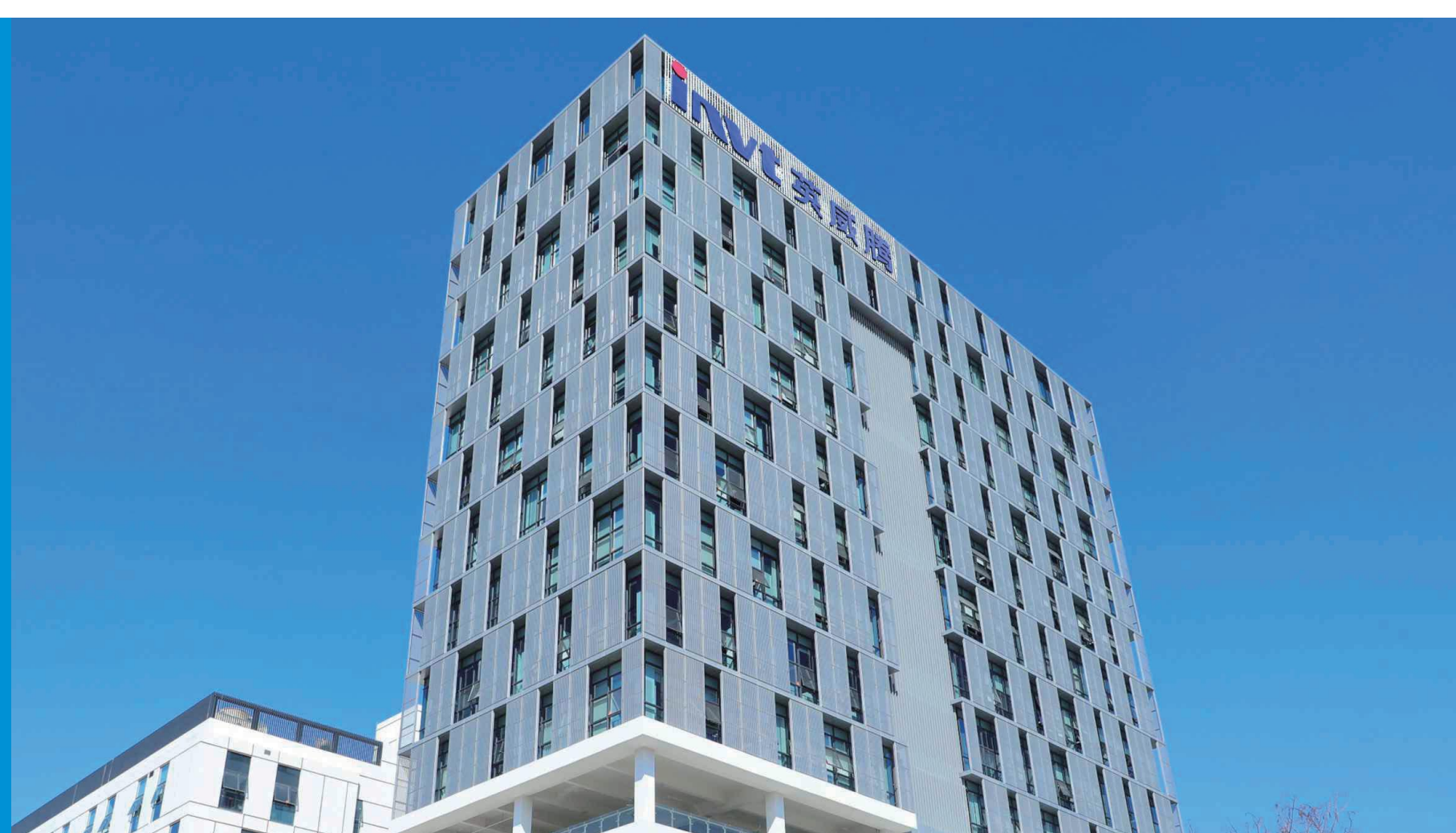


INVT Industrial Automation Product Catalog



ABOUT US

INVT provides differentiated and specialized industry solutions, customized technical services, global localization operations, and digital management models to global customers.



**INVT Guangming
Technology Building**



**INVT Suzhou
Industry Park**



**INVT Zhongshan
New Energy Industry Base**



Business segments

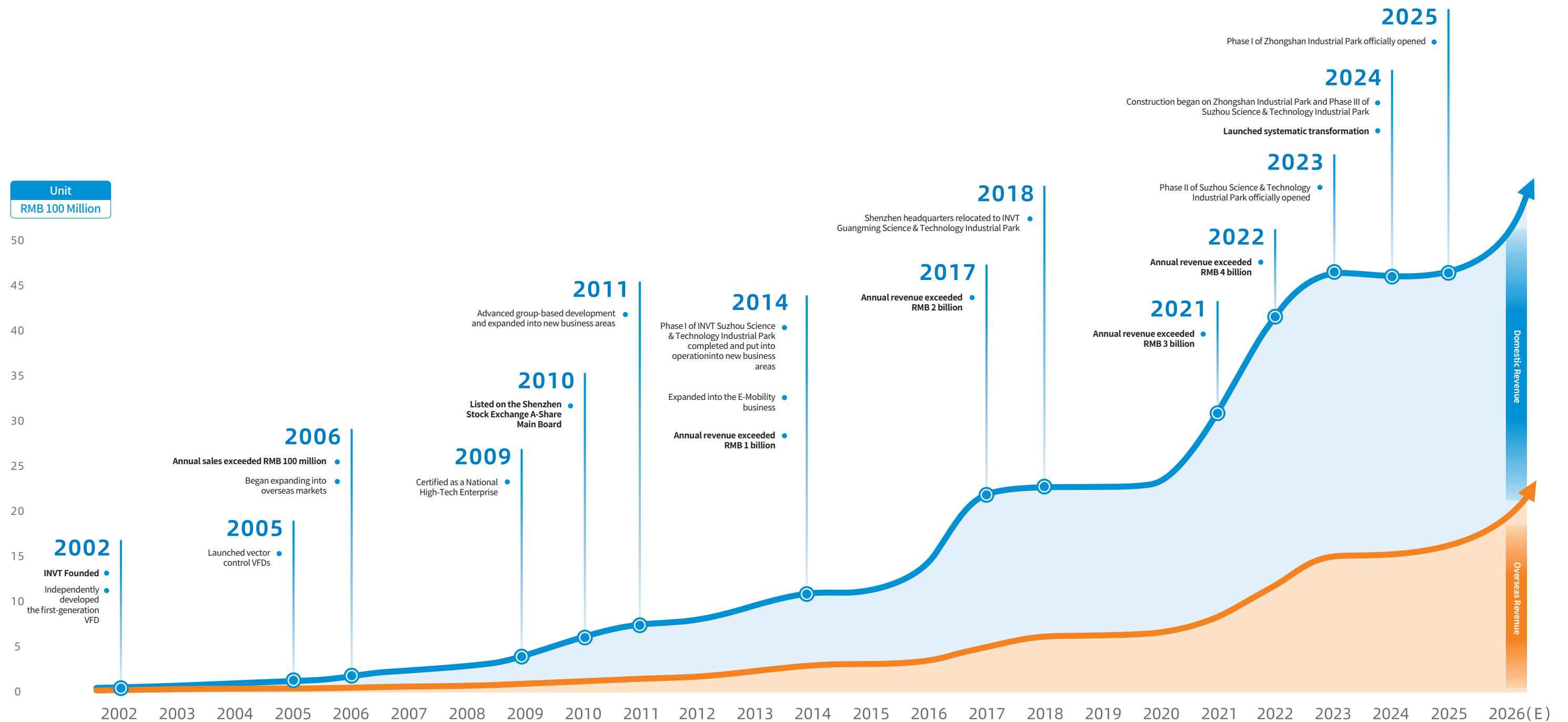
Industrial automation: Offers VFDs, servo systems, motors, controllers, HMIs, sensors, elevator drive systems, industrial internet solutions, and integrated packages, which are widely applied in compressors, cranes, solar pumps, printing and packaging machinery, 3C electronics, lithium battery equipment, semiconductor equipment, offshore equipment, steel, petroleum, chemicals, and other industries.

Network power: Offers micro module data centers, power supply and distribution products, intelligent temperature control products, intelligent monitoring products, and integrated solutions, which are widely used in cloud data centers, finance, telecommunications, healthcare, energy, and other sectors.

E-mobility: Offers a comprehensive portfolio including main motor controllers, auxiliary motor controllers, vehicle controllers, and onboard power supplies, delivering complete solutions for both commercial vehicles and passenger cars.

PV & ESS: Offers grid-tied inverters, energy storage inverters, off-grid inverters, monitoring accessories, and O&M platforms, together with integrated smart energy solutions, which have been deployed across diverse applications worldwide.

DEVELOPMENT HISTORY



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GD18 Series Two-in-One VFD

GD18 series simple two-in-one VFDs are composed of one rectifier unit and two inverter units. With semi-book type structure, they can be used in scenarios where two or more VFDs of the same power or similar power are required.

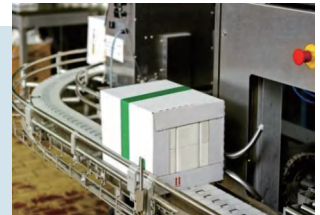
AC 3PH 380V (-15%)- 440V (+10%) 0.75- 7.5kW



- Enhanced protection performance and wide voltage design
- Upgraded structure and user-friendly wiring to save the labor time
- Dual-axis drive to save 50% of the volume and reduce cabinet cost
- Excellent control performance to support V/F and SVC control

Application areas

Textile machinery, stone machinery, music fountains, and packaging equipment.



GD20 Series Compact VFD

GD20 series VFDs have excellent drive and control performance for using of sensorless vector control technology. 18.5kW and higher VFD models comes standard with built-in DC reactor and up to 110kW VFD models are configured with optional built-in braking units. Meeting different industrial control applications.



