Industrial Automation Products

Eddie Peng

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Content

General purpose VFD

Advanced

Features

GD350A: IP20(G/P 400V 1.5~500kW) & IP55(4~110kW G/P)
- SVC&VC for both PM&IM, UL version G/P(LED, LCD)
- Built-in DBU(≤ 37kW), optional built-in for 45~55kW and STO(SII2)
- Flexible extension: 3 slots simultaneously (2 ≤ 5.5kW) PG, PLC, I/O, Field bus, Bluetooth & Wi-Fi
- Friendly interface: LCD standard/**USB** interface

Printing & Packaging, Paper , Plastic, HVAC

Pump & Fan

GD200A 1.5~500kW
- G(150% 1min)&P(120% 1min) dual rating
- Specially for Pump & Fan

Compact

GD20 Economic 0.4~110kW (PM, High frequency)
- SVC, compact design and support rail installation
- Built-in DCR (≥18.5kW) and DBU(≤ 37kW)
- -EU built-in STO(SIL3), both STO&UL(0.4~11kW)
- Support 110V 0.4~1.1kW with UL

OEM: Textile, F&B, Print & Packaging, Conveyor, Compressor

GD18 Dual drive 0.75~7.5kW
- SVC, saving space 40% & cost 30% vs GD20
- 2 inverter output of same power

Applications: stone machine, springs, textile, etc

GD10 Simple 0.2~2.2kW
- V/F control

Application: Packaging, food machine, etc

Power/kW

General purpose VFD: GD350A

Advanced

GD350A: IP20(G/P 400V 1.5~500kW)
- Add a new model: GD350A-2R2G/003P-4
- Support new PLC card(INVT Auto station platform)
- Support Ethernet/IP (ODVA) and Modbus TCP
- Improvements and new functions, such as P01.19 dormancy function, fire-mode, etc
- Customers can set Modbus communication address

Plan

- BACnet card & 24Vdc Power supply board
- Remote update & USB connection between VFD and PC

Select a product type.   ×

○ VFD   ○ Servo   ⦿ Remote

No SIM 🛜   4:13 PM   ⊕ 100% 🔋

‹ back   Equipment upgrade   ⋮

* Device document ▼

Request PDM to generate software files

request time:

File path:

Upgrade Device

* 1 ▼

* 请选择变频器型号 ▼

Start upgrade

Upgrade progress

Upgrade preparation...   ✅
Enter bootloader mode...   ✅
Unlock...   ✅
Erase FLASH...   ✅
Download Program...100%   Upgrade success ✅

General purpose VFD: GD350 IP55

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GD350 IP54 (4~110kW G/P)

➢ Reserved Real-time Clock Interface

➢ Built-in DC reactor (18.5-110kW)

➢ Built-in braking unit (4-37kW)

➢ Control and expansion functions are same as GD350(IP20)

GD350 IP55 (4~110kW G/P)

➢ **Integrated AC switch**

➢ Standard built-in EMI filter (4~37kW), **meet C3, support max. 30m motor cable**

➢ 4~5.5kW and 75~110kW are available now, 7.5~55kW will be released in 2021

Improvements

General GD200A-S24 & GD20-S12

Basic features

GD200A-S24 (5.5~11kW)

➢ AC 1-phase 220V input / 3-phase 380V output

Model	Power(kW)	Input current (A)	Output current(A)
GD200A-5R5G/7R5P-S24	5.5	50	14
GD200A-7R5G/011P-S24	7.5	65	18.5
GD200A-011G/015P-S24	11	87	25

GD20-S12 (0.4~1.1kW)

➢ AC 1-phase 110V input / 3-phase 220V output
➢ UL certificated

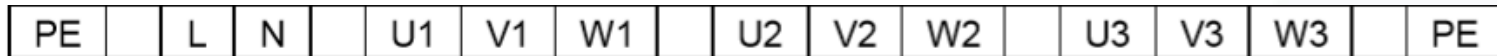| Model	Power(kW)	Input current(A)	Output current(A)
GD20-0R4G-S12	0.4	8.1	2.5
GD20-0R7G-S12	0.75	15.1	4.2
GD20-1R1G-S12	1.1	20	5.8

Multi in one VFD: GD18

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GD18-x-4-2: 0.75~7.5kW(380V models)

- ➢ Equipped with two inverter outputs, which can control the output independently
- ➢ Half book design, the volume is 40%-50% smaller than the same power (two sets) of GD20
- ➢ Wall mounted installation and adopts independent air duct design (IP20)
- ➢ The terminals can be reused, which can be freely configured for different inverters
- ➢ Optional LED keypad (support parameter copy keypad) can realize the control of two inverters separately.

