT6-S200001 | - | License, provides a convenient way to open and edit project offline. |
| | TMflow Editor - Offline AOI | - | RT6-S100005 | License, add-on to TMflow Editor. Enables TMflow Editor to offline edit a TMflow project that includes AOI vision. |

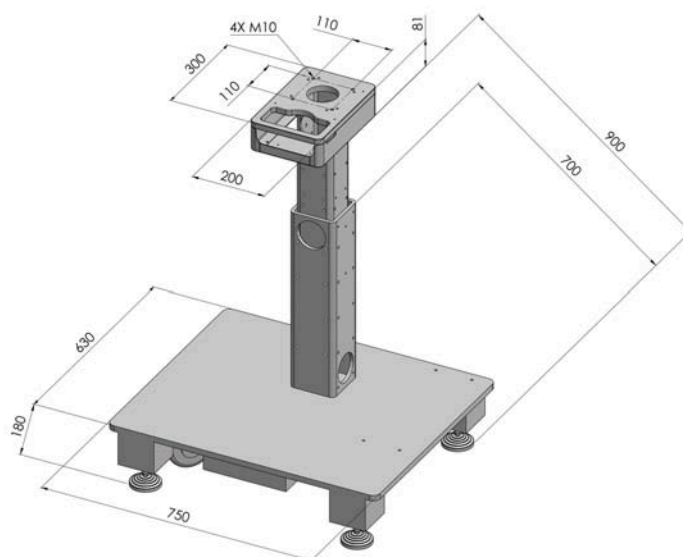
Accessories Dimensions

(Unit: mm)

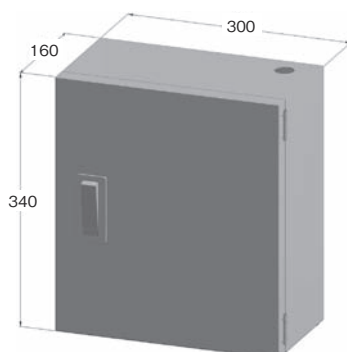
Mobile Work Station (MWS)














Robot Stand




















Pneumatic Control Box





Recommended Plug & Play Hardware

| Category | Appearance | Company | Product Name | Manufacturer SKU Number* | Description |
|----------|---|---------|---|---|--|
| Grippers |  | Robotiq | Adaptive Gripper 2-Finger 85/140 for OMRON TM robot | 85 kit: AGC-OMRON-KIT-85 140 kit: AGC-OMRON-KIT-140 | A 2-finger adaptive gripper that can adapt to parts of various shapes and sizes. Comes in two stroke options – 85mm and 140mm. Each kit includes: - End effector coupling kit - 10-meter communication cable - RS485 to RS232 converter - RS485 to USB converter - Screw kit - Quick start guide |
| |  | | Hand-E gripper for OMRON TM robot | HND-OMRON-KIT | A 2-finger parallel gripper with an IP67 rating, 50mm stroke. Each kit includes: - Fingertip starting kit - End effector coupling kit - 10-meter communication cable - RS485 to RS232 converter - RS485 to USB converter - Screw kit - Quick start guide |
| |  | | EPick for Omron TM robot | VAC-OMRON-EPICK-KIT1 | A vacuum gripper that uses an integrated vacuum generator. Each kit includes: -Basic gripper unit -End effector coupling kit -10-meter communicable cable -RS485 to RS232 converter -RS485 to USB converter -Quick start guide -Vacuum cup(s): 1.5 bellows, 55mm diameter |
| |  | | | VAC-OMRON-EPICK-KIT2 | |
| |  | | | VAC-OMRON-EPICK-KIT4 | KIT1 includes 1 vacuum cup KIT2 has a suction system for 2 cups KIT4 has a suction system for 4 cups |
| |  | | AirPick for Omron TM robot | VAC-OMRON-AIRPICK-KIT1 | A vacuum gripper that uses an external pneumatic supply. Each kit includes: -Basic gripper unit -Tubing 8mm-8m -End effector coupling kit -RS485 to RS232 converter -RS485 to USB converter -Quick start guide -Vacuum cup(s): 1.5 bellows, 55mm diameter |
| |  | | | VAC-OMRON-AIRPICK-KIT2 | |
| |  | | | VA-OMRON-AIRPICK-KIT4 | KIT1 includes 1 vacuum cup KIT2 has a suction system for 2 cups KIT4 has a suction system for 4 cups |
| |  | | I/O Coupling | IO-CPL-OMRON-KIT | Component that connects the Robotiq adaptive/vacuum gripper to the wrist of the OMRON TM robot to eliminate the need for an external serial communication cable. Each kit includes: - I/O Coupling - Screw kit - Micro-USB to USB cable - 16G USB Stick |
| |  | | Dual-Grip Adapter Plate | AGC-APL-159-002 | Adapter plate and mounting screws to mount two grippers onto the OMRON TM robot. |
| |  | | 2F-85 Dual kit for OMRON Robots 2F-140 Dual kit for OMRON Robots HAND-E Dual kit for OMRON Robots | OMRON-DUAL-AGC-85 OMRON-DUAL-AGC-140 OMRON-DUAL-HND | Kit that enables dual gripper setting. Each kit includes: - Chosen gripper x 2 - Mechanical coupling x 2 - USB to RS485 Adapter - Communication Cable - M12 5 Pins Splitter - Dual-Grip Adapter Plate - Screw kit x 2 |

