

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.

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.



Contents

VFD

GD18 Series Two-in-One VFD	4	GD290L Series Escalator-dedicated VFD	17
GD20 Series Compact VFD	4	EC90B Series Open-Loop Integrated Elevator Controller	18
GD27 Series Smart VFD	5	EC160A/EC160B Series Integrated Elevator Controller	18
GD28 Series Flexible General-Purpose VFD	5	EC300 Four-quadrant Elevator Integrated Machine	19
GD20-EU Series Compact VFD	6	EC600 Series Integrated Cabinet	19
GD270 Series VFD for Fan and Pump	6	DSC160A/DSC160B Series Control Cabinet	20
GD200A Series General VFD	7	EC-CTB Car-top Control Board	20
GD290 Series Low-Voltage Multifunction General-Purpose VFD	7	EC-CCB Car Command Board	21
GD350 Series High-performance Multifunction VFD	8	LM11-K1-A Elevator Voice Announcer	22
GD350A Series High-Performance General-Purpose VFD	8	EC-DF Destination Dispatch System	22
GD350C Series High-Performance Closed-Loop VFD	9	UCM Control Board EC-UCMV2.0	23
GD350-UL Series High-performance Multifunction VFD	9	DSC-CTB Series Car-top Inspection Box	23
GD350-IP55 Series High protection Multifunction VFD	10	DC Series Display	24
GD600A Series High-Performance Multi-Drive VFD	10	EC30 Series Elevator Door Controller Innovative design	26
SP100 Series High-Protection Solar Pump Inverter	11	GD200A-02 Series Super-start VFD	26
GD170-PV Series Economical Solar Pump Inverter	11	GD350-02 Series Through-the-Wall VFD	27
GD100-PV Series Solar Pump Inverter	12	GD350-12 Series VFD for Loom Spindles	27
GD350-01 Series VFD for Compressor	12	GD350-13 Series VFD for Oil Pumping Machine	28
GD350-01-FT Series Single-VFD Integrated System for Air Compressor	13	GD350-CCS Series VFD for Marine Industry	28
GD350-21 Series Dual-VFD Integrated System for Air Compressor	13	MF100 Series Medium-frequency Power Supply	29
GD350-01H Series High-Speed Motor VFD	14	DSV200 Series Servo Spindle Drive	29
GD20-09 Series VFD for Hoisting	14	GD880 Series High-performance Engineering VFD	30
GD350-19 Series High-performance VFD for Crane	15	GD1000 Series VFD for Coal Cutters	30
GD350-39 Series Construction Hoist Integrated Machine	15	GD2000 Series VFD for Mines	31
GD200L Series VFD for Simple Elevator	16	GD3000 Series Three-level Medium Voltage VFD	31
GD300L Series VFD for Elevator	16	GD5000 Series Medium Voltage VFD	32
GD390L Series Lift-dedicated VFD	17	iSVG Series High-voltage Static Var Generator	32