U1	V1	W1	R	S	T	U2	V2	W2

GD18-003G-S2-3-EB for Wood machine, Edge Bonder

- ➢ Inverter1: 0.75kW; Inverter2: 0.75kW; Inverter3: 1.5kW
- ➢ Support K-type thermocouple

PE		L	N		U1	V1	W1		U2	V2	W2		U3	V3	W3		PE

Industry-specific solutions

HMI: VS(4.3", 5.7", 7", 10.2", 12.1", IP65)

PLC : IVC1S Entry(60) / IVC1L Basic(128) / IVC3 Advanced(512) / AX Series

Pump & HVAC	Crane	Lift	Compressor	EU	Servo
GD350-16 HVAC					
BPD IP65 0.75~5.5kW	GD300-29 AFE 7.5~55kW	EC10/20/30 Door 0.2~0.75kW		GD5000 3/3.3/4.16/6/6.6/10/11kV	MH800 Hydraulic 4.4~75kW
SPC IP65 0.75~7.5kW	GD350-19 Standard 1.5~500kW	EC300 Four-quadrant Controller 7.5~30kW		GD5000 Integrated 6kV 315~1120kW &10kV 400~2000kW	DA180 0.1~2kW 2.0kHz
GD100-PV 0.75~200kW	GD20-09 Economic 0.75~37kW	EC160A Integrated 2.2kw~30kW	Dual Drive GD300-21 15~75kW	GD3000 1140V 55~1000kW	DA300 0.1~2kW 3.0kHz
		GD300L Elevator Drive 2.2~30kW	Single drive GD300-01A 7.5~315kW	Multi-Drive Solution GD800	DA200 General 2.0kHz 0.1~55kW
				Engineering GD600 45/160/355kW & inverter 1.5~75kW	

PLC & HMI

HMI

VS Series

- ➤ 4.3", 5.7", 7", 10.2", 12.1", IP65
- ➤ 600mHz CPU, 128M Flash+128M DDR2
- ➤ Built-in COM RS232/422/485 2 USB
- ➤ Support 2USB, Ethernet communication

64k

PLC

IVC3 Advanced

* Extension module: I/O, Special (AD/DA/TC/PT/AM)
Communication (GPRS/Can/Ethernet)

- ➤ 0.065 μS, Max. 512 I/O, 64k capacity
- ➤ 8*200k inputs & 8*200k outputs
- ➤ Support 8 extension modules
- ➤ RS232/485/Modbus TCP/CANopen/Ethernet
- ➤ Integrate motion control(Position control, linear / arc interpolation, CAM)

IVC1L Economic

16k

- ➤ 0.2μS, Max. 128 I/O,16k capacity
- ➤ 6*high speed input +3*100kHz outputs
- ➤ Support 7 extension modules, removable terminals
- ➤ Support integrate 2AI/1AO
- ➤ RS232/485/Ethernet(epm module)

IVC1s Entry

6k

- ➤ 0.2μS, Max. 60 I/O, 6k capacity
- ➤ 6*high speed inputs + 2*100kHz outputs
- ➤ RS232/485

I/O

60   **128**   **512**

AX series PLC

Basic features

AX series PLC

- ➢ I/O: 16 IN/08 OUT Ry/Tr output
- ➢ Program capacity: 64K steps
- ➢ Built-in port: RS232*1, USB*1, RS485*2, CAN*1
- ➢ Max. Expansion modules: 16
- ➢ Support PLCopen standard(six programming languages)

Product highlights

AX series PLC

- ➢ Motion control features: Integrated synchronous control, trajectory (interpolation), positioning and other motion control functions
- ➢ Multi level open network: CANopen, Modbus, EtherCAT, Ethernet
- ➢ Main CPU module support 32 axis bus servo axis
- ➢ Support EtherCAT distributed expansion, I/O up to 32,000 points
- ➢ Support mini USB interface and 32G Micro SD card
- ➢ Built-in E-CAM function
- ➢ Support offline simulation to make debugging more flexible