| Category | Appearance | Company | Product Name | Manufacturer SKU Number* | Description |
|----------|---|---------|------------------------------|--------------------------|--|
| Grippers |  | OnRobot | RG2 Gripper | 102012 | Electric 2-finger gripper. Each kit includes: - RG2 Gripper - Fingertip adapters (pre-mounted) - Integrated Quick Changer (tool side) - Torx key |
| |  | | RG6 Gripper | 102021 | Electric 2-finger gripper with larger stroke. Each kit includes: - RG2 Gripper - Fingertip adapters (pre-mounted) - Integrated Quick Changer (tool side) - Torx key |
| |  | | VG10 Electric Vacuum Gripper | 101661 | Flexible and adjustable electrical vacuum gripper. Each kit includes: - VG10 Gripper - d30mm suction cups x 16 (pre-mounted) - Integrated Quick Changer (tool side) - d40mm suction cups x4 - d15mm suction cups x4 - Blind screws x16 - Positioning arrows - Torx key |
| |  | | Gecko Gripper | 102215 | Gripper that uses van der Waals force to pick up flat and porous objects without compressed air. Each kit includes: - Gecko Gripper - Gecko Pads x4 (pre-mounted) - Integrated Quick Changer (tool side) - Spare Gecko Pads x8 - Pad removal tools |
| |  | | Quick Changer-robot side | 102037 | Manual tool changer to attach on the robot's end-of-arm. Either the Quick Changer (robot side) or the Dual Quick Changer must be purchased for use of all OnRobot grippers. Each kit includes: - Quick Changer robot side - Screws - Torx key |
| |  | | Quick Changer- tool side | 102014 | Manual tool changer to attach on the tool side. (All OnRobot grippers have this component integrated, so this is only necessary when user is developing own tool.) |
| |  | | Quick Changer Kit | 102277 | Each kit includes: - Quick Changer (robot side)x1 - Quick Changer (tool side)x2 - Torx key - Screws and pins |
| |  | | Dual Quick Changer | 101788 | Manual tool changer to attach on the robot's end-of-arm for dual gripper configuration. Either the Quick Changer (robot side) or the Dual Quick Changer must be purchased for use of all OnRobot grippers. Each kit includes: - Dual Quick Changer - Screws - Torx key |
| |  | | OMRON TM Robot Kit | 102359 | This kit must be purchased for the use of OnRobot grippers on OMRON TM collaborative robot. Each kit includes: - Compute Box - Power supply - Adapter plate (included in all kits but only necessary for VG10 and Gecko grippers) - USB stick with software components and User Manual - Device cable 5m - UTP cable 0.5m - I/O cable 0.3m - Cable management hook/loop |

