

VEICHI

SD810 Series

General Multi-Drive Servo System



VEICHI

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Official Website

*Version: Y5/2-11

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Stock code:688698

About Us



Veichi Electric (Stock Code: 688698) specializes in electrical transmission and industrial control, operating as an integrated high-tech enterprise in R&D, production, and sales of industrial automation products. With a vision to lead in smart industry and green energy solutions, the company leverages its R&D and manufacturing hubs in Suzhou, additional R&D centers in Shenzhen and Xi'an, and wholly-owned subsidiaries overseas, consistently serving customers worldwide with competitive and reliable solutions.

Under the "One Core, Two New Drivers" strategy, Veichi focuses on industrial automation, offering AC drives, servo systems, and control systems widely applied across heavy and light industries, as well as high-end equipment sectors, supporting the digital and intelligent transformation of manufacturing with its tailored solutions. Simultaneously, in two emerging fields, it provides one-stop solutions for humanoid, collaborative, and mobile robots in embodied intelligence, while in green energy, it delves into segments like photovoltaic, energy storage, and hydrogen energy, to "connect every device with green power," fostering a synergistic growth between core operations and new ventures.

Sustained R&D has yielded a portfolio of proprietary patented technologies including silicon carbide application, HF injection, motor controls and protections (auto-tuning, flying-start, high-speed flux-weakening, V/F control, vector control), high-density water-cooling layout, and IGBT drive protection. As of September 30, 2025, Veichi holds 234 patents, with 66 for invention.

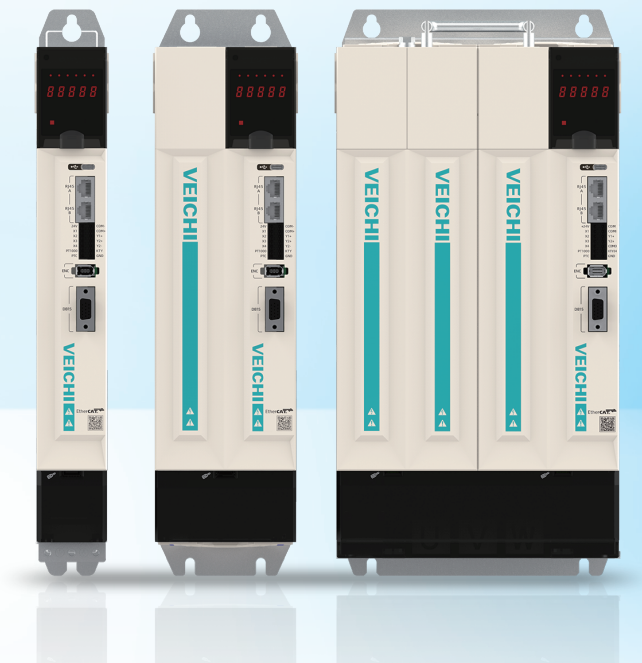
Over two decades of steady growth, Veichi has earned numerous certifications and accolades from national and regulatory authorities, including "High-Tech Enterprise," "Postdoctoral Research Workstation," and provincial honors like "Engineering Technology Research Center," "Enterprise Technology Center," and "Industrial Internet Development Demonstration Enterprise (Benchmark Factory Category)."

Guided by its mission to "Drive Smart Industry, Co-create a Green Future," Veichi will continue to intensify R&D and advance into high-performance, high-reliability fields to propel global progress.

SD810 Series General Multi-Drive Servo System

Veichi's SD810 series multifunctional servo platform offers efficient solutions for industrial machinery across injection molding, die-casting, bending, manipulator, forging tool, turret punch press, steel cutting, and handling equipment.

It boasts easy one-touch adjustment, an adaptive notch filter, torque compensation, and a reliable, compact design, simplifying installation, power/wiring distribution, and maintenance for a better user experience.