Pump and HVAC

Segment requirement:

-Multi-pump control

-Normal duty enough

HVAC

GD350-16
- Based on GD350 platform, multi-pump control
- Specially for HVAC, water treatment

BPD 220V 0.75~4kW/ 380V 2.2~5.5kW IP65
- Wider voltage: 1AC 80~440VDC/3AC 220~800VDC. Built in boost module
- **Support AC&DC input , AC bypass function, Built in DC switch**
- Water level detection, natural cooling

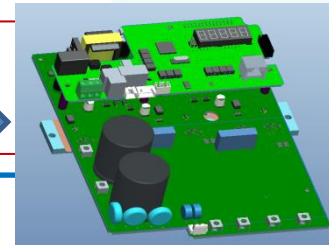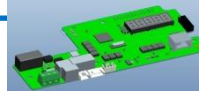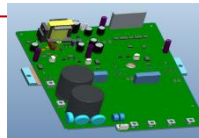**GD100-PV: IP20 or IP54, 0.4~7.5kW(220V output); 0.75~200kW(400V output)**
- Drive both AC & DC pump, MPPT 99%
- ≤2.2kw support boost module
- Blend input(AC&DC) and auto switch, GPRS module

* For solar pumping inverter, support PM and BLDC(with non-standard FW)

SPC 220V 0.75~2.2kW/ 380V 4~7.5kW IP65
- IP65 low cost solution, both product and SKD
- Built in GPRS module

Solar pump

Crane

Segment requirement:

---High starting torque

---Braking unit

---Macro(limit switches, brake logic control, etc)

Four-Quadrant

GD300-29 AFE Solution 7.5~55kW

➢ SVC& VC for both PM&IM

➢ Compact design comparing to other AFE products

➢ PWM: low harmonic <5% & high PF>0.99, with C2 filter

Application: Crane, Oil, Chemical, plastic, CNC, textile, etc…

GD350-19 Standard 380V 1.5~500kW & 660V 22~630kW

➢ **Open/Close-loop, ≤110kW built-in braking unit, Built in braking unit protection function**

➢ Integrated special function for crane, SVC & VC macro, translation application macro, and 30+ protection, 'Zero' position detection, etc.

➢ 0.25hz/150%, torque verification for anti-sliding

➢ **Support AC/ DC input terminal, the relay supports small current signal input**

➢ Built in PT100 / PT1000 detection function

GD20-09 Economic 0.75~37kW

➢ Compact design and built-in DBU

➢ Support AC/ DC input terminal, the relay supports small current signal input

➢ **Integrate special function for crane: SVC macro, translation special macro**

Two-Quadrant

Lift

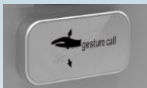**EC30 door controller 0.4kW**
- Close-loop for PM

EC20 door controller(0.4&0.75kW)
- SVC and VC for AC

Upcoming in 2021

Contactless Calling Solution
- Gesture Calling Device for LOP
- QR-Code Calling Device for COP

Control Board
- Support serial & parallel
- Support open & close loop control

Spare Parts

- New Door Drive
- Modular ARD
- General IOT Device

Other Spare Parts
- UPS\Door Sensor\Touch LOP,COP

EC300 Four-quadrant Integrated Controller 7.5~30kW

Max Speed: 6m/s 8-units group control   Max Floor:64
- Energy feedback efficiency >80% , Harmonic <5%
- IOT

Integrated Solution

- Open Loop Integrated Controller
- Integrated Control Panel
- Integrated Escalator Controller
- Explosion-proof Integrated Controller

EC160A Integrated Controller 2.2~30kW Max Speed: 6m/s 8-units group control Max Floor:64
- Support geared & gearless motor close loop with built-in PG card
- Support both serial and parallel for LOP\COP
- Support AC220V\380V UPS\ARD for emergency rescue

GD300L\GD200L Elevator Drive 2.2~30kW
- Support geared & gearless motor, open\closed loop
- 8 DI&3 RO, can be extended by I/O card
- **Comfort:** Starting torque compensation/Direct stop function

Analog Input
Multi-speed

Controller

Elevator Drive

- New Elevator Drive

Compressor

Segment requirement:

-PM motor, high efficiency

-Integrate control saving cost

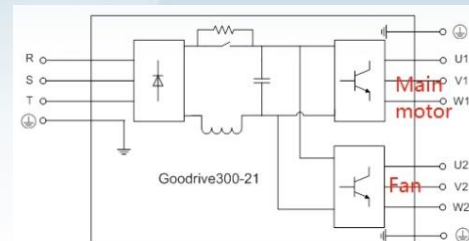*-PID Control*

HMI VK2070

ICA201-01N-24 IOT Module(GPRS)

GD300-21 Dual Drive solution 15~90kW

➤ **Dual VFD solution, drive main motor(PM&IM) + Fan**
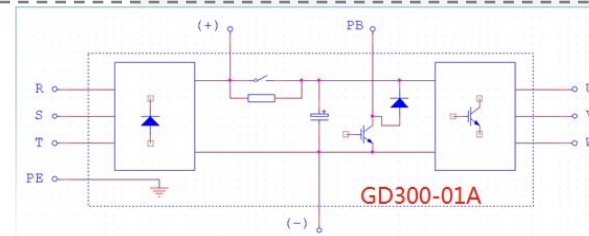
➤ Saving cost and 40%+ space

➤ Customized HMI, IOT

Motor ←

Fan ←

Goodrive300-21

Main motor

Fan

GD300-01A 7.5~500kW

➤ **PM&IM, Integrated special logic control and 30+protections, no need PLC**

➤ 2PID(2AI Pressure & 2AITemp). Intelligent sleep and wake-up

➤ 120% continuous running/150% 1min/180% 10s/200% 1s

➤ **7.5~110kW built-in DCR,24V/24W DC Power**

GD300-01A

Single Drive

Engineering & M.V

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M.V.

GD5000(Two/Four quadrant) 3/3.3/4.16/6/6.6/10/11kV
- VF/SVC/VC for IM&PM, 7"HMI, IP30/IP42
- PF>0.97,THDI<2%, efficiency>97%
- **Power Cell:** Serial connection and interchangeable, same level or neutral point drifting bypass
- **Control unit:** DSP+FPGA+ARM 3-core technology, optical power & control, field bus

GD5000 Integrated Solution 6kV 315~1120kW&10kV 400~2000kW
- Integrated Bypass, transformer, power and control unit,
- Saving cost and dimension

➡️ **Application: Metallurgy, Chemical, Mine, Cement, Sugar, Water**

GD3000 1140V 55~1000kW
- 3-level topological structure, SVC &VC
- AFE solution, efficiency>0.98, PF>099

➡️ **Application: belt conveyor, Mine hoist, Mine cable way, emulsion pump, Oil**

Engineering VFD

GD800 Multi-drive solution
- Modularized design, VF/SVC/VC
- Field bus: Profibus-DP/Ethernet/CANopen/Profinet
- Optical communication

Multi-Drive:
- GD800-51 37~400kW Converter unit
- GD800-61 400kW Diode Rectifier

Single-drive:
- Tow quadrant GD800-11 4~400kW
- Four quadrant GD800-26 75~1200kW

➡️ **Application: Metal, Paper, Petrol, Chemical, Mining**

GD600 Multi-drive solution: rectifier 45/160/355kW & inverter 1.5~75kW
- Independent Power Supply(24Vdc) for Control Board
- Integrated DC Bus Connector
- Integrated DC Fuse

➡️ **Process control : metal processing, printing & packaging, textile, paper**

Power/kW

Servo

Hydraulic

MH800 Hydraulic servo 4.4~75kW
- ➢ Energy saving effect: 20% ~ 80%
- ➢ Pressure and flow control, three times overload capacity
- ➢ A variety of multiple pump system solutions
- ➢ Embedded LED, hand-held HMI, PC tuning

Single Axis

DA180 Basic servo 1-phase 220V 0.1~2.0kW
- ➢ DA180 series basic AC servo drive is the new generation of INVT **simplified single-axis servo product**
- ➢ High speed response(up to 2.0kHz)
- ➢ Light and handy: Compared with DA200, **DA180 can maximum reduce the size by 45%**
- ➢ Accurate positioning: 17-bit absolute encoder
- ➢ Enriched communication interfaces: Support EtherCAT, CANopen and Modbus