AC 1PH 220V (-15%)- 240V (+10%) 0.4- 2.2kW

AC 3PH 220V (-15%)- 240V (+10%) 0.4- 7.5kW

AC 3PH 380V (-15%)- 440V (+10%) 0.75- 110kW



- Multi-function and easy to use
- Adopt the SVC mode
- Mini design for VFDs, abreast multiple installation methods

Application areas

Food machinery, plastic machinery, ceramic equipment, petroleum machinery, cable equipment, air compressors, machine tools, woodworking machinery, textile machinery, printing and packaging equipment, chemical equipment, environmental protection equipment, conveying equipment, washing equipment, small machine tools, etc.



GD27 Series Smart VFD

GD27 is a smart VFD, in compact structure, with excellent performance and rich functions, simple and easy to use.



AC 1PH 200V- 240V 0.4kW- 2.2kW

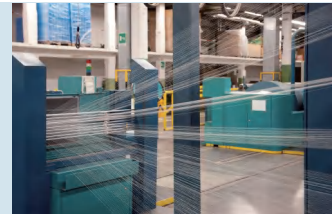
AC 3PH 200V- 240V 0.4kW- 15kW

AC 3PH 380V- 480V 0.75kW- 22kW

- -10-50°C, without derating
- Book-type design to support side-by-side installation
- Push-in spring loaded control terminals, tool-free wiring
- The EU models are equipped with built-in C3 and STO functions
- Support sensorless vector control and permanent-magnet synchronous motor control

Application areas

Widely used in woodworking, textiles, food, printing and packaging, plastics, logistics and transportation equipment.



GD28 Series Flexible General-Purpose VFD

The GD28 series is a flexible general-purpose VFD, integrating multiple advantages to deliver reliable motor drive solutions. The product offers high safety and reliability, a compact design, excellent performance, rich functionality, and ease of use. It integrates an EMC filter, safety functions, and a Type-C debugging interface, while supporting energy-saving control and multiple fieldbus communication options.



AC 1PH 200V-240V 0.2-2.2 kW

AC 3PH 200V-240V 0.2-15 kW

AC 3PH 380V-480V 0.4-22 kW

- Built-in STO (SIL3) safety function and EMC filter as standard.
- Designed for both light-load and heavy-load modes; in heavy-duty mode, no derating is required up to 50 °C.
- Excellent motor control performance, supporting both asynchronous and permanent magnet synchronous motors.
- Compact design allowing side-by-side mounting, facilitating simple and flexible installation
- Built-in Type-C interface for easy and convenient commissioning and monitoring
- Optional all-in-one communication expansion card integrating Profinet, EtherCAT, EtherNet/IP, and Modbus TCP

Application areas

The product can be widely applied in industries such as machine tools, textiles, printing and packaging, food, lithium batteries, logistics, 3C, plastics, cables, and HVAC.



GD20-EU Series Compact VFD

GD20-EU is a vector VFD developed for the European market, which is equipped with built-in STO function.



AC 1PH 220V (-15%)- 240V (+10%) 0.4- 2.2kW

AC 3PH 220V (-15%)- 240V (+10%) 0.4- 7.5kW

AC 3PH 380V (-15%)- 440V (+10%) 0.75- 110kW



- Adopt the SVC control mode
- External keypad for parameter copying
- Equipped with built-in DC reactor as standard configuration for ≥ 18.5 kW VFDs
- Equipped with built-in braking unit (standard configuration for ≤ 37 kW VFDs, optional configuration for ≥ 45 kW VFDs)
- Equipped with C3 filter (380V ≥ 4 kW VFDs) as standard configuration, optional external C3 (for 380V ≤ 2.2 kW VFDs) and C2 filters

Application areas

Widely used in small and medium power applications, such as food machinery, plastic machinery, ceramic equipment, petroleum machinery, cable equipment, air compressors, machine tool equipment, woodworking machinery, textile machinery, printing and packaging equipment, chemical equipment, environmental protection equipment, conveying equipment, etc.



GD270 Series VFD for Fan and Pump

GD270 series VFD is a VFD for fan and pump, which is optimized according to fluid load characteristics, Equipped with the latest ECO energy-saving control algorithm, with powerful special functions, making it easier to use and better performance.



AC 3PH 380V- 480V 1.5- 800kW



- Integrated with new ECO energy-saving algorithm
- EU version standard built-in STO function
- Support the driving of synchronous and asynchronous motors
- Support communication expansion of various mainstream industrial buses
- Integrated with constant-pressure water supply and HVAC-specific functions
- Circuit boards meet the protection requirements of IEC 60721-3-3:1994 3C3

Application areas

Central air conditioning, municipal water supply, sewage treatment, municipal heating, transfer pumps, irrigation pumps and other fan and pump industry applications.



GD200A Series General VFD

GD200A series VFD uses DSP control system as the platform, adopts the sensorless vector control technology, and is equipped with various protection methods, which can be used for asynchronous motors to provide excellent drive performance.



AC3PH 380V(-15%)-440V(+10%) 0.75-500kW



- VFD combining both the G and P types.
- Semi-book type design with independent cooling ducts.
- Compatible with common DC bus solutions and able to operate in DC supply mode.
- Built-in braking unit as standard for ≤ 30 kW models.
- Built-in C3 filter as standard; optional external C2 filter.

Application areas

Ceramic machinery, building material equipment, building municipalities, municipal water supply, municipal heating, environmental protection equipment, agricultural irrigation, woodworking machinery, textile machinery, air compressors, plastic machinery, petroleum machinery, mining equipment, glass machinery, fan pumps, etc.



GD290 Series Low-Voltage Multifunction General-Purpose VFD

The GD290 series VFD is a low-voltage multifunction general-purpose VFD with robust performance in driving asynchronous motors and can be widely applicable to constant torque and variable torque load equipment.

AC 3PH 380V-480V 0.75-500 kW



- Supports mainstream industrial communication extensions, I/O expansion, and 24 V power supply card expansion
- Circuit board compliant with IEC 60721-3-3:1994 3C3 protection requirements
- Built-in braking unit for models up to 110kW
- Equipped with ECO energy-saving algorithm
- High power density design, saving installation space and simplifying cabinet integration

Application areas

Constant torque or variable torque load equipment in industries such as municipal engineering, chemicals, HVAC, textiles, food, and packaging.



GD350 Series High-performance Multifunction VFD

GD350 is a high-performance and multi-function VFD, which integrates position, speed and torque control, supports various motor drives, and provides strong expansion capability, supporting customers' secondary development and remote operation of mobile APP and the IoT. With the expansion design, the VFD can meet customized and industrial requirements flexibly and quickly, make the application more flexible, and optimize the performance.



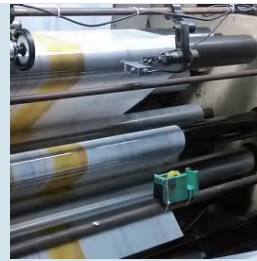
AC 3PH 380V (-15%)- 440V (+10%) 1.5- 500kW

AC 3PH 520V (-15%)- 690V (+10%) 22- 630kW

- Equipped with multi-function LCD keypad as standard configuration
- Equipped with the safe torque off (STO) function as standard configuration
- Strong expansion capability to support 3 expansion cards at most
- Integrate position control, speed control and torque control, and support various motor drives
- Support communication bus, encoder, IO, PLC and other expansion cards

Application areas

Textile machinery, metal processing, woodworking machinery, paper tissue machinery, printing and packaging machinery, petroleum machinery, plastics machinery, lifting machinery, permanent magnet synchronous motors, electric spindles, and drives of various automated production equipment.



GD350A Series High-Performance General-Purpose VFD

The GD350A series high-performance general-purpose VFD adopts INVT's latest Euler software platform, greatly enhancing motor control performance, parameter adaptability, and ease of use. The product supports the integration of the G and P types, delivering improved heat dissipation, reliability, and environmental adaptability. Featuring rich functions and flexible application configuration, the series meets a wide range of application requirements.



AC 1PH 200V ~ 240V 0.75~7.5kW

AC 3PH 200V ~ 240V 0.75~250kW

AC 3PH 380V ~ 480V 0.4~500kW

AC 3PH 500V ~ 575V 0.4~500kW

AC 3PH 520V ~ 690V 4~630kW

- G/P-in-one VFD
- Equipped with multi-function LCD keypad as standard configuration
- Equipped with the STO function as standard configuration
- Rich expansion card types to support 3 expansion cards at most
- Integrate position control, speed control and torque control, and support various motor drives

Application areas

Widely used in various automated production equipment such as metal processing, textiles, cranes, papermaking, petroleum, chemicals, plastics, printing and packaging, and compressors.



GD350-UL Series High-performance Multifunction VFD

GD350-UL is a high-performance and multi-function VFD, which passes the UL certification for the entire series, integrates speed, torque and position control, supports various motor drives, and provides strong expansion capability, supporting customers' secondary development and remote operation of mobile APP and the IoT.



AC 3PH 200V- 240V 0.75- 55kW
 AC 3PH 380V- 480V 1.5- 500kW
 AC 3PH 520V- 600V 0.75- 110kW

- Equipped with the multi-function LCD keypad as standard configuration
- Built-in STO (SIL2) function, safe and reliable
- Three card slots, meeting enriched expansion requirements
- Integrate torque control, speed control and position control, and support various motor drives

Application areas

Widely used in plastics, textiles, machine tools, food packaging, chemicals, printing, building materials, etc.



GD350-IP55 Series High protection Multifunction VFD

GD350-IP55 is the latest high protection multifunction VFD developed by INVT, which provides the best protection experience for the worst outdoor applications and incorporates features such as ease of use, excellent performance and high scalability.



AC 3PH 380V(-15%)-440V(+10%) 4-110kW

- All series meet the IP55 rating
- Optional AC switch for safe control
- Strong expansion capability to support 3 expansion cards at most
- Integrate position control, speed control and torque control, and support various motor drives
- Support communication bus, encoder, IO, PLC and other expansion cards

Application areas

Textile machinery, metal processing, woodworking machinery, paper tissue machinery, printing and packaging machinery, petroleum machinery, plastics machinery, lifting machinery, permanent magnet synchronous motors, electric spindles, and drives of various automated production equipment.