Parallel Bus
High energy efficiency

Compact Design
Efficient space utilization

Scalable Power
1kW to 75kW
for one drive

Certified Quality
CE, STO, SIL3
compliance

Broad Applicability
For diverse
mechanical sectors

Flexible Expansion
For industry-specific
products



2025

- Suzhou VEICHI Phase III digital production base put into operation
- Changzhou high-end electrical equipment production base topped out
- Jiujiang smart production base groundbreaking ceremony held

2024

- Strategic acquisition of Changzhou Jiteng, entering the port and marine sector
- "One Core, Two New Drivers" development strategy adopted

2023

- Suzhou VEICHI Phase II put into operation
- VEICHI Medical Equipment subsidiary established, expanding into the healthcare sector

2022

- Xi'an R&D Center established
- VEICHI Digital Energy subsidiary founded, digitalizing the green energy
- Integrated power solutions for humanoid/collaborative/mobile robots launched, initiating deployment in the robotics sector

2021

- VEICHI-controlled subsidiary established, enhancing industrial chain integration
- Recognized as a SRDI "Little Giant" enterprise

2020

- Listed on the Science and Technology Innovation Board (STAR Market)
- Recognized as a provincial SRDI "Little Giant" enterprise

2019

- Restructured into a joint-stock company
- VEICHI overseas subsidiary established, marking the start of global expansion

2005

- Start of business in Shenzhen
- First generation of AC drive launched

2016

- Suzhou VEICHI Phase I put into operation
- First-generation motion control system successfully launched

Rectifier Module Naming Rules

AC810-D10-T3-0056-XXXX

Product Series	
AC810	AC810 series

Module type	
D10	Rectifier

Input voltage	
T3	AC 380V

Rated Current	
Code	Rated Current
0056	56A
0110	110A
0240	240A
0358	358A

Code	
0	-

Code	
0	-

Communication	
0	Modbus RTU CANopen
1	PROFIBUS-DP
2	PROFINET
3	EtherCAT

Built-in Brake	
0	NO
B	YES

Inverter Module Naming Rules

SD 810-AC-S 3R8 D-E A -FS

Product Type	
SD	Servo drive

Product Series	
810	810 series multi-drive

Module Type	
AC	Inverter

Axis	
S	Single axis

Rated Current			
Code	Rated Current (A)	Code	Rated Current (A)
3R8	3.8	300	30
6R0	6.0	400	40
8R4	8.4	550	55
110	11	700	70
170	17	800	80
240	24	121	120
		151	150

Safety Function	
FS	YES
Blank	NO

First Encoder Type	
A	Absolute
B	BISS
R	RT encoder

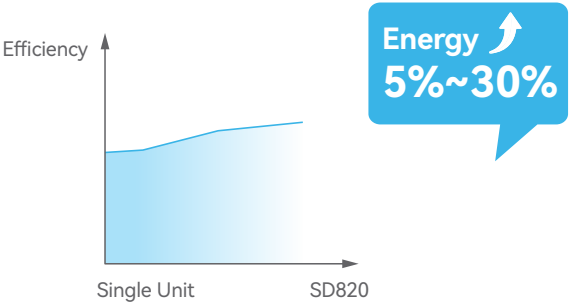
Internal Bus	
E	EtherCAT

Distribution System Voltage	
D	DC 540V

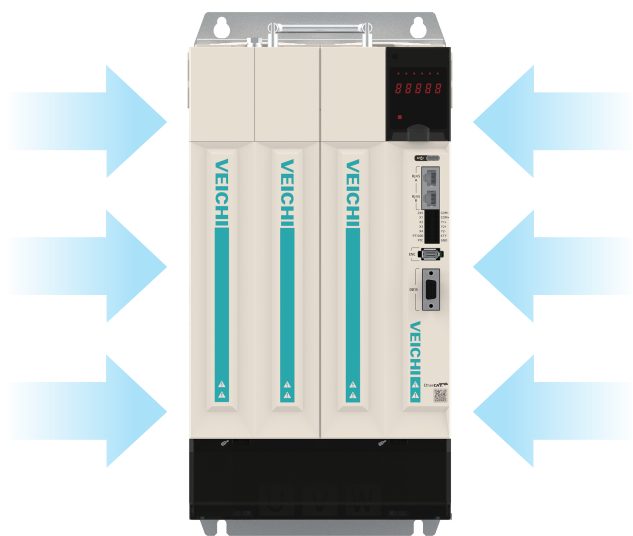
01 High Energy Efficiency



Integrated Bus Design: More energy efficient—saves 5% to 30% versus individual units and eliminates braking resistors.