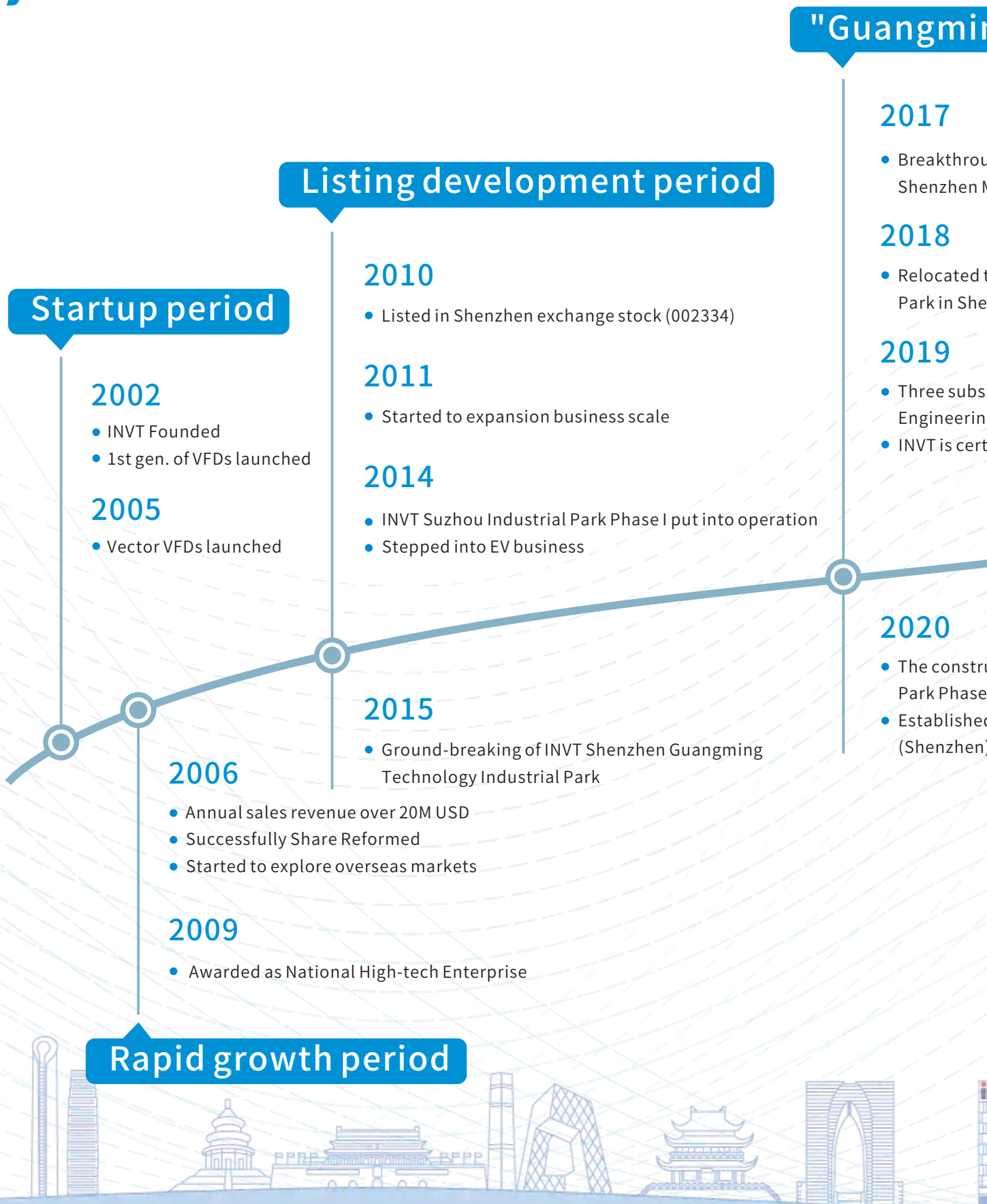
Servo/Motor

MH860A Series Electro-hydraulic Servo Drive	33	DA200A Series Servo Drive	34
MH860C Series Electro-hydraulic Servo Drive	33	DA180A Series General Servo Drive	35
DA200 Series High-performance Servo Drive	34	IMS20B Series Motor	35

Control Product

High-Performance X86 Intelligent PLC — TP2000 Series	36	Economical HMI-VS-Q Series	38
Medium-sized high-performance PLC – TM700 series	36	High-quality HMI-VK Series	39
Small Motion Control PLC-TS600 Series	37	IWOLink Data Terminal Product	39
Small Economical PLC-IVC1L	37	IWOScene IoT Application System	40
Distributed I/O System — Flex Series	38	IWOCloud IoT Cloud Platform	41

/ Milestones



"crossover period"

high in rail transit business to win the tender of Metro Line 9

the HQ to Guangming Technology Industrial Shenzhen

idiaries of INVT are certified as Guangdong g and Technology Research Center ified as "Guangdong Industrial Design Center"

uction of INVT Suzhou Industrial II was launched d INVT Network Power Co., Ltd.

New Strategy/New Culture/New Journey

2023

- Continuing to promote management change and build the platform and capabilities of the company's headquarters
- Suzhou Science and Technology Industrial Park Phase II officially opened

2024

- Suzhou Science and Technology Industrial Park Phase III Plan Launched and construction of Zhongshan Industrial Park started

2021

- Full launch of the company's business optimisation, organisational optimisation and management optimisation
- Merger of Electric Drive Company and Charging Pile Company; establishment of Zhongshan Sheet Metal Factory
- Annual revenue exceeded 3 billion yuan

2022

- 20th anniversary, upgrading the company's corporate culture and launching strategic changes
- Annual revenue exceeded 4 billion yuan

Period of strategic change



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.