DA200 General purpose 220V(1PH/3PH) 0.1~4.4kW & 400V 1~55kW
- ➢ Speed response frequency 2.0kHz, 23-bit,full close-loop
- ➢ Support Modbus, CANopen, Profibus-dp, EtherCAT
- ➢ Others: **Gantry synchronous/1000points ECAM/Vibration suppression**

➡ **Application: Textile, print & packing, semiconductor, CNC**

DA300 0.1~2.0kW 220V(1PH/3PH) Compact
- ➢ **3.0kHz+23bit, support second encoder, full close-loop**
- ➢ **0.75~1kW built-in braking unit, STO Class: SIL2**
- ➢ Support Modbus, CANopen & EtherCAT
- ➢ Others: Gantry synchronous/1000points ECAM/Vibration suppression

➡ **Application: Print & Packing, Textile, wood making, robots, laser**
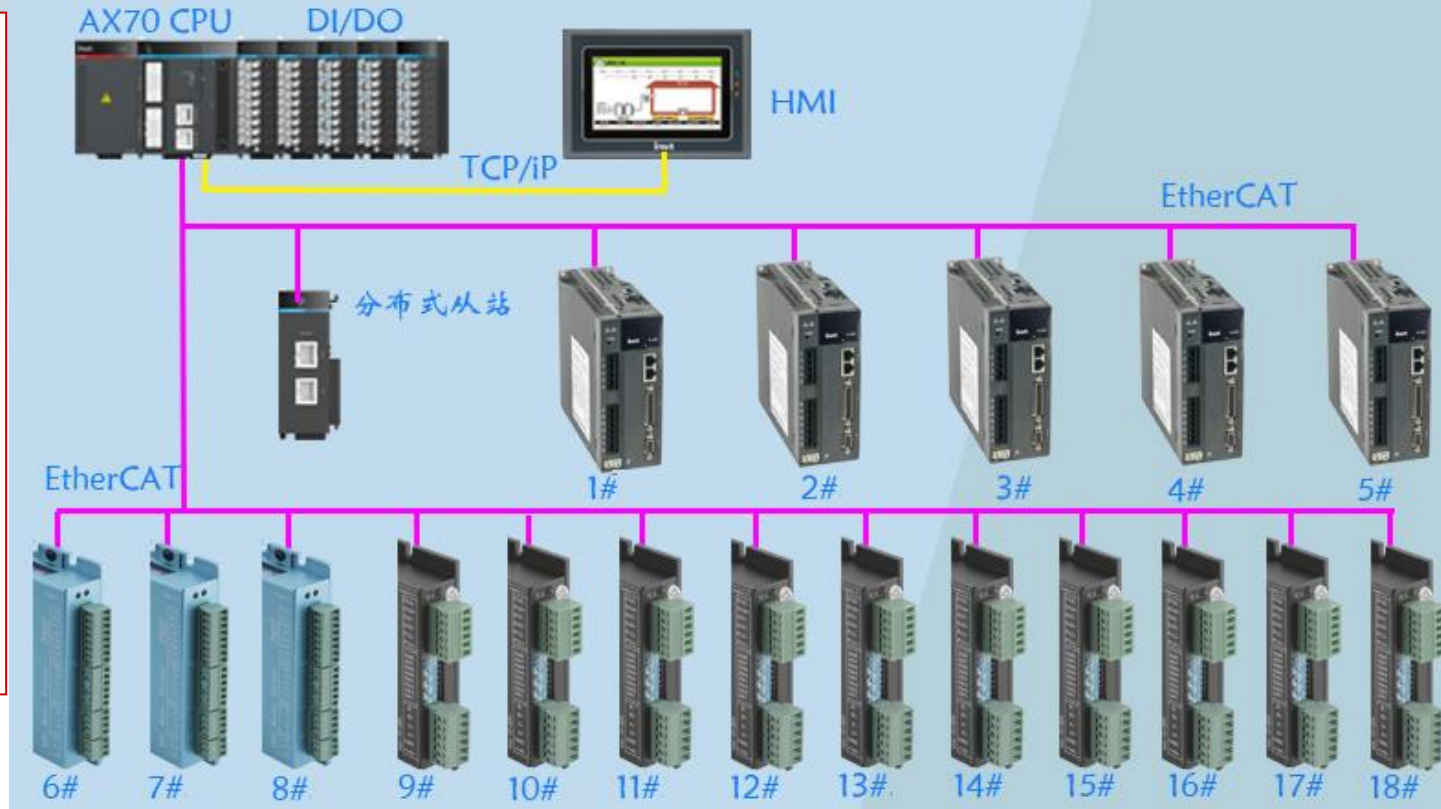
Application solutions