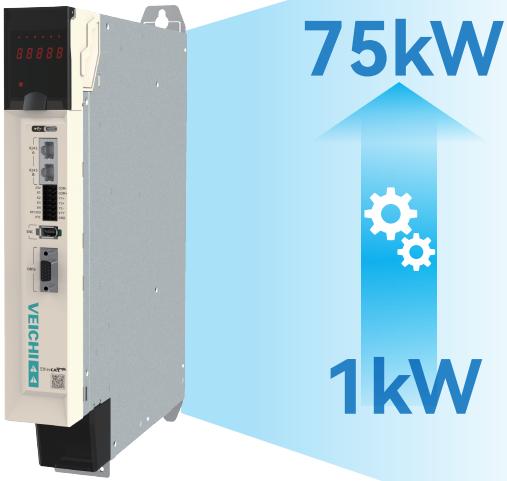


02 Space-Efficient Design



Saving cabinet space and costs

03 Wide Power Range



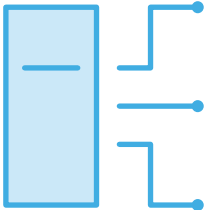
1kW~75kW per unit

04 Comprehensive Protection



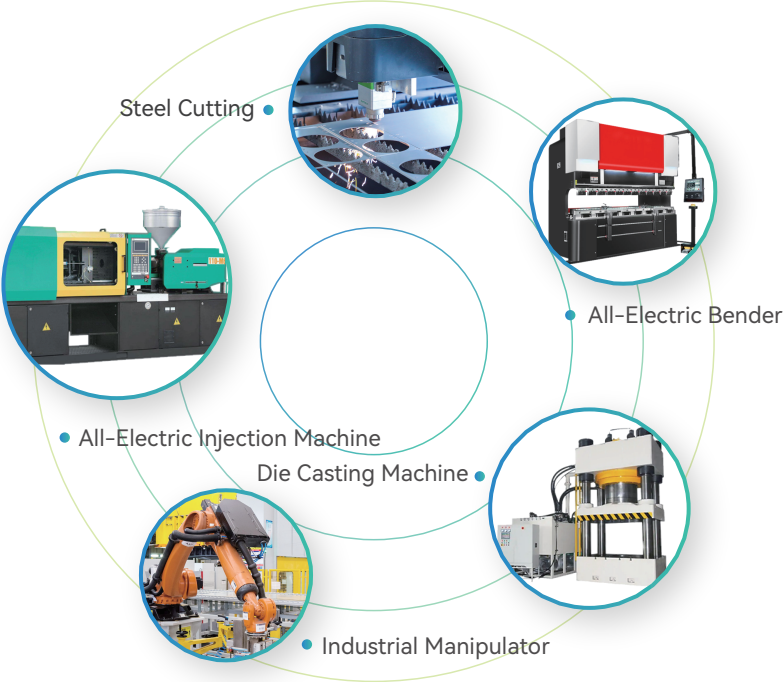
CE STO SIL3

05 Flexible Expansion



Rich expansions for various industrial applications and motors of other brands

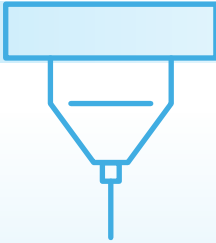
06 Extensive Application



Spanning various industries such as injection molding, die-casting, bending, manipulator, forging, punch press, metalcutting, and material handling.

07 Precise Positioning

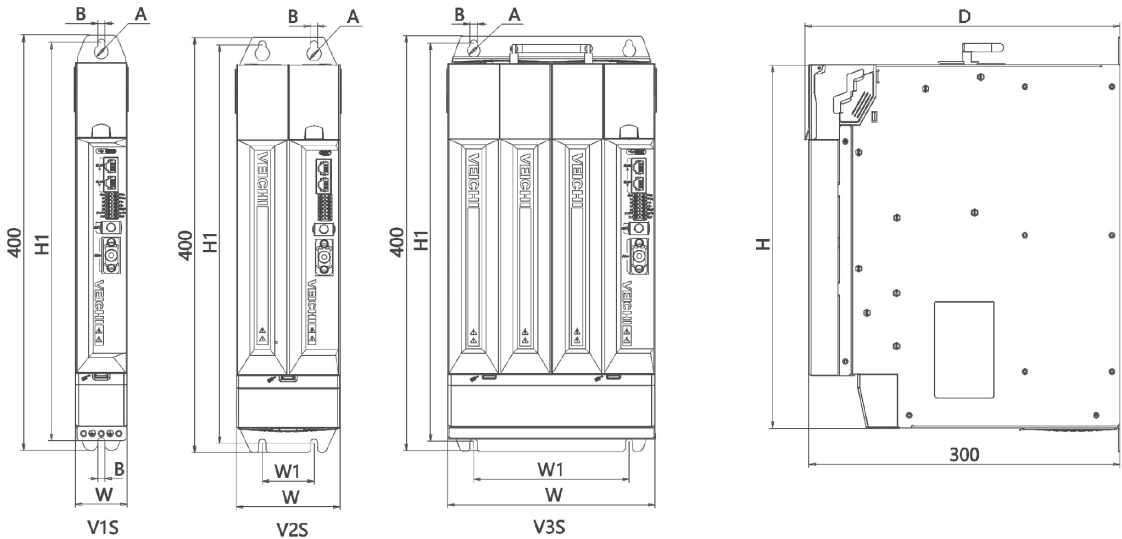
Standard with a **23-bit absolute encoder**, upgradeable to a higher precision encoder upon request.