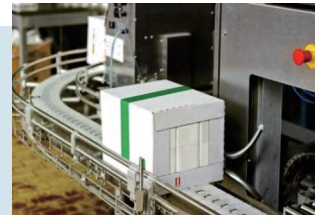
AC 3PH 380V (-15%)- 440V (+10%) 0.75- 7.5kW



- 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

Production application

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

Production application

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

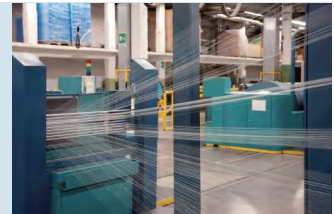
AC 3PH 200V- 240V 0.4kW- 15kW

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

Production application

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

Production application

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

Production application

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

Production application

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.

Production application

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

Production application

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.



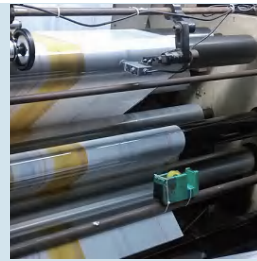
AC 3PH 380V (-15%)- 440V (+10%) 1.5- 500kW

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

Production application

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

Production application

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



GD350C Series High-Performance Closed-Loop VFD

The GD350C series high-performance closed-loop VFD features fast dynamic response and superior position control performance. The product supports multiple encoder feedback options and communication extensions, and offers functions such as electronic cam, full closed-loop control, flying shear, rotary shear, and electronic gearing. The series is well-suited for various high-precision machinery requiring accurate speed, torque, or position control.



AC 3PH 380V-480V 1.5-500kW

- Fast dynamic response and precise position control
- Functions include electronic cam, full closed-loop control, flying shear, rotary shear, and electronic gearing
- Supports mainstream high-speed bus extensions (EtherCAT, EtherNet/IP, PROFINET)
- Supports feedback from multiple types of encoders (incremental, absolute, resolver, sine-cosine, EnDat)

Production application

Mainly applied in industries such as textiles, printing, wire drawing, machine tools, packaging, glass, and food.



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

Production application

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

Production application

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

Production application

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

Production application

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 < 4 kw 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

Production application

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.

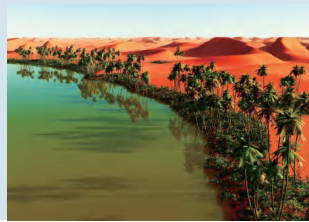


AC 1PH 220V (-15%)- 240V (+10%) 0.4- 2.2kW
 AC 3PH 220V (-15%)- 240V (+10%) 4- 7.5kW
 AC 3PH 380V (-15%)- 440V (+10%) 0.75- 500kW

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

Production application

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

Production application

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

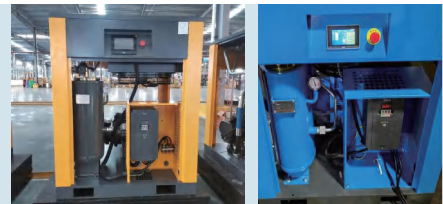
- Control loop bandwidth increased by 10×, with enhanced grid/load fluctuation adaptability for more stable operation
- Cooling fans with IP56 vacuum-coated design, significantly reducing fan failure rate and improving system reliability
- Loop-free commissioning with parameter self-adaptation; simple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

Production application

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.



(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

Production application

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)

Production application

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

Production application

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

Production application

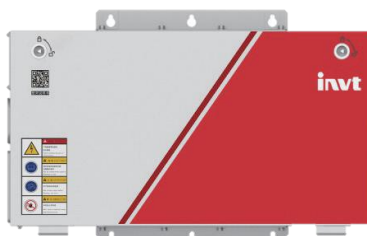
Drives of lifting, pitching, luffing, cross traveling, long traveling, slewing and grabbing mechanisms for hoisting equipment such as bridge cranes, RTG/RMG, quay cranes, portal cranes, gantry cranes, European-style cranes, tower cranes, winches, and mine hoists.



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.

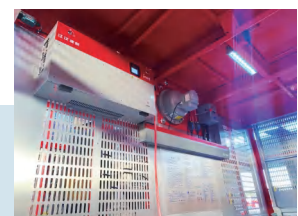
AC 3PH 380V (-15%)- 440V (+10%) 37- 45kW



- 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

Production application

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

Production application

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

Production application

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

Production application

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.

