



# 日本太科 FEDIII 系列控制器

日本太科多功能控制器，搭配高精度电批，采用无刷直流伺服马达，为自动化方案实现最佳品质的螺丝拧紧质量。

Multi-functional controller for coreless DC motor tool for automation to realize best quality screw tightening by Technart current control

## 数据监控功能

通过 RS-232C 端口可以在电脑上监测每一次操作的数据和显示伺服马达电流输出曲线图或扭力变化曲线图，监测操作时间、马达转速、输出扭力等数据，可以分析操作细节，并保存数据。

## For Audit & Traceability

Real-time monitoring data can be output at RS-232C Port, for every single operation. The graph view monitoring and recording of motor current curve is also available in option.



通过 RoHS 认证

RoHS Complied Model Available

## 最好的力矩控制实现最可靠的螺丝拧紧质量 自动化螺丝拧紧方案的最佳选择

数字显示扭力值，通过面板按键直接设定扭力值。

针对不同的螺丝和组装工件，不同的摩擦力和材料特性，控制器会自动调节输出扭力去克服，确保螺丝拧紧的可靠性。

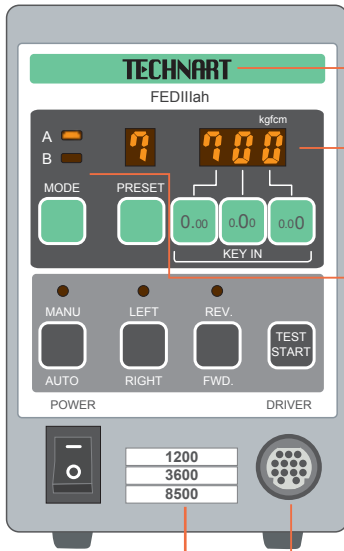
可靠和多功能的 FEDIII 系列控制器适用于自动化或半自动化螺丝拧紧控制方案。

Set tightening torque value digitally.

And all the rest are taken care automatically, and the torque is applied correctly and reliably, regardless of difference of screw and components, friction or joint characteristics.

The reliable and multi-functional FEDIII Series Controller is suitable for automated or semi-automated application.

## The Best Quality Screw Tightening Control With Reliability & Flexibility For Automation



## 螺丝拧紧扭力控制实现最佳锁紧质量

螺丝拧紧可靠的质量，不是单纯的从电批输出扭矩就可以，也取决于在螺丝拧紧过程中，电批怎样提供合适的扭矩给螺丝。

针对不同的螺丝和组装工件，不同的摩擦力，材料特性，可靠的控制器会自动调节输出扭力去克服，日本太科以其丰富的经验和最专业的方法实现拧紧螺丝到设定的目标扭矩。

### Screw Tightening Torque Control For Best Joint Quality

The reliability of screw tightening depends, not on the mere repeatability of output torque from driver tool, but on how the driver tool applies torque to the screw during its screw tightening process.

The Technart El. Torque Driver System tightens up a screw to the torque exactly in the same way as the most experienced operator will do, regardless of difference of friction or joint characteristics.

## 数字式的扭力设定

通过控制器前面板数字屏下方按键来设定螺丝拧紧扭力，然后控制器系统自动的以其理想的扭力重复性来实现最佳的螺丝拧紧工作以达到设定的目标扭力。

### Digital Torque Setting & Genuine Torque Repeatability

Set the screw tightening torque value digitally, and the rest are taken care by the system all automatically for optimized screw tightening job with genuine torque repeatability.

## 模式选择 (A&B)

两个不同的螺丝拧紧过程控制参数可以存储在模式 A 和模式 B。

### Mode Selection (A & B)

Two different sets of screw tightening process control parameters can be stored under Mode A and Mode B.

## 预设存储功能

拧紧 (FWD) 和拧松 (REV) 操作下，可以预设 #1~8 组扭力参数 (扭力值 & 反转角度)。

### Preset Memory Facility

Preset #1~8 for each of FWD & REV can contain different setting (torque & reversing angle) each other.