GD600A Series High-Performance Multi-Drive VFD

The GD600A series high-performance multi-drive VFD is a common DC bus drive system composed of rectifier and inverter units, delivering multi-point drive. Beyond the core advantages of multi-drive systems—energy efficiency and cost reduction, the product introduces differentiated power unit design for flexible configuration, further reducing system costs. Integrated with multiple motor drive capabilities, dedicated process algorithms, simplified servo functions, and bridge networking, the product delivers versatile solutions that precisely match customer needs across all application scenarios.



Rectifier module: AC 3PH 380V(-15%)–440V(+10%) 45–355kW

Inverter module: DC 350Vdc–800Vdc 1.5–160kW

- Common DC bus, achieving up to 30% energy savings
- 30% reduction in TCO
- Integrated complex process modules including brake control, anti-sway, tension control, master/slave control, and fully-closed loop control, covering diverse application scenarios
- Rectifier unit adaptable to unstable power grids such as diesel generators and weak grids, improving system reliability
- Rectifier units ≤ 110 kW with built-in braking unit, supporting brake short-circuit protection to reduce system cost and enhance reliability

Application areas

Widely applied in multi-motor continuous production lines for metal processing, printing and packaging, textile machinery, tissue machinery, small paper-making machines, and logistics equipment.



SP100 Series High-Protection Solar Pump Inverter

The SP100 series high-protection solar pump VFD can be directly installed outdoors and efficiently powers AC water pumps with solar energy.



AC 1PH 220V(-15%)–240V(+10%) 0.75–2.2kW

AC 3PH 380V(-15%)–440V(+10%) 2.2–22kW

- IP66 protection rating across the entire series
- Built-in DC switch and combiner function
- Supports AC/DC hybrid power supply
- IoT-enabled for smart remote monitoring
- Built-in boost module for ≤ 4 kW models, reducing the number of required PV panels

Application areas

Residential water pumps, agricultural irrigation, animal husbandry.



GD170-PV Series Economical Solar Pump Inverter

GD170-PV is an inverter special for solar pump applications.



AC 1PH (IN/OUT) 220V (-15%)- 240 (+10%) 1.5- 2.2kW

AC 1PH 220V (-15%)- 240 (+10%) 1.5- 2.2kW

AC 3PH 220V (-15%)- 240 (+10%) 1.5- 7.5kW

AC 3PH 380V (-15%)- 440 (+10%) 2.2- 315kW

- Support optional GPRS module
- Optional booster module for <4kW VFDs
- Maximum power point tracking (MPPT) up to 99%
- The power-off frequency drop function is to protect the VFD at transient power-off
- Automatic startup and sleep, 24-hour unattended work

Application areas

Urban water supply, desert control, grassland animal husbandry, agricultural forest irrigation, etc.



GD100-PV Series Solar Pump Inverter

GD100-PV is an inverter special for solar pump applications.



AC 1PH 220V (-15%)- 240V (+10%) 0.4- 2.2kW

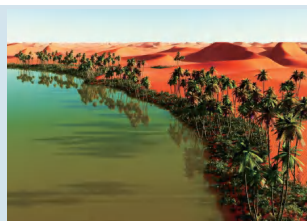
AC 3PH 220V (-15%)- 240V (+10%) 4- 7.5kW

AC 3PH 380V (-15%)- 440V (+10%) 0.75- 500kW

- Automatic startup and sleep
- Support optional GPRS module
- Extend product life effectively
- 24-hour unattended operation
- Maximum power point tracking (MPPT) up to 99%

Application areas

Urban water supply, desert control, grassland animal husbandry, agricultural forest irrigation, etc.



GD350-01 Series VFD for Compressor

The GD350-01 series VFD for compressor uses the new control platform, with deep optimizations in multiple aspects including software architecture, vector control algorithms, parameter autotuning, and rectifier harmonic suppression algorithms, thereby improving the reliability, stability, adaptability, and user-friendliness. Alongside dedicated functions and specialized interfaces, it provides comprehensive expansion capabilities, enabling versatile solutions for customized machines and diverse applications.



(AC 3PH 380V models)



AC 3PH 220V(-15%)–240V(+10%) 7.5–185kW

AC 3PH 380V(-15%)–440V(+10%) 7.5–500kW

AC 3PH 520V(-15%)–690V(+10%) 22–630kW

Intelligent control algorithms

- Multiple control modes (V/F, vector, VVC) for different motor load types
- One-click parameter autotuning, loop-free debugging, and one-touch start

Dedicated design

- Standard STO function (SIL2 certified)
- Supports two expansion cards (I/O, temperature/pressure analog, DP/PN bus communication)
- Built-in specialized interfaces for PT100 and compressor control logic, no need for PLC or separate compressor controller

Application areas

air compressor.



GD350-01-FT Series Single-VFD Integrated System for Air Compressor

The GD350-01-FT series single-VFD integrated system for air compressor is developed based on the GD300-01A-RT series. Incorporating a new-generation control platform, it delivers further innovations and breakthroughs in performance and functionality, making it a dedicated VFD for the compressor industry.



(AC 3PH 380V models)



AC 3PH 380V(-15%)–440V(+10%): 7.5–37kW

AC 1PH 220V (-15%)–240V(+10%): 4kW, 7.5kW

AC 3PH 220V(-15%)–240V(+10%): 7.5–15kW

Stable and reliable

- Control loop bandwidth increased by 10×, with enhanced grid/load fluctuation adaptability for more stable operation
- Cooling fans with IP56 vacuum-coated design, significantly reducing fan failure rate and improving system reliability
- Loop-free commissioning with parameter self-adaptation; simple setup with the need to configure numerous parameters

Integrated design, lower system cost

- Specialized all-in-one design integrating the motor and fan control, with specialized interfaces for PT100 and pressure sensors, reducing the electrical system cost by 10% compared with traditional solutions
- Pluggable terminals for convenient harness pre-assembly, improving assembly efficiency and reducing wiring cost

Application areas

air compressor.



GD350-21 Series Dual-VFD Integrated System for Air Compressor

The GD350-21 series dual-VFD integrated system for air compressor is developed on the foundation of the existing GD300-21 series VFD. It incorporates a new-generation control platform technology and is specifically designed around the characteristics of air compressors. As a high-end, fully integrated solution for air compressors that provides full variable frequency control for both the motor and fan, it perfectly achieves integrated drive and management for air compression systems.

CE (AC 3PH 380V models)



AC 3PH 380V(-15%)–440V(+10%): 15–90kW

AC 3PH 220V(-15%)–240V(+10%): 7.5–45kW

Intelligent control algorithms ensure stability and reliability

- Multiple control modes (V/F, vector, VVC) for different motor load types
- Control loop bandwidth increased by 10×, with enhanced grid/load fluctuation adaptability for more stable operation.

Dedicated design for simplicity and ease of use

- Standard LED keypad with intuitive display and parameter copy function for convenient commissioning of motor and fan parameters.
- Built-in 110 V/220 V power-frequency transformer and dedicated solenoid valve relay interface for direct valve control
- Cooling fans with IP56 vacuum-coated design, significantly reducing fan failure rate and improving system reliability.
- Built-in DC reactor as standard across the entire series

Application areas

air compressor.



GD350-01H Series High-Speed Motor VFD

The GD350-01H series is a specialized variable frequency drive (VFD) designed for high-speed motor control and compressor applications. Incorporating next-generation control platform technology, it delivers breakthrough performance and functionality. The new control platform employs modular and layered design concepts, with deep optimizations in multiple aspects including software architecture, vector control algorithms, parameter autotuning, and rectifier harmonic suppression algorithms, thereby improving the reliability, stability, adaptability, and user-friendliness of the product.

CE (AC 3PH 380V models)



AC 3PH 220V(-15%)–240V(+10%) 7.5–185kW

AC 3PH 380V(-15%)–440V(+10%) 7.5–500kW

AC 3PH 520V(-15%)–690V(+10%) 22–630kW

Smart core advantages

- Motor drive control up to 1200 Hz
- Multiple control modes (V/F, vector, VVC) for different motor load types
- One-click parameter autotuning, loop-free debugging, and one-touch start

Dedicated design

- Integrated PT100 and pressure input dedicated interfaces
- Functions include regenerative feedback on power loss, frequency reduction with voltage drop, frequency reduction on power loss, and anti-surge control
- Standard STO function (SIL2 certified)
- Supports two expansion cards (I/O, temperature/pressure analog, DP/PN bus communication)

Application areas

High-speed centrifugal fans, air suspension blowers, magnetic suspension blowers, and high-speed centrifugal compressors.



GD20-09 Series VFD for Hoisting

GD20-09 series VFD for hoisting is a VFD that INVT develops based on the load characteristics and control requirements of hoisting machinery, which is integrated with hoisting-oriented brake logic and conical motor control logic, and equipped with torque verifying, brake feedback, zero position detection, travel limit, overload protection, light-load speed boost, motor overtemperature, and other crane-specific functions.

AC 3PH 380V (-15%)-440V (+10%) 0.75-37KW



- Compact structure to save the installation space
- Integrated with hoist-specific functions, excellent performance
- Dedicated terminal design to provide diverse choices
- Application macros special for cranes, simplify the commissioning operations

Application areas

Electric hoists, European-style cranes, small tonnage gantry, and bridge cranes.



GD350-19 Series High-performance VFD for Crane

GD350-19 series new generation high-performance VFD for crane integrates various special functions, including brake control, zero servo, quick stop, master/slave control, switchover between three sets of motor parameters, pre-magnetizing, light-load speed boost, loose rope detection, and travel limit.



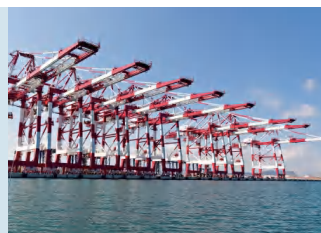
AC 3PH 380V (-15%)-440V (+10%) 1.5-500kW

AC 3PH 520V (-15%)-690V (+10%) 22-630kW

- Compatible with mainstream bus protocols in the market
- Closed-loop vector control with 0Hz/200% torque output
- Perfect brake logic integration to prolong the life of the brake
- Integrated with master-slave control in flexible and rigid connections
- Equipped with braking units as standard configuration for ≤ 110 kW VFDs to reduce costs

Application areas

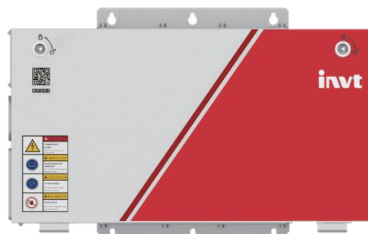
Drives of lifting, pitching, luffing, cross traveling, long traveling, slewing and grabbing mechanisms for hoisting equipment such as bridge cranes, RTG/RMG, quay cranes, portal cranes, gantry cranes, European-style cranes, tower cranes, winches, and mine hoists.