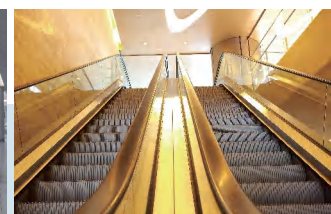
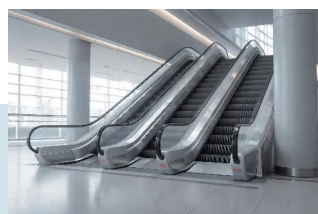


AC 3PH 380V(-15%)~440(+10%) 4~55kW

- 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

Production application

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 ($\pm 15\%$): 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

Production application

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

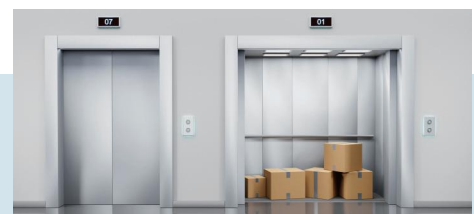
AC 3PH 220V(-15%)~240($+10\%$) 4~22kW

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

Production application

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

Production application

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

Production application

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)

Production application

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

Production application

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

Production application

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

Production application

Elevator components-operation box.



LM11-K1-A Elevator Voice Announcer

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



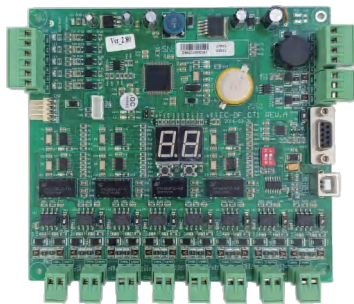
- Smart announcement system
- Voice pre-announcement of running direction (before start)
- Voice floor announcement (before landing)
- Background music playback
- Reassurance voice messages for faults/fire operation
- Arrival advertising music (customizable by floor)
- SD card storage, supporting MP3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

Production application

Car top or car operation panel.



EC-DF Destination Dispatch System



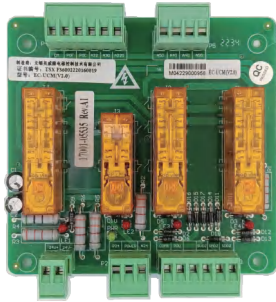
- Smart group control solution
- Group control of up to 8 elevators
- AI intelligent algorithm
- Peak traffic recognition
- Real-time passenger flow statistics
- VIP/accessibility functions

Production application

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

Production application

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

Production application

Elevator component – car top inspection box.



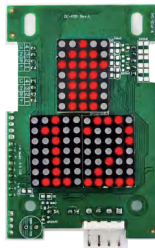
DC Series Display

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



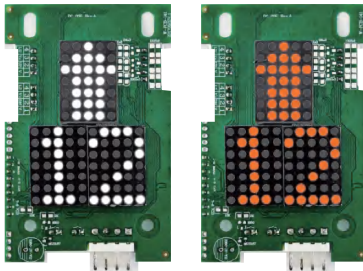
- 32-bit processor, CAN bus communication
- Ultra-thin 10mm body, perfectly fits wall-mounted LOPs
- Real-time display of overload/full load/fault/maintenance status
- Full ASCII character display
- Integrated core functions: hall calling, locking, fire service

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

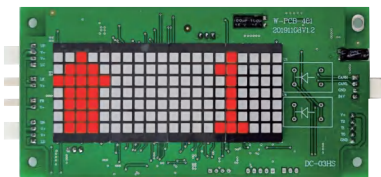


DC-03S-W

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



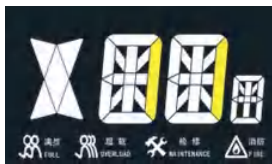
- 32-bit processor, CAN bus architecture
- Optional red/white dual-color square dot-matrix LED
- Arrival light or chime output
- Full ASCII character display
- Integrated core functions: hall calling, locking, fire service

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



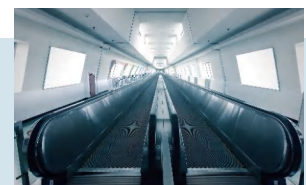
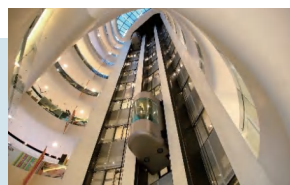
DC-07D

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

Production application

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

Production application

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

Production application

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%.

