

uArm Swift & uArm Swift Pro Specifications

| Specifications | | | | | | | | | | |
|----------------------------------|---|---|---------------------|-------------|----|--|-------|-------------|-----------|--|
| | | uArm Swift | | | | uArm Swift Pro | | | | |
| Weight | | 1.2kg | | | | 2.2kg | | | | |
| Degrees of Freedom | | 4 | | | | 4 | | | | |
| Repeatability | | 5mm | | | | 0.2mm | | | | |
| Max. Payload | | 500g | | | | 500g | | | | |
| Working Range | | 50mm ~ 320mm | | | | 500g 50mm ~ 320mm | | | | |
| Max. Speed | | 167mm/s | | | | 100mm/s | | | | |
| Connector | | Micro USB | | | | Micro USB | | | | |
| Wireless | | Bluetooth 4.0 | | | | Bluetooth 4.0 | | | | |
| Input Voltage | | DC 5-6V | | | | DC 12V | | | | |
| Power Adapter | | Input:100 ~ 240V 50/60Hz; Output: 5V4A 20W | | | | Input:100 ~ 240V 50/60Hz; Output: 12V5A 60W | | | | |
| Operation Temperatu Humidi | ire & ty | 0°C-35°C 30%RH-80%RH noncondensing | | | | 0°C-35°C 30%RH-80%RH noncondensing | | | | |
| Storag Temperatu Humidi | ıre & | -20°C-60°C 30%RH-80%RH noncondensing | | | | -20°C-60°C 30%RH-80%RH noncondensing | | | | |
| Hardware | | | | | | | | | | |
| | | | uArm Sw | ift | | | uArn | n Swift Pro | | |
| Joint Type | | Cı | Customized RC Servo | | | Customized Gearbox + Stepper | | | | |
| Position Feedback | | Potentiometer | | | | 12 bit Encoder | | | | |
| Reducer | | Servo gearbox | | | | Customized ultra-thin Gearbox | | | | |
| Dimension(L*W*H) | | 150mm*132mm*281mm | | | | 150mm*140mm*281mm | | | | |
| Mother Board | | Arduino MEGA 2560 | | | | Arduino MEGA 2560 | | | | |
| Material | | Aluminum | | | | Aluminum | | | | |
| Baud Rate | | 115200bps | | | | 115200bps | | | | |
| Extendable I/O Interface | | I/O *3, 5V*1, IIC *1 | | | | I/O *27 | | V*1, 12V*1 | Stepper*1 | |
| Software | | | | | | | | | | |
| | | | | | | | | | | |
| PC Control | | uArm Swift uArm Studio | | | | uArm Swift Pro uArm Studio | | | | |
| App Control | | uArm Play | | | | uArm Play | | | | |
| For Developer | | Python/Arduino/ROS | | | | Python/Arduino/ROS | | | | |
| Feature | | Open Source | | | | Open Source | | | | |
| | | | | | | | | | | |
| | Joint Speed & Torque uArm Swift uArm Swift Pro | | | | | | | | | |
| | Angle | Speed | Lifetime | Torque | Α | ngle | Speed | Lifetime | Torque | |
| Base Motor | 0° ~ 180 |)° 60°/s | 500h | 12kg·cm | 0° | ~ 200° | 40°/s | >3000h | 12kg·cm | |
| Left Motor | 0° ~ 130 |)° 60°/s | 500h | 12kg·cm | 0° | ~ 135° | 40°/s | >3000h | 12kg·cm | |
| Right Motor | 0° ~ 106 | 60°/s | 500h | 12kg·cm | 0° | ~ 100° | 40°/s | >3000h | 12kg·cm | |
| End-effector Motor | 0° ~ 180 |)° 60°/s | 500h | 2kg·cm | 0° | ~ 180° | 60°/s | 500h | 2kg·cm | |
| | | | | Accessories | | | | | | |
| Pump | | Suction Diameter | | | | 5mm ~ 10mm | | | | |
| | | | Max. Pressure | | | | 33kPa | | | |
| | | ividx. FTe55ufe | | | | 33KPa | | | | |

| | | V1.4 | | | |
|---------------------|-------------------------|--|--|--|--|
| | Max. Lifting Weight | 1000g | | | |
| | Feature | With feedback | | | |
| | Weight | 36g | | | |
| Universal Holder | Dimension(L*W*H) | 62mm*25mm*15mm | | | |
| Offiversal Holder | Material | Aluminum | | | |
| | Holder Diameter | 14mm | | | |
| | Weight | 58g | | | |
| | Dimension(L*W*H) | 92mm*50mm*18mm | | | |
| Gripper | Material | Aluminum | | | |
| | Max. Force | 750~800g | | | |
| | Max. Size of Object | 40mm | | | |
| | Max. Speed | 20mm/s | | | |
| | Drive Mode | Electrically-driven | | | |
| | Working Voltage/Current | 6V/300mA | | | |
| | Focal Length | 2.8mm | | | |
| | FOV | 115° | | | |
| OpenMV Camera | F-number | f2.0 | | | |
| | Programmable Method | Micro Python | | | |
| | Weight | 16g | | | |
| | Dimension(L*W*H) | 45mm*36mm*30mm | | | |
| | Туре | E3D v6 | | | |
| | Consumption | 35W | | | |
| | Nozzle Diameter | 0.4mm | | | |
| 3D Printing Kit | Max Temp | 270 ℃ | | | |
| (ONLY For Pro) | Material | PLA | | | |
| | Max. Printing Speed | 20mm/s | | | |
| | File Format | .gcode | | | |
| | Printing Size(L*W*H) | 10mm*10mm*10mm | | | |
| | Laser Power | 500mW | | | |
| | Working Voltage/Current | 12V/5A | | | |
| Laser Engraving Kit | Wave Length | 405nm | | | |
| (ONLY For Pro) | Weight | 140g | | | |
| | Dimension(L*W*H) | 55mm*33mm*88mm | | | |
| | Materials to Engrave | Wood, Plastic, Leather, Feather, Paper, etc. | | | |