| Category | Appearance | Company | Product Name | Manufacturer SKU Number* | Description |
|---------------|---|---------|--|-------------------------------|--|
| Grippers |  | Schmalz | ROB-SET ECBPi OMRON | 10.03.01.00544 | Complete vacuum gripper for collaborative robots. Each kit includes: - Vacuum generator (ECBPI) - End-effector coupling kit - Connection cable - Mounting flange - Flat suction cup - Bellows suction cup - Bolts and t-nuts - Operating instructions |
| |  | | ROB-SET FXCB OMRON | 10.01.43.00120 | Area gripper equipped with integrated pneumatic vacuum generation. (Needs external air supply.) Each kit includes: - Pneumatic area gripper (FXCB) - Connection cable - Mounting flange - Bolts and t-nuts - Operating instructions |
| |  | Schunk | Co-act EGP-C 40 N-N-TMID | 1374363 | Electric 2-finger parallel gripper certified for collaborative operation with actuation via 24 V and digital I/O. Each kit includes: - Co-act EGP-C gripper - Assembly and Operating Manual - Accessory pack |
| |  | | Co-act AUB EGP 40/12 Co-act AUB EGP 40/24 Co-act AUB-F EGP 40/xx | 1401285 1401286 1409839 | Gripping fingers for Co-act EGP-C. |
| Screw Driving |  | Kilews | Screw Driving Solution Kit | - | Kilews screwdriver kit and pneumatic control box. Each kit includes: - Screwdriver SKD-BN512LM - Power Controller SKP-32BC-60W - Flange E31700-3 - Air Nozzle KS-TM-B500 - Signal box - Pneumatic control box - Installation guide |
| Vision |  | Basler | GigE camera, color, 5MP, CMOS 1/2.5", 14 fps | acA2500-14gc, Rolling Shutter | External camera for eye-to-hand robot applications. Maximum 2 external cameras per robot. |
| | | | GigE camera, mono, 5MP, CMOS 1/2.5", 14 fps | acA2500-14gm, Rolling Shutter | |
| | | | GigE camera, color, 5MP, CMOS 1", 21fps | acA2500-20gc, Global Shutter | |
| | | | GigE camera, mono, 5MP, CMOS 1", 21 fps | acA2500-20gm, Global Shutter | |
| | | | GigE camera, color, 5MP, CMOS 2/3", 23fps | acA2440-20gc, Global Shutter | |
| | | | GigE camera, mono, 5MP, CMOS 2/3", 23 fps | acA2440-20gm, Global Shutter | |
| | | | GigE, camera, color, 10MP, CMOS 1/2.3", 10 fps | acA3800-10gc, Rolling Shutter | |
| | | | GigE, camera, mono, 10MP, CMOS 1/2.3", 10 fps | acA3800-10gm, Rolling Shutter | |
| | | | GigE, camera, color, 12.2 MP, CMOS 1/1.7", 8 fps | acA4024-8gc, Rolling Shutter | |
| Force sensor |  | ATI | Axia80 | 9105-TM-Axia80 | Six-axis force/torque sensor with EtherCAT communication. Each kit includes: - Interface plate - Power and Ethernet cable - Digital delivery of calibration documents and user manual |
| |  | Robotiq | FT-300 | FTS-300-OMRON-KIT | Six-axis force/torque sensor with RS485 Serial Communication. Each kit includes: - Coupling - RS485 to RS232 converter - Power and communication cable with USB adapter - Screw kit |

| Category | Appearance | Company | Product Name | Manufacturer SKU Number* | Description | |
|------------------|---|-------------|--------------------------------------|--------------------------|---|--|
| Cable Management |  | Murrplastik | FHS-C-SET TM5 (TM5-700 & TM5-900) | 83693500 | Cable management dress pack. Each kit includes: Conduit (Cable routing hose, Length:2m, Interior diameter: ~21mm) | |
| | | | FHS-C-SET TM12 / TM14 (TM12 & TM14) | 83693501 | 4x Attachment straps 2x End plugs Cable insertion tool Installation instructions | |
| |  | | FHS-RS-SET TM5 (TM5-700 & TM5-900) | 83693506 | Cable management dress pack. Each kit includes: Conduit (Cable routing hose, Length:2m, Interior diameter: ~21mm) | |
| | | | FHS-RS-SET TM12 / TM14 (TM12 & TM14) | 83693507 | 2x Conduit clamps Self-retracting hose guide (2x Ball joint fixing, Ball joint strain relief, Feedback system, System holder) Tool-end clamp End sleeve Cable puller Installation instructions | |

* Manufacturer SKU numbers are 3rd party part numbers, not OMRON part numbers.