GD350-39 Series Construction Hoist Integrated Machine

GD350-39 is an all-in-one product that integrates the electrical, control and brake circuits in the existing electric control cabinet of the construction hoists, strengthens safety and industry application adaptability, and provides functions such as voice broadcast, automatic floor leveling, weighing protection, 4G remote monitoring, etc. It is professionally applied to the all-in-one products of the construction hoists.

AC 3PH 380V (-15%)- 440(+10%) 37- 45kW



- IoT-Cloud platform-OTA to realize intelligent IoT
- Wide range of voltage fluctuations to meet the complex grid environment
- Intelligent voice announcement and visual interface, more suitable for the usage needs
- Leading IF control mode, low-frequency and high-torque output, and no slipping during start and stop
- Electrical intelligent terminal for hoist system, highly integrated design, easy to use for customers

Application areas

Construction hoists.



GD200L Series VFD for Simple Elevator

GD200L is an elevator VFD for asynchronous motors that developed by INVT based on years of experience in motor drive and elevator drive industry. It adopts the advanced non-weighing sensor vector control technology and optimized DSP control algorithm, which provides excellent reliability and performance.

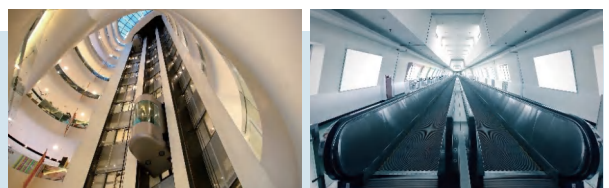
AC 3PH 220V(-15%)~240(+10%) 4~30kW
AC 3PH 380V(-15%)~440(+10%) 4~55kW



- Applicable to asynchronous motors, supporting both open-loop and closed-loop control
- Emergency rescue mode to support 1PH UPS light-load judgment
- Optimized DC braking and S-curve algorithms for smoother operation and start/stop
- With compact structure design, the control board is integrated with asynchronous PG card and terminals, easy installation and low cost

Application areas

Asynchronous motor elevators.



GD300L Series VFD for Elevator

The GD300L series is a mature and highly competitive lift-dedicated VFD developed by INVT. Based on the latest drive platform, it adopts DSP and advanced vector control technology, significantly enhancing safety, reliability, and control performance, offering an ideal solution for modern elevator systems.



AC 1PH 220V(-15%)~240(+10%) 2.2kW

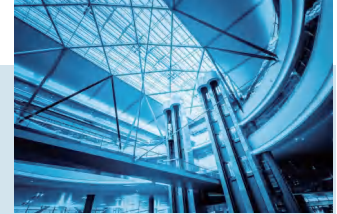
AC 3PH 220V(-15%)~240(+10%) 4~15kW

AC 3PH 380V(-15%)~440(+10%) 4~30kW

- Supports AC 220 V UPS emergency rescue and light-load re-leveling function
- Achieve the starting torque compensation function
- Equipped with the STO function
- Static identification on the initial pole angle of a synchronous motor
- Support open-loop control mode without encoder and closed-loop control mode with encoder

Application areas

Widely used in passenger and freight elevators, escalators, etc.



GD390L Series Lift-dedicated VFD

The GD390L is a new-generation high-performance lift-dedicated VFD. It integrates drive technology, control system, and network communication functions, and incorporates safety features such as STO (Safe Torque Off, SIL3 certified), electronic shorting, and Class C2 EMC filter. It is suitable for diversified elevator application scenarios.



AC 1PH 220V(-15%)~240(+10%) 2.2kW

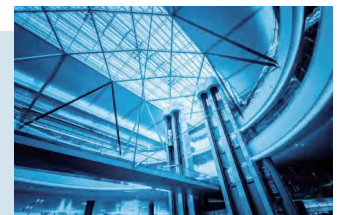
AC 3PH 220V(-15%)~240(+10%) 4~18.5kW

AC 3PH 380V(-15%)~440(+10%) 4~37kW

- Dual-CPU (MCU + DSP) design with strong scalability, supporting secondary development
- Built-in Class C2 EMC filter with excellent anti-interference performance
- Supports incremental, Sin/Cos, EnDat, and SSI absolute encoder extensions
- Weightless start/stop compensation technology for smoother running
- Automatic light-load detection in emergency mode to reduce backup power consumption

Application areas

Widely used in freight elevators and passenger elevators.



GD290L Series Escalator-dedicated VFD

The GD290L is a multifunction VFD specifically designed for escalators. It supports both synchronous and asynchronous motors, and its reinforced PCB coating ensures reliable long-term operation in harsh environments with low maintenance costs.

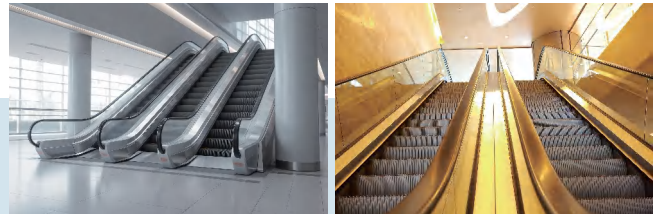


AC 3PH 380V(-15%)~440(+10%) 4~55kW

- Advanced vector control technology ensuring stable operation under complex conditions
- Optimized hardware circuitry with strong electromagnetic immunity
- Seamless switchover between industrial mode and VFD mode
- Built-in PLC card with 16K memory, supporting customer secondary development
- Preset scenario modes to meet customized requirements and reduce implementation cost

Application areas

Primarily used in escalator applications.



EC90B Series Open-Loop Integrated Elevator Controller

The EC90B is a new-generation intelligent open-loop elevator control system that integrates drive, control, and network communication technologies. With advanced V/F vector control and intelligent algorithms, it enables seamless integration of elevator drive, control, and management functions, significantly enhancing safety, reliability, ease of operation, and cost efficiency.

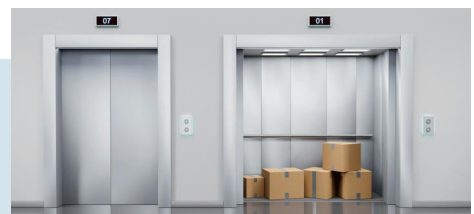


AC 3PH 380V (±15%): 4~5.5kW

- Supports up to 15 floors; speeds up to 1.0 m/s in open-loop mode and 1.5 m/s in closed-loop mode
- Compatible with both asynchronous and permanent magnet synchronous motors, supporting open-loop and closed-loop modes
- Supports parallel and semi-serial
- UPS power support for emergency rescue operation
- Customized communication protocol preventing unauthorized spare-part replacement

Application areas

Widely used in freight elevators and passenger elevators.



EC160A/EC160B Series Integrated Elevator Controller

The EC160A/EC160B is an advanced intelligent control system that integrates drive, control, and network communication technologies. With closed-loop vector control and intelligent elevator algorithms, the product enables efficient coordination of elevator control, drive, and management functions.



EC160A

Control board with integrated input terminal module



EC160B

Uses a dedicated plug-in board (connected via flat cable)

AC 1PH 220V(-15%)~240(+10%) 2.2kW
 AC 3PH 220V(-15%)~240(+10%) 4~22kW
 AC 3PH 380V(-15%)~440(+10%) 4~55kW

- Fully compliant with EN81-20/50 safety standards, supporting speeds up to 6 m/s and control of up to 64 floors
- Advanced group control functionality, supporting coordinated operation of up to 8 elevators
- Weightless start compensation technology for smoother operation
- AC 220V UPS support for emergency rescue with automatic light-load detection
- Integrated synchronous/asynchronous PG card; optional absolute encoder plug-in card

Application areas

Residential elevators, commercial elevators, medical elevators, sightseeing elevators, and freight elevators.



EC300 Four-quadrant Elevator Integrated Machine

The EC300 is a new-generation four-quadrant intelligent control system that integrates drive, control, energy regeneration, and network communication functions. With four-quadrant drive technology, it efficiently feeds elevator mechanical energy back to the grid, achieving energy savings of more than 30%, while complying with IEC 61000-3-2 Class A efficiency certification.



AC 3PH 400V ($\pm 15\%$) 7.5–30kW

- Retains all functions of the EC160A while upgrading energy regeneration technology (efficiency > 80%, node energy-saving efficiency 30%)
- TI dual-core DSP chip with high-speed communication capability, fast curve-tracking response
- Data black box for real-time operation status recording
- Automatic fault diagnosis with transient fault logging
- Direct landing technology with automatic generation of multiple curve profiles

Application areas

Residential elevators, commercial elevators, medical elevators, sightseeing elevators, freight elevators, Explosion-Proof Elevator and metro elevators.



EC600 Series Integrated Cabinet

The EC600 integrates vector drive control, intelligent management, and network communication into a unified platform, delivering safer, more reliable, and user-friendly elevator control.



AC 3PH 380V(-15%)~440(+10%) 7.5 kW & 15kW

- Intelligent variable-frequency control: precise leveling, automatic generation of multi-speed curves, smart short-floor recognition
- Low-noise design: running noise < 50dB for improved passenger comfort
- Safety certification: STO (SIL3 certified) + electronic shorting for PMSM
- Compact design: cabinet size reduced by 32%, internal wiring reduced by 45%
- Compatible with both asynchronous motors and permanent magnetic synchronous motors
- Dedicated external LED monitoring panel, supporting hoistway installation

Application areas

Widely used in freight elevators and passenger elevators.



DSC160A/DSC160B Series Control Cabinet

The DSC160A/DSC160B series control cabinets are INVT's latest universal, intelligent, and system-integrated products, featuring comprehensive improvements and enhancements in reliability, ease of use, cost-effectiveness, and open functional design.