Non-woven Flat Mask Machine Control System
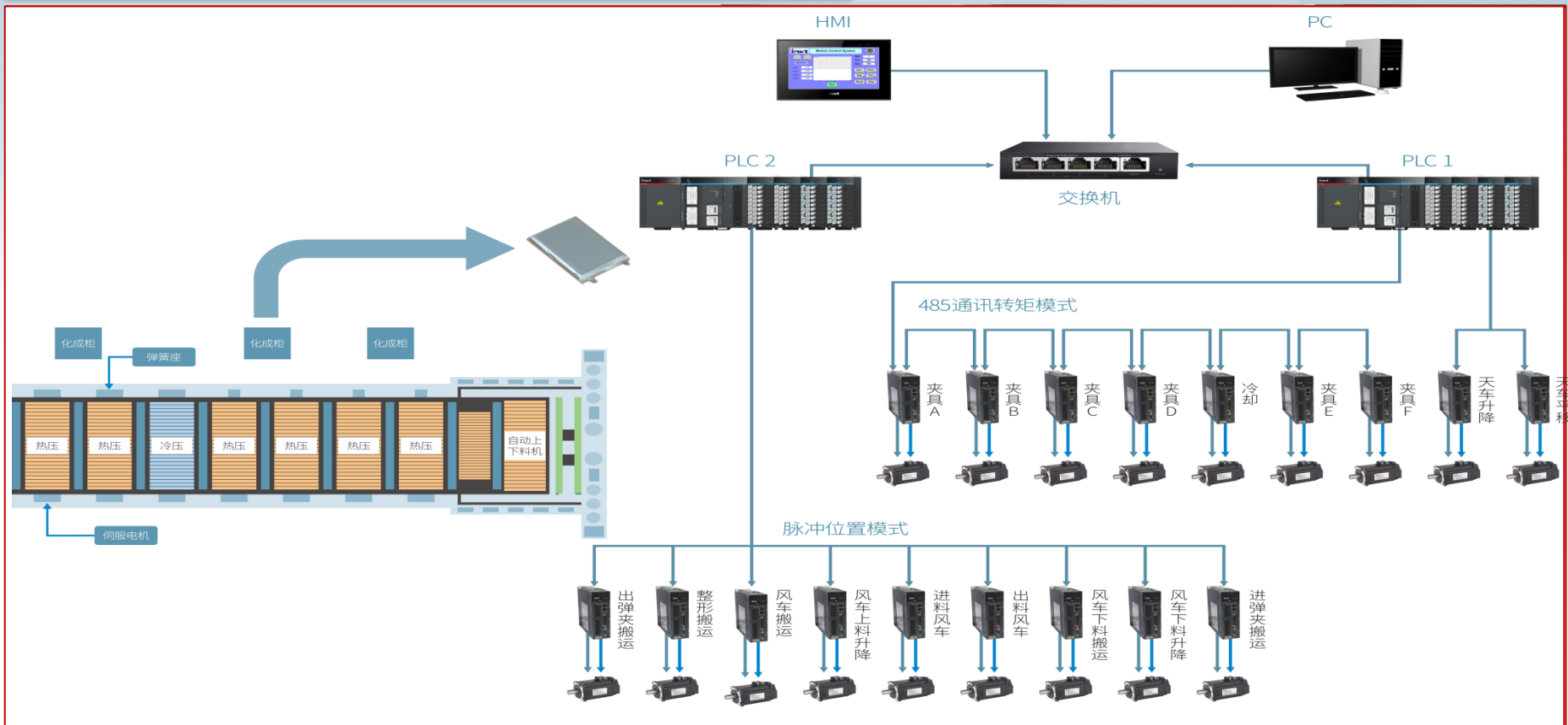
System configuration
➤ VS-070HS + AX70 + DA200

Results achieved
➤ EtherCAT, the controller and servo are connected by network cable, which saves a lot of wiring time and improves the production speed
➤ EtherCAT, feeds back the fault condition of each axis, saving the difficulty and time of troubleshooting
➤ EtherCAT has high response speed and synchronous control to improve the positioning accuracy of cutting and welding lug