Ordering Information

Model Number Legend

RT6 - 0 0 0 7 0 0 0
 (1) (2) (3) (4) (5) (6) (7) (8)

| No. | Item | Specifications | Symbol |
|--------|--------------------------------|------------------------------|--------|
| (1) | Collaborative Robots - Techman | | |
| (2) | Model Type | TM5 | 0 |
| | | TM12 | 1 |
| | | TM14 | 2 |
| (3) | Power Supply | AC | 0 |
| | | DC | 1 |
| (4) | Eye in Hand | Standard | 0 |
| | | X Model *1 | 1 |
| (5)(6) | Arm Length | 700 (TM5) | 70 |
| | | 900 (TM5) | 90 |
| | | 1300 (TM12) | 13 |
| | | 1100 (TM14) | 11 |
| (7) | Semi | Standard | 0 |
| | | Semi | 1 |
| (8) | Cable Length | Standard Length (3m/1.5m) *2 | 1 |
| | | Extended Length (12m) *3 | 2 |

*1. X model refers to robot models without integrated camera system.

*2. 1.5m cable is only standard on DC models.

*3. 12m cable is not available on DC models.

Cobot Part Number List

| Type | Part Number |
|---------------------|-------------|
| TM5-700 | RT6-0007001 |
| TM5-700, 12m cable | RT6-0007002 |
| TM5X-700 | RT6-0017001 |
| TM5X-700, 12m cable | RT6-0017002 |
| TM5M-700 | RT6-0107001 |
| TM5M-700 SEMI | RT6-0107011 |
| TM5MX-700 | RT6-0117001 |
| TM5-900 | RT6-0009001 |
| TM5-900, 12m cable | RT6-0009002 |
| TM5X-900 | RT6-0019001 |
| TM5X-900, 12m cable | RT6-0019002 |
| TM5M-900 | RT6-0109001 |
| TM5M-900 SEMI | RT6-0109011 |
| TM5MX-900 | RT6-0119001 |
| TM12 | RT6-1001301 |
| TM12, 12m cable | RT6-1001302 |
| TM12X | RT6-1011301 |
| TM12X, 12m cable | RT6-1011302 |
| TM12M | RT6-1101301 |
| TM12M SEMI | RT6-1101311 |
| TM12MX | RT6-1111301 |
| TM14 | RT6-2001101 |
| TM14, 12m cable | RT6-2001102 |
| TM14X | RT6-2011101 |
| TM14X, 12m cable | RT6-2011102 |
| TM14M | RT6-2101101 |
| TM14M SEMI | RT6-2101111 |
| TM14MX | RT6-2111101 |

Accessories Part Number List

| Type | Part Number |
|--|-------------|
| Landmark | RT6-A000008 |
| Mobile Workstation (MWS) | RT6-A000010 |
| Robot stand | RT6-A000009 |
| SSD with cable | RT6-A000012 |
| Kit, calibration set with additional pin | RT6-A000002 |
| Robot stick stand | RT6-A000000 |
| Pneumatic control box | RT6-A000015 |

Software Part Number List

| Type | Part Number |
|-----------------------------|--------------------|
| USB Dongle | RT6-A000004 |
| TMflow | N/A, Free Download |
| TM Identify & Measure | RT6-S100000 |
| TM External Vision | RT6-S100002 |
| TM OCR | RT6-S100003 |
| TMflow Editor | RT6-S200001 |
| TMflow Editor - Offline AOI | RT6-S100005 |

