

# Technical Specifications of AIS Pro

## Technical Specifications 4-Pole Slotless Motor (Pro) w/ 7" Touch Panel

| Item                         | Unit   | Item Description   |              |            |            |            |
|------------------------------|--------|--|--------------|------------|------------|------------|
| Tool Model                   |        | AIS-S1.7Pro  | AIS-S5.0Pro  | AIS-S10Pro | AIS-S20Pro | AIS-S25Pro |
| Torque Range                 | kgf·cm | 0.2-1.7  | 1.0-5.0      | 2.0-10     | 4.0-20     | 5.0-25     |
|                              | lbf·in | 0.17-1.48  | 0.86-4.34    | 1.7-8.7    | 3.4-17.4   | 4.3-21.7   |
| No Load Speed                | rpm    | 50-1500  | 20-1000      | 20-1000    | 20-800     | 20-500     |
| Applicable Thread            | mm     | 0.7-1.8  | 1.0-2.6      | 1.4-3.0    | 2.0-4.0    | 2.8-4.5    |
| Available Bit Socket         |        | Ø4•SH¼•½Moon   | Ø4•SH¼•½Moon | Ø4•SH¼     | Ø5•SH¼     | Ø5•SH¼     |
| Actuation                    |        | Lever Start  |              |            |            |            |
| Motor Control                |        | FOC  |              |            |            |            |
| Variation/Repeatability      |        | < ±5%  |              |            |            |            |
| Gyro Sensor                  |        | Standard or Optional for Tilt Angle Management & Control             |              |            |            |            |
| Dimensions                   | mm     | Ø28.6 x 216  |              |            |            |            |
| Tool Weight                  | g      | 320  |              |            |            |            |
| Touch Panel Controller Model |        | TSC-1.0  |              |            |            |            |
| Dimensions                   | mm     | 221 (L) x 113 (W) x 51 (D)   |              |            |            |            |
| Weight                       | g      | Hanging Type: 365 / Automation Fixing Type: 365 / Desktop Type: 1190 |              |            |            |            |
| Communications               |        | Wi-Fi / EtherNET / RS-232 / RS-485                                   |              |            |            |            |
| I/O                          |        | 16 Points (Input: 7 & output: 5)                                     |              |            |            |            |
| Inputs                       |        | FORWARD/REVERSE/RESET/CONNECT_POWER/JOB_SELECT                       |              |            |            |            |
| Outputs                      |        | OK/NG/FL/SS/WORKPIECE_COMPLETE/TASK_COMPLETE(SCREW_COMPLETE)         |              |            |            |            |
| Programmability              |        | 8 STEPS / 16 TASKS (SCREWS) / 8 JOBS                                 |              |            |            |            |
| Power Adapter Model          |        | APM-403A @ 200W  |              |            |            |            |
| Vac In                       |        | 100-240V @ 50/60 Hz  |              |            |            |            |
| Dimensions                   | mm     | 170 x 80 x 60  |              |            |            |            |
| Weight                       | g      | 620  |              |            |            |            |



Smart Servo Screwdrivers AIS  
[AIS-S1.7/5.0/10/20/25Pro]

Support single to multi-step, repeated tightening program settings and independent or integrated judgment  
Precision torque and angle monitor and control  
Real-time display of: OK/NG/FL/SS/Workpiece\_Count/Screw\_Count/RPM/Motor\_Temperature  
Tightening angle detects, monitors, controls, and judges  
Peak torque and curve stored for each tightening  
Up to 5 million sets of tightening data on the peak torque, Torque curve, and tightening process with real-time display  
Production data for traceability and analysis  
Uploadable data of Result/Count/Peak Torque/Time/Turns/FL/SS/Serial Number  
Digital Input/Output signals, open protocols, barcode scanner, and other upstream/downstream devices