Application solutions

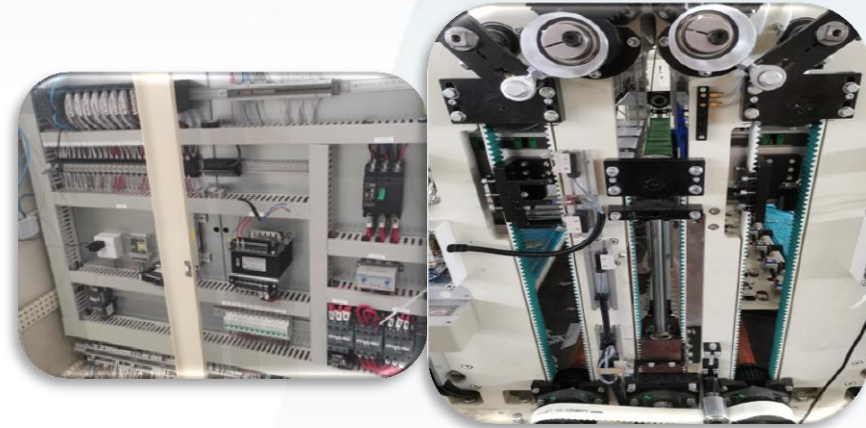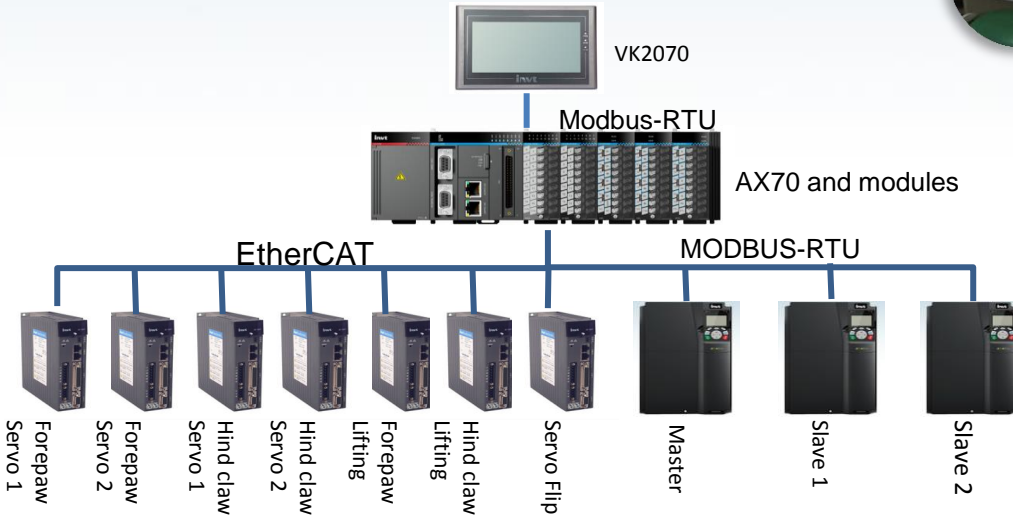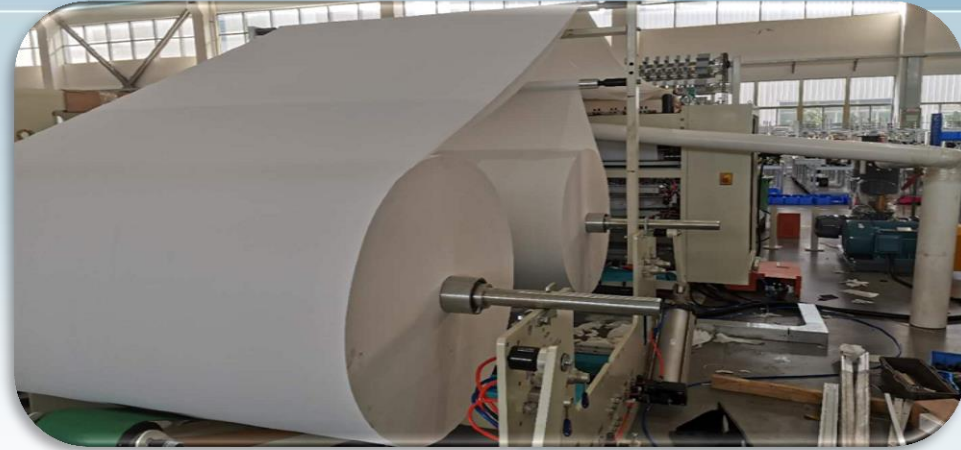**Lithium winding machine and lithium pressure forming machine**

Application solutions

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System configuration

➢ GD350 + AX70 + HMI + DA200

Results achieved

➢ At least 14 sheets of paper / min, fully automatic production.
➢ Mechanical CAM origami, ensure the width (90mm) is consistent.
➢ Mechanical treatment of paper head and tail, no waste.