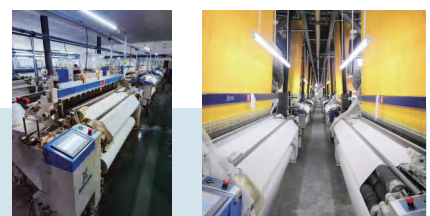


AC 3PH 380V (-15%)- 440V (+10%) 11- 15kW

- 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

Production application

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)

Production application

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

Production application

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



MF100 Series Medium-frequency Power Supply

MF100 is a product developed for medium frequency power supply applications.



AC 1PH 220V (-15%)- 240V (+10%) 1.1- 2.2KW
AC 3PH 380V (-15%)- 440V (+10%) 2.2- 500KW

- Temperature control function
- Automatic frequency detection function
- Automatic voltage adjustment function
- Constant voltage and constant current dual working mode
- Output frequency up to 6000Hz

Production application

Ozone generator, pumping rod heating and other induction heating applications.



DSV200 Series Servo Spindle Drive

DSV200 series simple servo drive adopts the high-performance closed-loop vector control, which can provide more stable, reliable, and accurate position control, speed control and torque control, and realize the driving of asynchronous servo motors and synchronous motors. It supports incremental encoders, single-turn 17bit absolute encoders, and two-way incremental encoders. The modular design of PG card makes it easy to choose. With the strengthened environmental adaptability, customized and industrialized design, and more industry-specific functions, the product can be applied more flexibly.



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

- Support EtherCAT bus communication
- Semi-book type structure design, servo appearance
- Adopt pluggable terminals, facilitating on-site wiring and maintenance
- Equipped with spindle positioning, rigid tapping and other specialized functions
- Support a variety of encoders (incremental, single-turn 17bit absolute)

Production application

Machining centers, high-speed tapping machines, CNC lathes, CNC milling machines, lathe-milling machines, vertical lathes, woodworking rotary lathes, and other applications where low speed drilling, position positioning, high-speed tapping, rigid tapping and C-axis control are required.



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-T1 (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

EAC



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

Production application

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



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.

Production application

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 VFD movement product.



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

Production application

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

Production application

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

Production application

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

Production application

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



MH860A Series Electro-hydraulic Servo Drive

Designed for hydraulic equipment such as injection molding machine, die-casting machine, and hydraulic press, the MH860A series hydraulic servo drive features energy saving, high accuracy, high efficiency and durability for adopting high-performance vector control. The drive has rich external expansion and CAN communication interfaces, helping to form a multi-pump parallel system to realize the hydraulic control on large flow equipment.



- Achieve pressure-release control with mini. reverse amount
- Simple gain adjustment and gain switching function
- Easy to use: Pluggable terminals for easier maintenance and on-site wiring
- High reliability: Built-in C3 filter, the core circuit board is equipped with a thickened protective coating as standard configuration
- Optional expansion cards, supporting Modbus, EtherCAT, PROFINET and other bus communication protocols

Production application

Widely used in injection molding machines, die-casting machines, hydraulic presses, bending machines, 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

Production application

Injection molding machines; hydraulic presses; hydraulic stations.



DA200 Series High-performance Servo Drive

DA200 servo drive series products adopt the modular structure with abundant functions and powerful performance. The upper computer software adopts USB communication, uses a variety of bus communication, digital pulse and analog inputs, and supports safety terminals for matching multiple types of encoders. With powerful adaptive software, high-precision control and reliable EMC design, it can be applicable to most of the market equipment and environmental applications.



1P/3P AC 220V (-15%)- 240V (+10%) 0.1- 4.4kW
3P AC 380V (-15%)- 440V (+10%) 1- 55kW

- Speed response up to 2.0kHz
- Support multiple bus technologies
- Fully closed-loop control and internal position control
- Supports multiple types of encoder protocols and can support a second encoder
- Low-frequency vibration suppression, disturbance suppression, friction torque compensation, and automatic/manual notch design

Production application

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.



DA200A Series Servo Drive

To enhance the servo system competitiveness and better meet the needs of customers in niche industries, we launch DA200A series AC servo drive—a new servo product series based on a stable technology platform. This series further improves system performance, robustness, and ease of use, integrating control algorithms for linear and direct drive motors, and offering a wide range of product configurations. When working with the IMS20B series motors, it significantly enhances the servo system cost-performance ratio.