AC 3PH 380V(-15%)~440(+10%) 7.5 kW & 15kW

- DSC160A: CAN bus communication, terminal wiring installation
- DSC160B: dual communication interfaces (RS485 + CAN), plug-in board with flat cable connection
- Single elevator/duplex/group control available
- Capable of reaching 6 m/s and managing up to 64 floors
- Door operator controller with dual-path control (main board / car top board)
- Compliant with EN81 international safety standards
- Integrated drive-control design (EC series integrated controllers)

Application areas

Widely used in freight elevators and passenger elevators.



EC-CTB Car-top Control Board

EC-CTB-C car-top control board

EC-CTB-C is an elevator car-top control board, which is a derivative product based on EC-CTB-A. Compared with EC-CTB-A, EC-CTB-C adds 4 input points and 3 output points.



- Support single door and double door control
- Support floor control below 64 floors
- Support RS485 communication output, communicating with the third-party controller
- Support two modes: analog weighing input and digital weighing
- Support the function requirements of EN81-20:2020 and EN81-50:2020

Application areas

Residential elevators, commercial elevators, medical elevators, sightseeing elevators, and freight elevators.



EC-CTB-K2 Car-top Control Board, EC-CTB-J4 Car-top Plug-in Board



EC-CTB-K2



EC-CTB-J4

- CAN bus communication, supporting RS485
- Dual input for analog/digital load weighing signals, strong compatibility
- 64-floor control for high-rise buildings
- Arrival chime output, enhancing passenger experience
- Independent dual-door operator control, adaptable to different door systems
- Comfort optimization and leveling parameter tuning for smoother operation

Application areas

Adapted to EC160B models, installed inside the car-top inspection box.



EC-CCB Car Command Board

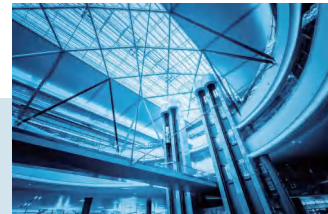
EC-CCB is car button board.



- 24 digital inputs
- Support driver, independent, non-stop switch, driver change direction, door opening delay button input, etc.
- Each elevator is equipped with at least one car command board, the first car command board supports 16 floors, and every 20 floors above 16 floors is equipped with one car command board

Application areas

Elevator components-operation box.



LM11-K1-A Elevator Voice Announcer



AC 3PH 380V(-15%)~440(+10%) 7.5 kW & 15kW

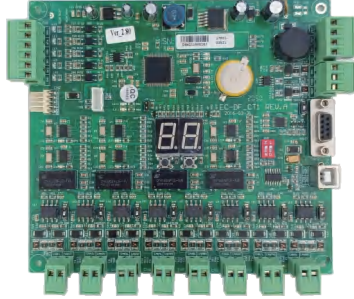
- Smart announcement system
- Voice pre-announcement of running direction (before start)
- Voice floor announcement (before landing)
- Background music playback
- Reassurance voice messages for faults/fire operation
- Arrival advertising music (customizable by floor)
- SD card storage, supporting MP3 format for flexible music replacement (ads, background, announcements)

Application areas

Car top or car operation panel.



EC-DF Destination Dispatch System



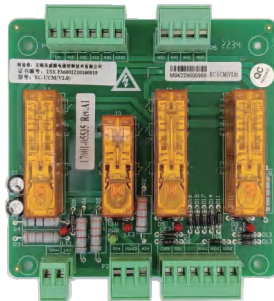
- Smart group control solution
- Group control of up to 8 elevators
- AI intelligent algorithm
- Peak traffic recognition
- Real-time passenger flow statistics
- VIP/accessibility functions

Application areas

Control cabinet or independent dispatching system panel.



UCM Control Board EC-UCMV2.0



- Support the advance door opening and creeping leveling function
- Support the synchronized UCMP function of GB7588-2020
- EC-UCMV2.0 adopts safety relay with high reliability design

Application areas

Control cabinets of passenger and freight elevators.



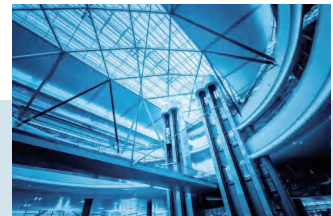
DSC-CTB Series Car-top Inspection Box



- Modular design highlights
- CAN bus architecture
- Connectors replace terminals, improving installation efficiency by 50%
- Compatible with multiple control boards (CTB-A/C/K2/J4) with unified wiring harness
- Compatible with both analog and digital load weighing inputs
- CTB-K2/J4 supports 4-door-zone (dual door) control, ensuring safe detection for single/double doors
- CTB-K2/J4 supports CAN and RS485 communication display panels, compatible with standard RS485 protocol and third-party multimedia displays/voice announcer

Application areas

Elevator component – car top inspection box.



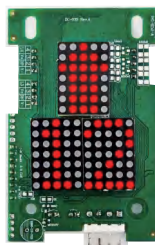
DC Series Display

DC-03B/L-A2 Dot-Matrix LED Display



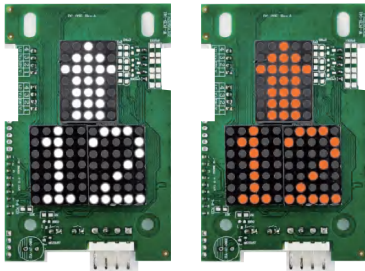
- 32-bit processor, CAN bus communication
- Ultra-thin 10mm body, perfectly fits wall-mounted LOPs
- Real-time display of overload/full load/fault/maintenance status
- Full ASCII character display
- Integrated core functions: hall calling, locking, fire service

DC-03S(0) Dot-Matrix LED Display



- Intelligent CAN bus communication
- Optimized for wall-mounted LOP design
- Multiple elevator operation status indications
- Full character display

DC-03S-W/DC-03S-O Dot-Matrix LED Display

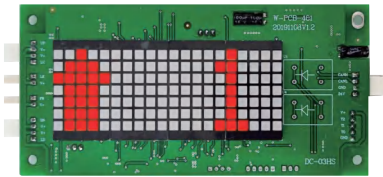


DC-03S-W

DC-03S-O

- CAN bus communication protocol
- Optional white/orange circular dot-matrix LED with scrolling display
- Real-time display of overload/full load/fault/maintenance status
- Full ASCII character display
- Integrated core functions: hall calling, locking, fire service

DC-03HS-A Dot-Matrix LED Display



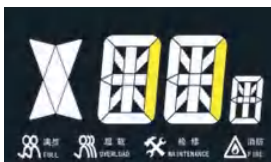
- 32-bit processor, CAN bus architecture
- Optional red/white dual-color square dot-matrix LED
- Arrival light or chime output
- Full ASCII character display
- Integrated core functions: hall calling, locking, fire service

DC-07P-D3 Segment LED Display



- 32-bit intelligent processor
- Reliable CAN bus communication
- Black background with white segment display
- Ultra-thin 6.5mm body
- Visualized monitoring of operating status

DC-05H Segment LCD Display



- 5-inch black background with white character display
- CAN bus communication
- Basic functions: hall call, parking, fire service
- Status display: overload/full load/maintenance

DC-07K-B3 Segment LCD Display



- 32-bit high-speed processor, CAN bus communication
- Blue background with white segment LCD for clear and soft visibility
- Standard ASCII character display
- Integrated functions, hall calling, locking, fire service
- Real-time display of overload/full load/fault/maintenance status

DC-07D/DC-07S Segment LCD Display



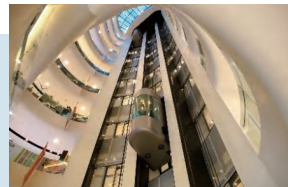
DC-07D

DC-07S

- Dual-color option available
- RS485 communication protocol (2-bit processor)
- Large 6.4-inch screen: 07D (blue background/white text); 07S (black background/white text)
- Basic character display
- Multiple elevator operation status indications

Application areas

The DC series displays can be widely used for car and hall displays, hydraulic elevators, passenger and freight elevators, home elevators, and dumbwaiters.



EC30 Series Elevator Door Controller Innovative design

An ultra-thin controller optimized for elevator door systems, with lightweight plastic housing, supporting both induction and permanent magnet motors to meet diverse door control requirements.



- Universal motor compatibility: supports both induction and permanent magnet motors
- Encoder support: compatible with incremental and absolute encoders
- Smart commissioning: one-tap upgrade/commissioning via mobile app
- Flexible communication: optional CAN/RS485 interfaces, customizable protocols
- Intelligent anti-pinch: full-pulse mode + dual pulse-loss protection
- Autotuning function: automatic speed curve generation, without manual parameter tuning
- Convenience functions: obstacle detection, auto demonstration, adaptive operation

GD200A-02 Series Super-start VFD

GD200A-02 series super-start VFD is an industry-specific product for weaving process in the textile industry, meeting various operation needs such as fast start, speed adjustment, slow jogging and variable-speed weaving. GD200A-02 is divided into built-in type and external type according to different installation requirements.

AC 3PH 380V (-15%)- 440V (+10%) 22- 55kW



- Enhanced coating, stable and reliable
- Variable-frequency super-start, effectively preventing stop gear
- Slow jogging to prevent operators from hitting hands, more reliable
- Stepless speed regulation, without belt pulley replacement, reducing the proportion of machines to be stopped
- Start in variable-frequency mode with small surge to the grid, and the service life of the input contactor is longer

Application areas

Supporting and modification of water jet looms, air jet looms and other permanent-magnet synchronous direct drive spindle drives.



GD350-02 Series Through-the-Wall VFD

GD350-02 series through-the-wall VFD is a through-the-wall special machine developed for avoiding cotton fiber, dust and oil causing secondary pollution, improving the product reliability and environment adaptability.

AC 3PH 380V (-15%)- 440V (+10%) 7.5- 55kW



- All series support the shared bus solution
- Through-the-wall installation to prevent secondary pollution
- Long-term and reliable operation at 50° ambient temperature
- Powerful drive performance, compatible with synchronous and asynchronous drives

Application areas

High-speed centrifugal fans, air levitation blowers, magnetic levitation blowers, and high-speed turbine fans.