Related Manuals

| Manual No. | English Title |
|------------|--|
| I623 | TM5 Regular Payload Series Hardware Installation Manual |
| I624 | TM12 & TM14 Medium & Heavy Payload Series Hardware Installation Manual |
| I626 | Software Manual TMflow |
| I627 | Software Manual TMvision |
| I628 | TM Mobile Work Station Manual |
| I629 | TM Robot Stand Manual |
| I630 | Pneumatic Control Box Manual |
| I648 | Safety Manual |
| I848 | Expression Editor and Listen Node Reference Guide |

Robot Parts Code and Bundled Accessories

| Type | TM5-700 | | | | | TM5-900 | | | | |
|---------------------|--|-------------|---------------|---|-------------|--|-------------|---------------|---|-------------|
| Product Name | TM5-700 | TM5M-700 | TM5M-700 SEMI | TM5X-700 | TM5MX-700 | TM5-900 | TM5M-900 | TM5M-900 SEMI | TM5X-900 | TM5MX-900 |
| Part Number | RT6-000700□ | RT6-010700□ | RT6-010701□ | RT6-001700□ | RT6-011700□ | RT6-000900□ | RT6-010900□ | RT6-010901□ | RT6-001900□ | RT6-011900□ |
| Overview | Robot and control box with built-in vision system | | | Robot and control box without vision system | | Robot and control box with built-in vision system | | | Robot and control box without vision system | |
| Purpose | Typical for use in single collaborative robot system | | | | | Typical for use in single collaborative robot system | | | | |
| Bundled Accessories | <ul style="list-style-type: none">• TM5-700 robot arm (1)• Robot stick (1)• Control box (1)• Calibration plates (one large and one small) (not included with the X model bundles)• IO cables (2)• Landmark (2) (not included with the X model bundles)• Ground wire (1)• Conducting wire, 3 cm (2)• Power cable for the control box (4 standard part number, 1 mobile part number)• SEMI emergency OFF switch (SEMI model only) | | | | | <ul style="list-style-type: none">• TM5-900 robot arm (1)• Robot stick (1)• Control box (1)• Calibration plates (one large and one small) (not included with the X model bundles)• IO cables (2)• Landmark (2) (not included with the X model bundles)• Ground wire (1)• Conducting wire, 3 cm (2)• Power cable for the control box (4 standard part number, 1 mobile part number)• SEMI emergency OFF switch (SEMI model only) | | | | |
| Type | TM12 | | | | | TM14 | | | | |
| Product Name | TM12 | TM12M | TM12M SEMI | TM12X | TM12MX | TM14 | TM14M | TM14M SEMI | TM14X | TM14MX |
| Part Number | RT6-100130□ | RT6-110130□ | RT6-110131□ | RT6-101130□ | RT6-111130□ | RT6-200110□ | RT6-210110□ | RT6-210111□ | RT6-201110□ | RT6-211110□ |
| Overview | Robot and control box with built-in vision system | | | Robot and control box without vision system | | Robot and control box with built-in vision system | | | Robot and control box without vision system | |
| Purpose | Typical for use in single collaborative robot system | | | | | Typical for use in single collaborative robot system | | | | |
| Bundled Accessories | <ul style="list-style-type: none">• TM12 robot arm (1)• Robot stick (1)• Control box (1)• Calibration plates (one large and one small) (not included with the X model bundles)• IO cables (2)• Landmark (2) (not included with the X model bundles)• Ground wire (1)• Conducting wire, 3 cm (2)• Power cable for the control box (4 standard part number, 1 mobile part number)• SEMI emergency OFF switch (SEMI model only) | | | | | <ul style="list-style-type: none">• TM14 robot arm (1)• Robot stick (1)• Control box (1)• Calibration plates (one large and one small) (not included with the X model bundles)• IO cables (2)• Landmark (2) (not included with the X model bundles)• Ground wire (1)• Conducting wire, 3 cm (2)• Power cable for the control box (4 standard part number, 1 mobile part number)• SEMI emergency OFF switch (SEMI model only) | | | | |

* Please note the calibration plates and landmark are not included with the X model bundles.

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