## 两个标准接口

- 1) 通过 24-pin 接口可以从外部 PLC 远程控制器进行操作。
- 2) RS-232C 串口用于控制参数的设置以及监控数据的输出。

### Two Standard Interfaces

Two interfaces are found at the rear panel of the controller in standard :

- 1) 24-pin photo-coupler interface port for remote control from external PLC
- 2) RS-232C modular jack port for customizing of control parameters etc. and for monitoring data output

## 高速拧紧控制型号「FEDIIIah」&「FEDIIIfh」

型号 FEDIIIah & FEDIIIfh( 后缀 h) 控制器配备高速控制功能，当连接上 3600 或者更高力矩电批时，可实现高速控制。

### Model FEDIIIah (FEDIIIfh) For High Speed Tightening Control

Model FEDIIIah & FEDIIIfh (suffix h) are equipped with high speed control board which realizes faster control rpm, when connected with a driver tool of 3600 family or larger.

## 可以定制参数

在 Windows 操作系统下，可以通过 RS-232C 端口，使用客户端软件连接控制器，您可以编辑和设定控制参数和功能，也可以设定一个多步骤控制程序。

### Customize It As You Want

Connect with Customizer Program running on PC with Windows 2000/XP®, and you can edit and customize control parameters and functions.

You can also compose a Multi-sequence Program.

## 规格

型号	FEDIIIa 或 FEDIIIah FEDIIIfh 或 FEDIIIfh (RoHS 认证)
输入电压	AC100 ~ 240V 50/60Hz
功率	120W
配件	1 x AC 电源线
外形尺寸	W95 x H148 x D210 mm
重量	2.0 kg
保修期	一年

## 多轴同步螺丝拧紧·拧松

可选 MSTC 多轴同步操作功能，实现多螺丝多轴同步控制拧紧和拧松，是多轴应用的理想解决方案。

### Synchronize Them

Working with MSTC synchronizing controller, synchronized control of screw tightening and reversing is available in option, as the ideal solution for multi-spindle application.

Model Name	FEDIIIa or FEDIIIah FEDIIIfh or FEDIIIfh (RoHS complied)
Power Supply	AC100 ~ 240V 50/60Hz
Power Consumption	120W
Accessories	1 x AC Power Supply Cable
Dimensions	W95 x H148 x D210 mm
Weight	2.0 kg
Warranty Period	12 months after delivery

## 可搭配电批系列

FEDIII 控制器可以匹配三种型号电批，电批扭力范围 0.1~8.5 kgf.cm，适用于手持式和自动机操作，包含直型、L 型和 Z 型，配备快速更换批头的 Ø4 半月形批头卡座。



### Tool Line-up

The tool line-up covers torque of 0.1 to 8.5 kgf.cm, with variation of straight design type, manual operation type and offset design type, all of which come with quick-release ball chuck for Ø4 D-cut shank bit.

电批型号	扭力范围	
	kgf · cm	Nm
600	0.10 - 0.60	10 - 59 mNm
1200	0.30 - 1.20	29 - 118 mNm
2200	0.60 - 2.20	59 - 216 mNm
3600	1.00 - 3.60	98 - 353 mNm
5500	1.50 - 5.50	147 - 539 mNm
8500	2.00 - 8.50	196 - 833 mNm

## 防冲击 & 防静电解决方案



螺丝着座时，冲击力控制在目标扭力内，不会造成工件损坏。



防静电功能可选。

### Shock-free & ESD Solution

There will be no damage on your precious components, thanks to low inertia and shock-free process control.

Continuous Bit Grounding Mechanism is available in option for both straight and offset design tools, as the best ESD solution.



## 可变 rpm

转速可调整，转速根据扭力值变化，不会牺牲扭力输出精度和批头咬合质量。

### rpm Adjustability Without Sacrifice

The control rpm can be adjusted, slower or faster, without sacrifice of torque repeatability and joint quality.