GD350-12 Series VFD for Loom Spindles

GD350-12 series spindle VFD is a permanent-magnet synchronous direct drive special machine for new air jet looms and water jet looms, which is used with the INVT's energy saving algorithm in the motor control field and synchronous direct drive motor, saving the overall energy of the loom by 20-30%.

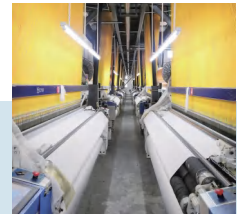


AC 3PH 380V (-15%)- 440V (+10%) 11- 15kW

- Synchronized direct drive, power saving and energy saving
- Support open-loop and closed-loop switching mode
- Slow jogging to prevent operators from hitting hands
- Built-in process algorithm and excellent starting braking performance

Application areas

Supporting and modification of water jet looms, air jet looms and other permanent-magnet synchronous direct drive spindle drives.



GD350-13 Series VFD for Oil Pumping Machine

GD350-13 series VFD realizes the integration of synchronous and asynchronous motor drives, and integrates the control of different types of oil pumping machines such as tower, beam and direct drive progressive cavity pumps, while strengthening the product reliability and environmental adaptability as well as the customized and industrial design, featuring more optimized functions, better control performance and more flexible applications.



AC 3PH 380V (-15%)- 440V (+10%) 11- 75kW

AC 3PH 520V (-15%)- 690V (+10%) 22- 75kW

- Smart announcement system
- Voice pre-announcement of running direction (before start)
- Voice floor announcement (before landing)
- Background music playback
- Reassurance voice messages for faults/fire operation
- Arrival advertising music (customizable by floor)
- SD card storage, supporting MP3 format for flexible music replacement (ads, background, announcements)

Application areas

Widely used in various types of oil pumping machines such as beam, tower and direct drive progressive cavity pumps.



GD350-CCS Series VFD for Marine Industry

GD350-CCS series VFD is a VFD for marine industry based on GD350 platform and developed for marine application environment, which integrates special functions for fans, pumps and hoists, strengthens the product reliability and environmental adaptability to meet the requirements of salt mist, vibration, humidity, temperature and grid electric dazzling for ships, and features strong expansion capability, rich safety protection functions and excellent control performance to meet diversified application requirements.

AC 3PH 380V (-15%)- 440 (+10%) 30- 500kW



- Equipped with the STO function as standard configuration
- Integrated with functions special for fans, pumps and cranes
- Enhance the marine application environment adaptability such as salt spray and vibration
- Three card slots, supporting mains power synchronization card and a variety of common expansion cards
- Integrate torque control, speed control and position control, and support various motor drives

Application areas

Floating cranes, floating pile drivers, windcarrier vessels, dredging ships, dredging vessels, pipe laying vessels, container carriers, fishery administration vessels, etc.



GD880 Series High-performance Engineering VFD

GD880 series engineering VFD is divided into two topologies: single drive and multi-drive, which is a drive product positioned in high-end applications. Through performing the modular design based on the DFX concept and adopting advanced control algorithms, the product features the advantages of excellent speed and torque control performance, high reliability, high power density, convenient installation, debugging, maintenance and comprehensive protection, facilitating the localization upgrade of process industry and continuous production equipment.

Power range

GD880-71 (basic rectifier unit)

400V 475kW- 3616kW

690V 650kW- 5183kW

GD880-81 (regenerative rectifier unit)

400V 76kW- 3513kW

690V 685kW- 6057kW

GD880-91 (active rectifier unit)

400V 64kW- 3169kW

690V 437kW- 6070kW

GD880-51 (inverter unit)

400V 4kW- 3000kW

690V 55kW- 6500kW

GD880-11 (single-drive unit)

400V 5.5kW- 1000kW

690V 355kW- 1200kW

GD880-41 (3PH braking unit)

400V 500kW- 750kW

690V 870kW- 1300kW

CCS

ERC



400V:380V (-15%)- 480V (+10%)

690V:500V (-15%)- 690V (+10%)

- Excellent speed and torque control performance
- Ergonomic design to make installation and maintenance easier
- Enriched expansion capability to support various protection options
- Modular design, as flexible as building blocks, which makes the project integration simple and efficient
- Long-life component selection and fast fault recovery design to ensure efficient process control

Application areas

Metallurgy, port machinery, lifting, shore power, petroleum, petrochemical, municipal engineering, chemical, electric power, building material, mining, shipbuilding, paper making, dynamometer, EPS, etc.



MH860C Series Electro-hydraulic Servo Drive

The MH860C series is a high-performance hydraulic servo drive featuring fast dynamic response and stable pressure control. It can be paired with the IMS20B series motors to form a high-performance electro-hydraulic servo system. This product is primarily used in industries such as plastic molding, pipe extrusion, footwear manufacturing, rubber processing, die-casting, hydraulic presses, bending machines, and hydraulic stations.



AC 3PH 380V-480V 7.5-355kW

- Fast dynamic response and stable pressure control.
- Auto-calibration with IMS20B series motor parameters, no tuning required.
- Type-C interface for easy PC connection and convenient commissioning
- Encoder disconnection ride-through (dedicated for hydraulic station applications)
- Comprehensive networking functions: CANopen and RS485 as standard; expandable to EtherCAT and PROFINET

Application areas

Injection molding machines; hydraulic presses; hydraulic stations.



GD1000 Series VFD for Coal Cutters

GD1000 series VFD for coal cutters is a variable-frequency drive unit with delicate structure and excellent performance.

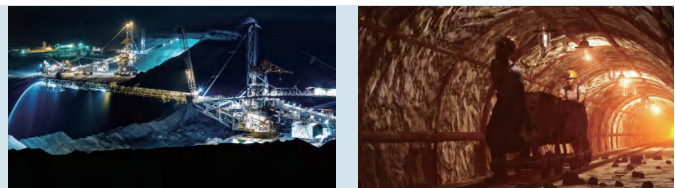


AC 3PH 380V $\pm$ 15% 160kW
 AC 3PH 460V $\pm$ 15% 200kW
 AC 3PH 660V $\pm$ 15% 315kW
 AC 3PH 1140V $\pm$ 15% 110kW

- 32-bit DSP based, supporting both asynchronous and synchronous motors.
- Superior vibration resistance, compliant with 5G vibration standard for coal shearers.
- Compact size for easy system integration.
- Surface-mount structure for quick and convenient installation.
- Four-quadrant operation with energy regeneration capability.

Application areas

Coal mining equipment such as coal cutters, continuous mining machines, alpine bolter miners and shuttle cars in mining industry.



GD2000 Series VFD for Mines

GD2000 series VFD is a high-performance vector control drive unit.



AC3PH 660V $\pm$ 15%22kW-630kW

- Wide voltage input range
- Modular design to make maintenance easier
- Multi-machine synchronous operation with function equilibrium
- Compatible with synchronous/asynchronous motor drive control

Application areas

Belt conveyors, hoists, winches, emulsion pumps, mine fans, and water pumps.



GD3000 Series Three-level Medium Voltage VFD

GD3000 series VFD is a high-performance vector VFD, which uses the three-level topological structure and supports both two-quadrant and four-quadrant modes.



AC 3PH 660V $\pm$ 15% 800kW- 1600kW
 AC 3PH 1140V $\pm$ 15% 55kW- 1000kW
 AC 3PH 3300V $\pm$ 15% 400kW- 3750kW

- Powerful communication function
- Support the mainstream control system
- Integrated with energy-saving control algorithm to reduce the operating costs
- Meet the 3C3 environmental requirements of IEC60721-3-3
- Support the built-in DC reactor, with high power utilization rate

Application areas

Belt conveyors, scrapers, hoisters, emulsion pumps and mine fan in mining industry; Integrated motor-drive systems, ball mills, pumping units, drilling rigs, fracturing plunger pumps in petroleum industry.



GD5000 Series Medium Voltage VFD

GD5000 series second-generation medium voltage variable-frequency speed regulation device adopts the mainstream power unit series connection technology with the DSP + ARM + FPGA triple-core processor as the control core, achieving high control accuracy, fast response speed, and low frequency and large torque.



Two-quadrant:

AC 3PH 6kV 200~7100kW

AC 3PH 10kV 200~14000kW

Customizable for voltage ratings
from 3.3kV to 13.8kV

Four-quadrant:

AC 3PH 6kV 315~3150kW

AC 3PH 10kV 400~5600kW

Customizable for other voltage classes and
higher capacity models

- Integrated with open-loop vector control, closed-loop vector control, and vectorized V/F control technologies
- Flux braking and dual-frequency rapid motor braking technologies
- Peer-level and neutral-point offset unit bypass technologies
- Low-voltage/medium-voltage ride-through, master/slave control, and heavy-load start technologies
- IoT-enabled for remote monitoring and predictive maintenance
- High-reliability solutions available, including submodule redundancy, system-level redundancy, and system-level hot-standby

Application areas

Fans, pumps, air compressors, belt conveyors and rolling mill loads in the electric power, metallurgy, cement, chemical, mining, municipal engineering, petrochemical, sugar, paper making, pharmaceutical and other industries.



iSVG Series High-voltage Static Var Generator

iSVG series high-voltage static var generator is a static high-voltage dynamic reactive compensation equipment developed and produced by INVT, which can compensate reactive power as well as harmonics.



AC 3PH 6kV 1~16MVA

AC 3PH 10kV 1~25MVA

AC 3PH 35kV 10~24MVA (direct-hung)

- Suppress voltage fluctuation and flicker
- Suppress the grid 3PH imbalance
- Reduce the line loss to improve the line transmission capacity
- Harmonic dynamic compensation to improve power quality
- Compensate system reactive power to improve power factor
- Maintain the voltage at the receiving end to enhance the system voltage stability

Application areas

Mainly used in electric power industry, new energy power plants, rail transportation, coal mining and port industries.



DA200 Series General-purpose AC Servo Drive

DA200 series general-purpose AC servo drive is INVT's general-purpose medium- and high-power servo product designed for industrial applications. With a broad power range and compatibility with mainstream bus protocols and multiple encoder types, it provides efficient and reliable drive solutions for general-purpose equipment.