1P / 3P AC 220V (-15%) - 240V (+10%): 2.8A- 13A
3P AC 380 (-15%)- 440V (+10%): 1.6- 21A

- Support for rotary servo motors, linear motors, and torque motors
- Support for STO (Safe Torque Off) function
- Integrated brake control relay
- Standard with dynamic braking function
- UL certification for export (in preparation)

Production application

Suitable for general machinery such as 3C electronics manufacturing equipment, laser equipment, woodworking machinery, printing and packaging machines, and high-speed die-cutting machines.



DA180A Series General Servo Drive

DA180A series AC servo drive is a new generation of INVT servo platform product, which adopts the modular design and supports various functions such as online/offline inertia identification, gain switching, automatic/manual notch filter, automatic/manual vibration control filter, medium-frequency vibration suppression, internal point-to-point (PTP) control and dynamic braking.



AC 3PH 220V (-15%)- 240 (+10%) 2.8-6.0A



- Triple overload, power surge
- Internal point, return to the original point
- Independent air duct used for multi-environment
- Support Modbus, CANopen and EtherCAT
- Single-board design, overall mold, ultra-high cost-effective

Production application

Widely used in printing and packaging, textile machinery, warehousing and logistics, electronic processing and manufacturing, metal cutting, woodworking machinery, and other general equipment.

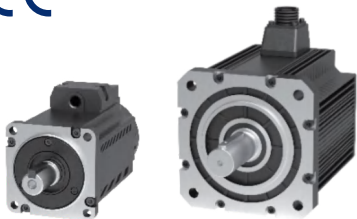


IMS20B Series Motor

IMS20B series motor is INVT latest generation of permanent magnet synchronous servo motor. This series features strong overload capacity, a wide speed range, low temperature rise at running, and compact dimensions.



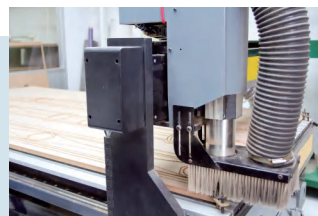
AC 220V 0.5- 3kW
AC 380V 0.2- 79kW



- Frame sizes 40, 60, 80: Rated for 3.5 times overload capacity, with a maximum speed of 7000 rpm (in preparation)
- Frame sizes 130, 180: Rated for 2.5 to 3 times overload capacity, with a maximum speed of 4500 rpm
- Compliant with Class 1 energy efficiency standards
- High absolute positioning accuracy, within ± 15 arcseconds

Production application

Suitable for general machinery such as 3C electronics manufacturing equipment, laser equipment, woodworking machinery, printing and packaging machines, and high-speed die-cutting machines.



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

Production application

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

Production application

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

Production application

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

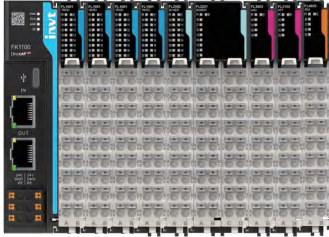
Production application

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



Distributed I/O System — Flex Series

Flex series I/O system is a flexible, reliable and efficient signal transmission system. The system is able to access to multiple standard communication networks, respond in microseconds, and equipped with rich signal modules to meet various industrial automation needs while saving the cabinet space, helping you develop more competitive personalized solutions.



- Channel-level diagnostics, color-blocked marking, and self-contained wiring diagrams
- 12mm slim design to save the space in the electrical cabinet greatly
- Push-in in-line technology to increase the wiring efficiency by 70%
- Equipped with 100Mbps F-BUS internal bus for microsecond response
- Multi-protocol communication coupler with rich I/O modules, flexible configuration

Production application

Equipment, production lines and factory automation in discrete automation and process automation.



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

Production application

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



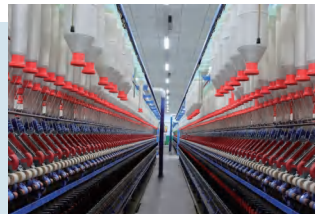
High-quality HMI-VK Series



- 3 serial ports
- Support macro instructions
- Backlight life of 20,000hr
- Regular size of 4.3/7.0/10.1 inches

Production application

Widely used in textile industry, electronic manufacturing, packaging, woodworking, medical, food, printing, wind power 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

Production application

Widely used in IoT application scenarios in various industries.



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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