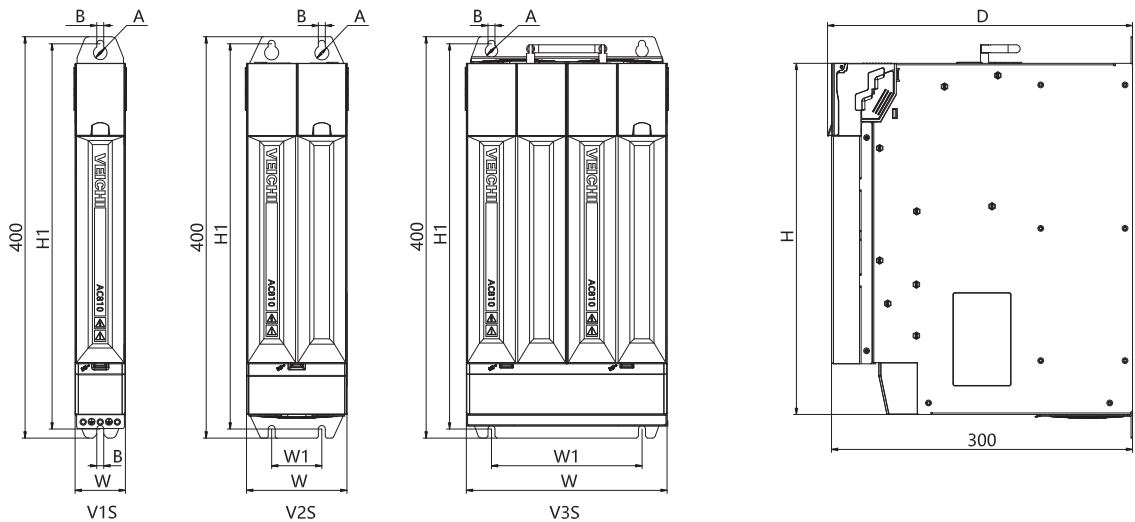
Drive Current Table

Model	Rated Output Current (A)	Max. Output Current (A)	Model	Rated Output Current (A)	Max. Output Current (A)
SD810-AC-S3R8D-EA	3.8	10.3	SD810-AC-S400D-EA	40.0	92.0
SD810-AC-S6R0D-EA	6.0	16.2	SD810-AC-S550D-EA	55.0	126.5
SD810-AC-S8R4D-EA	8.4	22.7	SD810-AC-S700D-EA	70.0	161.0
SD810-AC-S110D-EA	11.0	29.7	SD810-AC-S800D-EA	80.0	184.0
SD810-AC-S170D-EA	17.0	45.9	SD810-AC-S121D-EA	120.0	276.0
SD810-AC-S240D-EA	24.0	64.8	SD810-AC-S151D-EA	150.0	345.0
SD810-AC-S300D-EA	30.0	81.0	---	---	---