AC 3PH 380 V (-15%)–440 V (+10%): 25 A–134 A
7.5 kW–55 kW (customizable up to 250 kW)



- 7.5–250 kW power range
- STO and a second encoder interface as standard
- Compatible with 17-bit magnetic encoders, 23-bit optical encoders, and resolvers
- Supports pulse control and multiple bus protocols, including EtherCAT, CANopen, and PROFINET

Application areas

Designed for medium- and high-power applications, the DA200 series is widely used in industrial robots (material handling, palletizing, and welding), machine tools (large lathes and gantry milling machines), press brakes, injection molding machines, die-casting machines, and printing and packaging equipment (large flute laminating machines and die-cutting machines).



DA200A Series General-purpose AC Servo Drive

DA200A series general-purpose AC servo drive is INVT's new-generation general-purpose servo product. Built on a mature technology platform, it supports direct-drive motors and is compatible with mainstream bus protocols and multiple encoder types. With flexible configurations and wide applicability, it provides stable and reliable motion control solutions for various automation equipment.



AC 1PH/3PH 220 V (-15%)–240 V (+10%): 2.8 A–13 A, 0.4 kW–3 kW
AC 3PH 380 V (-15%)–440 V (+10%): 1.6 A–33 A, 0.4 kW–15 kW



- STO as standard
- CE and UL certified
- Compatible with direct-drive motors and multiple encoder protocols
- Speed-loop bandwidth: 2.5 kHz; current-loop bandwidth: 16 kHz
- Supports pulse control and multiple bus protocols, including EtherCAT, CANopen, PROFINET, and MECHATROLINK-III (M3)
- Compatible with 17-bit magnetic encoders, 23-bit optical encoders, and 23-bit mechanical multi-turn encoders (no battery maintenance required)

Application areas

Widely used in laser cutting machines, machining centers, engraving and milling machines, flute laminating machines, die-cutting machines, lithium-battery winding and stacking equipment, and assembly and inspection equipment for automotive electronics production lines.



DA180A Series Basic AC Servo Drive

DA180A series AC servo drive is INVT's new-generation single-axis servo product. With a focus on practicality, it features a modular design, supports direct-drive motors, and offers flexible expansion and easy commissioning. Targeted at the general-purpose equipment market, it provides a competitive and cost-effective solution.



AC 1PH 220 V ($\pm 15\%$): 2.8 A–6 A, 0.4 kW–1 kW



- Models are available for both rotary servo motors and direct-drive motors
- Speed-loop response: 2.5 kHz
- Built-in dynamic braking on selected models
- Compatible with 17-bit magnetic encoders and 23-bit optical encoders
- Supports pulse control as well as CANopen and EtherCAT bus protocols

Application areas

Focused on low-power equipment and auxiliary stations. Typical applications include printing and packaging equipment (window patching machines and die-cutting machines), textile machinery (sewing machines and knitting machines), electronics manufacturing equipment (component insertion machines and SMT placement machines), and warehousing and logistics equipment (sorting machines and strapping machines).



DA360 Series AC Servo Drive

DA360 series is INVT's new-generation servo drive. Built on high-speed control algorithms and a highly robust hardware platform, it is highly integrated, supports multiple encoder types, and incorporates advanced process functions for easy operation. It also supports multiple safety functions and is designed for critical stations in high-end equipment.



AC 1PH/3PH 220 V (-15%)–240 V ($+10\%$): 1.8 A–13 A, 0.2 kW–3 kW
AC 3PH 380 V (-15%)–480 V ($+10\%$): 1.6 A–26 A, 0.4 kW–7.5 kW



- Supports FSoE
- Supports seamless side-by-side installation
- Speed-loop bandwidth: 3.5 kHz
- Supports stable operation with cables up to 50 m long
- Supports rotary motors, direct-drive linear (DDL) motors, direct-drive rotary (DDR) motors, voice coil motors, and more
- Supports auto-tuning, batch commissioning, and commissioning without main circuit power
- INVT's first product to support multiple safety functions, with safety integrity levels up to SIL 3
- Certification/compliance for CE, UL, TÜV (Safety), UKCA, EAC, KC, and SEMI F47 is in progress

Application areas

Designed for critical stations with stringent requirements for speed, precision, and safety certification.

Typical applications include semiconductor die bonding and packaging/testing, high-speed electrode stacking and electrode die cutting for lithium batteries, precision machine vision inspection for 3C electronics, gantry milling machines, and precision machining centers.



IMS20B Series Low-power Servo Motor

IMS20B series low-power servo motor is INVT's new-generation low-power servo motor developed for the general automation industry. Featuring a short body and high power density, it delivers high-speed operation and high overload capability. The entire series features IP67 protection, meets China's Grade 1 energy efficiency standard, and supports multiple encoder types, making it suitable for a wide range of applications. When paired with various INVT servo drives, it provides a superior system-level drive solution for equipment.



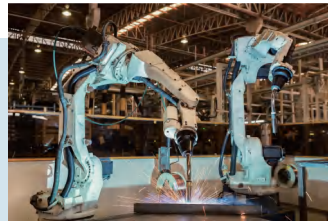
AC 220 V: 0.16 N·m–14.3 N·m, 0.05 kW–3 kW

AC 380 V: 0.64 N·m–47.8 N·m, 0.2 kW–7.5 kW

- High overload capability and high speed
- Short body and low temperature rise
- IP67 protection for all models
- Compliant with CE and UL certification requirements and China's Grade 1 energy efficiency standard
- Available in 40, 60, 80, 100, 130, and 180 frame sizes
- Available with 17-bit magnetic encoders, 23-bit optical encoders, 26-bit optical encoders, and mechanical multi-turn encoders

Application areas

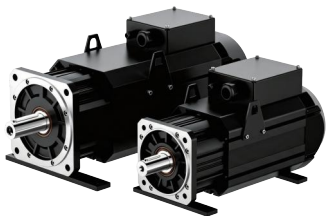
Widely used in general automation applications involving machine tools, laser processing, printing, packaging, photovoltaics, lithium battery manufacturing, industrial robotics, and electronics manufacturing.



IMS20B Series Medium-power Air-cooled Servo Motor

IMS20B series medium-power air-cooled servo motor is designed by INVT for applications requiring higher power. It retains a compact structure and advanced electromagnetic design and uses an independent forced-air cooling system to ensure continuous and stable output under medium- and high-power operating conditions.

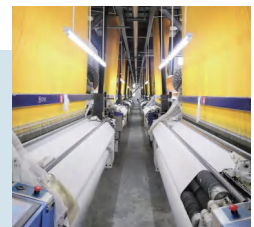
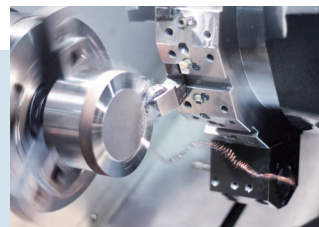
AC 380 V: 40 N·m–495 N·m, 6.3 kW–90 kW



- CE certified
- Independent forced-air cooling
- KTY84 temperature sensor as standard
- Maximum output torque of 500 N·m and 2.5× overload capability
- Supports 12-bit resolvers and 23-bit multi-turn absolute encoders

Application areas

Widely used in heavy-duty applications such as metal forming, wire EDM, plastics machinery, large printing and packaging equipment, and large textile machinery.



IMS20B Series Medium-power Liquid-cooled Servo Motor

IMS20B series medium-power liquid-cooled servo motor is designed by INVT for applications requiring higher power density and more demanding heat dissipation. It uses a high-efficiency liquid-cooling system to ensure excellent temperature control and stable performance during prolonged continuous operation at high loads.



AC 380 V: 41 N · m–495 N · m, 6.4 kW–90 kW

- Built-in KTY84 temperature sensor
- High-efficiency liquid cooling with a shared system oil circuit
- Rated torque output up to 495 N · m
- IP55 protection and CE certification
- Supports 12-bit resolvers and 23-bit multi-turn absolute encoders

Application areas

Widely used in medium- and large-scale automation equipment with stringent requirements for heat dissipation efficiency and continuous operation capability.



IMF Series Variable-frequency Permanent Magnet Synchronous Motor

IMF series high-efficiency permanent magnet synchronous motors comprise two subseries, IMF10A and IMF10B, designed respectively for energy-saving upgrades of existing equipment and compact designs of new equipment. The entire series features high efficiency, a high power factor, and low maintenance costs.

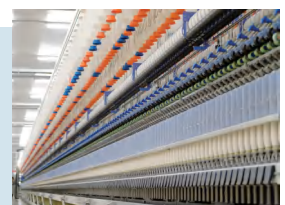


AC 380 V: 40 N · m–495 N · m, 6.3 kW–90 kW

- IP55 protection and CE certification
- Models rated at 90 kW and below meet China's Grade 1 energy efficiency standard
- Reduced shaft height for the IMF10B, enabling more flexible equipment layout
- The IMF10A is compatible with the mounting dimensions of induction motors, allowing drop-in replacement
- 80 K low-temperature-rise design, 1.7× peak overload capability (≤ 20 s), and 1.2× overspeed capability

Application areas

Suitable for energy-saving retrofits and new equipment integration in the metal products, textile machinery, plastics machinery, fan, and pump industries.



High-Performance X86 Intelligent PLC — TP2000 Series

The TP2000 series high-performance X86 intelligent PLC is built on a multi-core PC-based architecture and EtherCAT bus technology. With powerful performance, rich interfaces, advanced functionality, and ring redundancy, the product meets the requirements of complex logic and motion control. It is widely used in high-speed, high-precision, high-response equipment, medium to large-scale production lines, and process control applications.



- High-performance multi-core processor, achieving 500 μ s @ 32-axis precision control
- Dual isolated EtherCAT master for independent control, balanced load, and multi-purpose operation
- G-code and ROBOT programming capabilities for complex motion control scenarios
- EtherCAT ring redundancy to enhance system stability
- Web-based visualization for cross-platform access to multiple devices, enabling convenient management

Application areas

Packaging, printing, lithium battery, new energy, food, photovoltaics, 3C electronics, robotics, and other industrial equipment; medium to large-scale production lines; as well as process control industries such as mining, metallurgy, petroleum, and water treatment.



Medium-sized high-performance PLC – TM700 series

TM700 series high-performance programmable controller is mainly used in scenarios with high motion control requirements and complex control networks. It has significant improvements in control performance, communication capabilities, and programming efficiency, allowing you to flexibly build control networks. Through OPC UA, it easily achieves data interaction with the information layer, further enhancing equipment cycle times, shortening development cycles, and providing an outstanding experience.



- 1ms@16-axis EtherCAT bus motion control
- OPC UA and tag-based communication for more efficient data interaction
- Buffer mode function for smoother command transitions
- Integrated with various kinematic models for easy control of various robotic arms
- Industry-specific process packages and EoE debugging for efficient system development

Application areas

Packaging, printing, logistics and warehousing, photovoltaics, 3C, woodworking, and other industrial equipment and small and medium-sized production lines.



Small Motion Control PLC-TS600 Series

INVT TS600 series small PLC integrates the high-performance embedded technology, integrating four major types of automation control, such as sequence, process, information, and motion and control, into the same system based on the high-speed bus system architecture. The software and hardware real-time system with high reliability conducts real-time control and complex computing, and provides open communication interfaces, IoT network and distributed module system architecture.



- High performance: 1G basic frequency, bitwise operation 0.01us
- Cloud coordination: Support IoT operation and maintenance, 4G, expansion
- Strong motion control: EtherCAT bus, 32 axes at most, synchronization cycle of 2ms
- Easy programming: PLCopen specification, pulse axis, bus axis compatible with a set of axis control instructions

Application areas

Widely used in printing and packaging, textile, woodworking, lithium, 3C electronics, logistics, machine tools and other automation industries.



Small Economical PLC-IVC1L

IVC1L is a small general-purpose PLC product with compact structure, rich models, complete functions and flexible I/O configurations, which can be widely used in mid-low end and small-scale points as well as simple positioning applications.



- 16K step program space
- Two 50K + 4 10K high speed inputs
- Three 100K high-speed outputs (transistor type)
- The max. number of I/O points is 60 points, supporting 7 expansion modules
- One RS232, Two RS485, supporting MODBUS master/slave communication

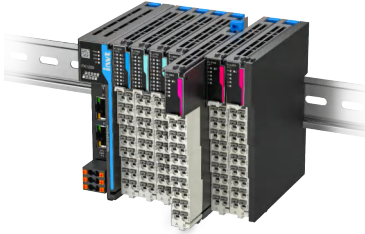
Application areas

Widely used in textile machinery, lifting machinery, building material machinery, food packaging equipment and other industry equipment.



FL Series I/O System

INVT FL series I/O system is designed to provide flexible, reliable, and efficient signal transmission. It supports multiple standard communication networks and delivers microsecond-level response. Combined with versatile signal modules, it meets diverse industrial automation needs while saving control cabinet space, helping you develop more competitive customized solutions.



- Conformal coating and wide-temperature operation; EMC performance exceeds CE requirements
- 64% smaller than the previous generation for the same I/O point count, saving cabinet space
- Self-developed F-BUS high-speed backplane bus with microsecond-level response and a minimum synchronization cycle of 500 μ s
- Supports EtherCAT, PROFINET, EtherNet/IP, and Modbus TCP communication protocols

Application areas

Widely used in automotive manufacturing, smart warehousing and logistics, packaging machinery, 3C electronics manufacturing (SMT placement machines, PCB test lines, and electronic component insertion lines), photovoltaics, lithium battery manufacturing, and food and beverage.



FE Series Basic I/O System

INVT FE series is designed to provide an economical, reliable, and easy-to-use I/O system. The couplers support connection to multiple standard communication networks, while the expansion modules cover a wide range of signal-processing requirements, including digital input/output, analog input/output, and multiple types of temperature measurement. FE series helps you develop cost-effective, customized solutions.



- Conformal coating and wide-temperature operation from -25°C to 55°C, with vibration resistance for stable and reliable operation
- Compatible with EtherCAT, PROFINET, and EtherNet/IP buses
- Compact, flexible, and easy to use: 12 mm ultra-slim modules with push-in terminals

Application areas

Widely used in automotive manufacturing, smart warehousing and logistics, packaging machinery, 3C electronics manufacturing (SMT placement machines, PCB test lines, and electronic component insertion lines), photovoltaics, lithium battery manufacturing, and food and beverage.



FP Series High-protection I/O System

INVT FP series high-protection I/O system features IP67 protection for the entire unit and an all-metal enclosure, and is designed specifically for harsh industrial environments outside control cabinets. It uses standardized IO-Link technology with plug-and-play cabling, reducing wiring time by 70%. It also supports batch parameter download and channel-level fault diagnostics, helping customers reduce maintenance costs and downtime.



- IO-Link connectivity and compatibility with mainstream protocols
- Flexible networking and plug-and-play connection: M12 quick-connect interfaces with an error-proof design
- High protection rating: IP67-rated metal enclosure for direct installation outside cabinets

Application areas

Widely used in automotive manufacturing (body welding lines, final assembly lines, automated wiper assembly lines, and automated seat assembly lines) and lithium battery manufacturing (battery electrode coating machines, winding machines, assembly lines, and battery pack lines).



Economical HMI-VS-Q Series

VS-Q series is a high-quality HMI featuring rich display, huge performance, flexible configuration, easy to use and more cost-effective, which can easily realize the HMI function in various fields of industrial automation.



- Full-sized coverage with 4.3/7/10/15 inches
- Support IoT remote operation and maintenance (4G/WIFI version)
- Dual-core CPU, main frequency up to 1.2GHz
- Rich configuration controls to support C language macro instruction programming

Application areas

Widely used in manufacturing, water treatment, textile, packaging, woodworking, medical, food, agricultural and other industries.



General-purpose HMI — VI-Q Series

VI-Q series HMI is INVT's new-generation HMI independently developed based on an all-new software architecture, delivering smooth, safe, and reliable operation. With a wide range of communication interfaces, it is a powerful and highly cost-effective touchscreen.



- Supports 4G/Wi-Fi expansion for easy remote operation and maintenance
- IP65-rated front panel and conformal coating as standard for stable and durable operation
- Supports tag communication, JavaScript scripting, and AI translation for convenient and efficient configuration
- Serial, Ethernet, and USB interfaces for most industrial applications

Application areas

Widely used in printing and packaging, electronics manufacturing, food processing, textiles, woodworking, fluid-related industries, healthcare, and other industries.



IWOLink Data Terminal Product

To flexibly adapt to the data collection needs of various industrial equipment and different network scenarios, INVT has launched a series of data collection products to provide fast, easy, and secure IoT data connection solutions.

TBox



- APP Bluetooth debugging: APN service, Wi-Fi hotspot, communication parameter settings
- Remote programming: VPN virtual network, serial port transparent transmission
- Remote OTA: Networking configuration, program upgrades, status monitoring, data collection strategies
- Precise flow control: Modbus collection, MQTT upload, customizable reporting strategies: active upload/change upload/traffic saving/custom rules

ICA417



- Plenty network ports: 2*LAN ports supporting routing + 1*WAN port supporting mobile network
- Mobile hotspot + switch: Built-in routing and switching functions
- PLC/HMI program debugging: VPN virtual network, serial port transparent transmission
- Edge computing: Local protocol parsing, 10M data caching, offline data continuation

IWoScene IoT Application System

The IWoScene industrial IoT application platform from INVT is an IoT system that can be remotely monitored, managed, analyzed, and maintained. It features a user-friendly interface and simple operation, allowing you to quickly get started. Through lifecycle management, users can quickly understand equipment usage history and always know the equipment's operational status through data analysis and predictive maintenance. The platform processes data to remind about equipment maintenance and send fault alarms. It also supports real-time monitoring, remote control, and remote upgrades. IWoScene addresses the issues of inconvenient equipment management and maintenance, making work more efficient.



- Universal access: Supports data access for devices of various brands and protocols
- Easy to use: Simple operation and user-friendly interface
- Multiple displays: Supports PC, mobile app (Android, iOS), and large screen display
- Powerful functions: Data cockpit, remote OTA, predictive maintenance, black box data, equipment lifecycle management

IWOCloud IoT Cloud Platform

INVT has developed an industrial IoT data processing platform, providing a stable, secure, and efficient foundation for various IoT industries and application scenarios. As the brain of the IoT system, IWOCloud provides the capability to connect a large number of data terminal nodes and handle high concurrent terminal access. It processes uploaded data from various devices, including data reception, cleaning, sorting, distribution, and storage. Additionally, it offers database interface with standardized data format for external use, meeting the evolving needs of enterprise informatization.



- **Stability and security:** Combines software and hardware firewalls to prevent external intrusion and malicious requests; data encryption and real-time data backup
- **Remote disaster recovery:** Enhances data security through cross-region data copying
- **Distributed architecture:** Improves data flow control capabilities
- **Powerful data processing mechanism:** Abstracts business data from all industries into a unified data format, serving all industries as a big data cloud platform
- **Privatization:** Supports local private deployment to meet customer demands for data security and customized business applications
- **Multi-device access:** Supports the connection of a large number of devices and high concurrency
- **Standardized interface:** Provides standard API data interfaces for third-party business systems to call

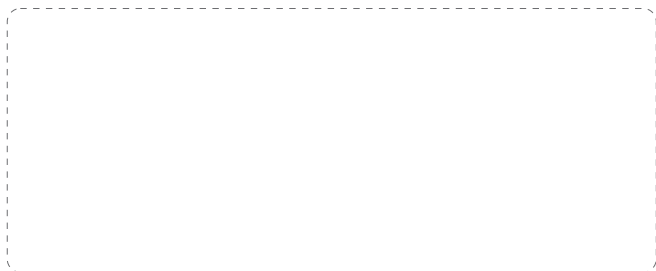
Application areas

Widely used in IoT application scenarios in various industries.



Note:

Your Trusted Industry Automation Solution Provider



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Industrial Automation:

- HMI
- PLC
- VFD
- Servo System
- Elevator Intelligent Control System
- Rail Transit Traction System

Electric Power:

- UPS
- DCIM
- Solar Inverter
- New Energy Vehicle Powertrain System
- New Energy Vehicle Charging System
- New Energy Vehicle Motor

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