Drive Appearance and Dimensions

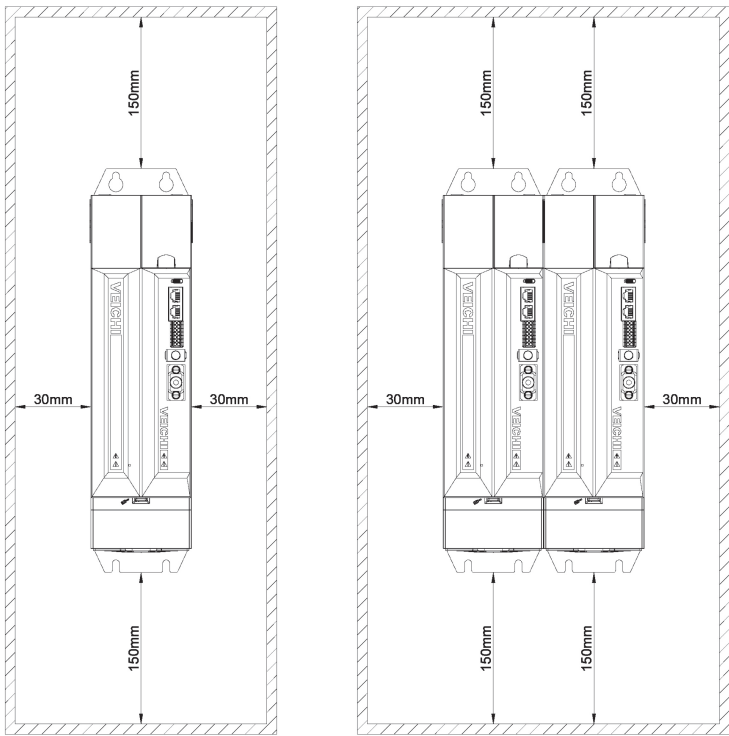


Structure	Model	Outer Dimensions (mm)			Installation Dimensions (mm)				Aperture
		W	H	D	W1	H1	A	B	
V1S	SD810-AC-S3R8D-EA*	50	350	305	/	384	13	7	2-M6
	SD810-AC-S6R0D-EA								
	SD810-AC-S8R4D-EA								
	SD810-AC-S110D-EA								
V2S	SD810-AC-S170D-EA	100	350	305	50	384	13	7	4-M6
	SD810-AC-S240D-EA								
	SD810-AC-S300D-EA								
	SD810-AC-S400D-EA								
	SD810-AC-S550D-EA								
V3S	SD810-AC-S700D-EA	200	350	305	150	384	13	7	4-M6
	SD810-AC-S800D-EA								
	SD810-AC-S121D-EA								
	SD810-AC-S151D-EA								



Housing	Model	Outer Dimension (mm)				Installation Dimension (mm)				Aperture
		W	H	D	W1	W2	H1	A	B	
V1S	AC810-D10-T3-0056	50	350	305	/	/	384	13	7	4-M6
V2S	AC810-D10-T3-0110	100	350	305	50	/	384	13	7	4-M6
V3S	AC810-D10-T3-0240	200	350	305	150	/	384	13	7	4-M6
V4S	AC810-D10-T3-0358	300	350	305	150	50	384	13	7	8-M6

Installation Space



Rectifier Specifications

Item		Specifications
Basic parameters	Grid voltage	Three-phase 380V~480V AC (-15%~+10%)
	Power range	45kW, 110kW, 160kW
	Grid type	TN, TT, IT star topology
	Input frequency	50Hz/60Hz (47Hz~63Hz)
	Braking	Additional braking module and braking resistor
Customization	Comm./Bus	Modbus-RTU: baud rate 115200 max., 128 nodes, 1000m max. Profibus-DP (optional): 12M max., 32 nodes, 100m max. CANopen: 1M max., 64 nodes, 40m max. PROFINET: 100M max., 100m max.
HMI	DI, DO	1x multi-function input terminal, isolated drain/source programmable (9V~30V, invalid<5V) 3kΩ input impedance, compatible with 100Hz inputs.
	Display	3 x RO (programmable NO/NC contacts)
Protection	Protection	Against overheat, phase loss, voltage imbalance, over-voltage, braking circuit over-current, braking resistor short-circuits, and brake tube blocking
Environment	IP	IP20
	Cooling	Forced air-cooling
	Temperature	Operating: -10°C~50°C, air temp change < 0.5°C/min; derate by 1.5% of rated current per 1°C rise above 40 °C, 50°C max. Storage: -25°C~70°C. Transport: -25°C~70°C.
	Relative humidity	Operating: 5%~95% RH, not suitable for corrosive gas environments Storage: 5%~95% RH Transport: <95% RH at +40°C
	Altitude	Derate by 1% of rated current per 100m rise above 1000m, 3000m max.

Inverter Specifications

Item		Specifications
Control		IGBT PWM control, sinusoidal current drive mode
Feedback	Rotary servo motor	Serial encoder: 17-bit, 23-bit, 24-bit, 25-bit multi-turn absolute encoder/resolver
	Linear servo motor	Incremental scale, parallel signals
Environment	Ambient temp.	Operating: -10°C~50°C, <0.5°C/min air temp. derate by 1.5% of rated current per 1°C rise above 40 °C, 50°C max.
	Storage temp.	-20°C ~ 70°C
	Ambient humidity	<95%RH (no freezing or condensation)
	Storage humidity	<95%RH (no freezing or condensation)
	Vibration resistance	4.9m/s ²
	Impact resistance	19.6m/s ²
	IP	IP20 (when properly installed)
	Cleanliness	No corrosive or flammable gases
		No water, oil, chemicals splash
		Less dust, dirt, salt and metal powders
	Altitude	Derate by 1% of rated current per 100m rise above 1000m, 3000m max.
	Others	No electrostatic interference, strong electric field, strong magnetic field, radiation, etc.
Compliance		IEC61800-2/-3/-5, IEC61000-2/-3/-4
Installation	Base mounted	Standard
	Rack mounted	Optional

Item			Specifications	
Performance	Speed control		1:5000, stable at rated torque	
	Speed fluctuation rate	Load	<±0.01% of rated speed (Load: 0%~100%)	
		Voltage	<±0.01% of rated speed (Voltage: ±10%)	
		Temperature	<±0.1% of rated speed (Temp.: 25°C±25°C)	
	Torque control accuracy (reproducible)		±1%	
Soft-start time		0s~30s (separate ACC/DEC setting)		
I/O Signal	Sequential control input	General	Operating voltage: DC24V ± 20%	
			4×input	
			Mode: common collector, common emitter	
		Distributable	• Positive-overtravel (P-OT), Negative-overtravel(N-OT)	
			• Alarm reset (/ALM-RST)	
			• Manual PI-P control (/P-CON)	
			• Torque limit control(/TLC)	
			• Zero clamp(/ZCLAMP)	
			• Pulse inhibit (/INHIBIT)	
			• Gain selection(/G-SEL)	
			• Torque reference direction(/T-SIGN)	
			• Reference pulse multiplier(/PSEL)	
			• Home (/Home)	
	Sequential control output	Relay	Operating voltage: DC5V ~ DC30V	
			1×output	
			Mode: Relay output (default as holding brake), configurable as needed	
		General	Operating voltage: DC5V ~ DC30V	
			1×output	
			Mode: Optocoupler output (isolated), configurable as needed	
		Distributable	• Servo ready (/S-RDY)	
			• Position coincidence (/COIN)	
			• Velocity completion(/V-CMP)	
			• Torque limit (/CLT)	
			• Velocity limit (/VLT)	
			• Brake (/BK)	
			• Warning (/WARN)	
			• Position near(/NEAR)	
			• Pulse input multiplier(/PSELA)	
			• Torque arrival output (/TAO)	
			• Encoder overheat(/encovheat)	
			• No-alarm position coincidence (/NoAlmCoin)	
Communication	Bus (CN6)		EtherCAT	Standard
			Device	PC , standard, TYPE-C
	USB (CN7)		Specification	USB 2.0 and 3.0
Display			CHARGE, 8-segment LED × 5bit	
Panel Operator			Button switch× 4	
Regeneration			External	
Overtravel (OT) Prevention			Dynamic brake (DB) stop, deceleration stop, or coasting stop at valid P-OT or N-OT signals	
Protection			Overcurrent, overvoltage, undervoltage, overload, encoder disconnection, motor overheat, etc.	
Auxiliary			Safe torque off (STO), gain adjustment, error history, JOG operation, home search, etc.	

Research and Production

R&D and Technology Platform

- Consolidating a dynamic force of top-tier professionals and technical experts in domestic industrial control, our R&D team represents 37.16% of our workforce, with 74.62% of our technical staff boasting bachelor's degrees or higher.
- Guided by philosophy of "Innovate with technology and strive for excellence," VEICHI is deeply customer-centric by providing stable and reliable products and technologies designed to the evolving needs of our clients.
- Investing 10% of our revenue into R&D, VEICHI has crafted advanced labs for EMC, safety, reliability, and performance testing to ensure product quality.
- In-depth cooperation with many famous universities and research institutions in China has been established and "Jiangsu Postdoctoral Innovation Practice Base" and "Jiangsu Postgraduate Workstation" are set up successively.

Intelligent Automation

- Digitally driven from inception to production, VEICHI boasts an annual capacity of 914,600 units with streamlined efficiency.
- 5 imported SMT placement lines, 5 automated coating lines, 4 DIP test lines, a robotic arm-equipped automated line, and 12 production lines are equipped with the latest intelligent manufacturing tools.
- All of the product checks are carried out automatically by the management mode of 3 (tri-inspection system)+ 1(proportional inspection) during the whole process for standard performance.
- Three major production management system WMS, MES and ERP together ensure that the unique code of each product is traceable in the system to manage product quality.