VK2070

Modbus-RTU

AX70 and modules

EtherCAT

MODBUS-RTU

Forepaw Servo 1
Forepaw Servo 2
Hind claw Servo 1
Hind claw Servo 2
Forepaw Lifting
Hind claw Lifting
Servo Flip
Master
Slave 1
Slave 2

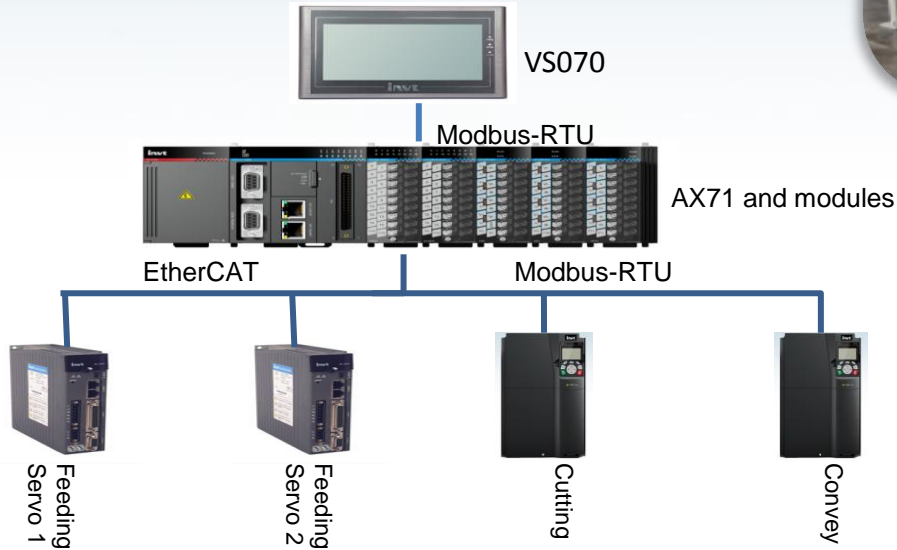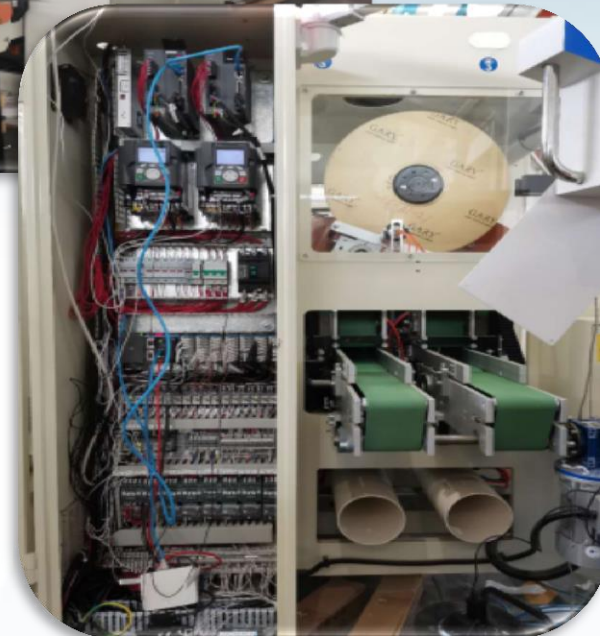# Application solutions

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Large rotary paper cutter

System configuration
➢ AX71 + 2*DA200+ 2*GD350 + VS070

Results achieved
➢ Electronic CAM function, realize servo following encoder synchronization
➢ PLC + servo overall solution, improve the production efficiency.

VS070

Modbus-RTU

AX71 and modules

EtherCAT   Modbus-RTU

Feeding Servo 1   Feeding Servo 2   Cutting   Convey
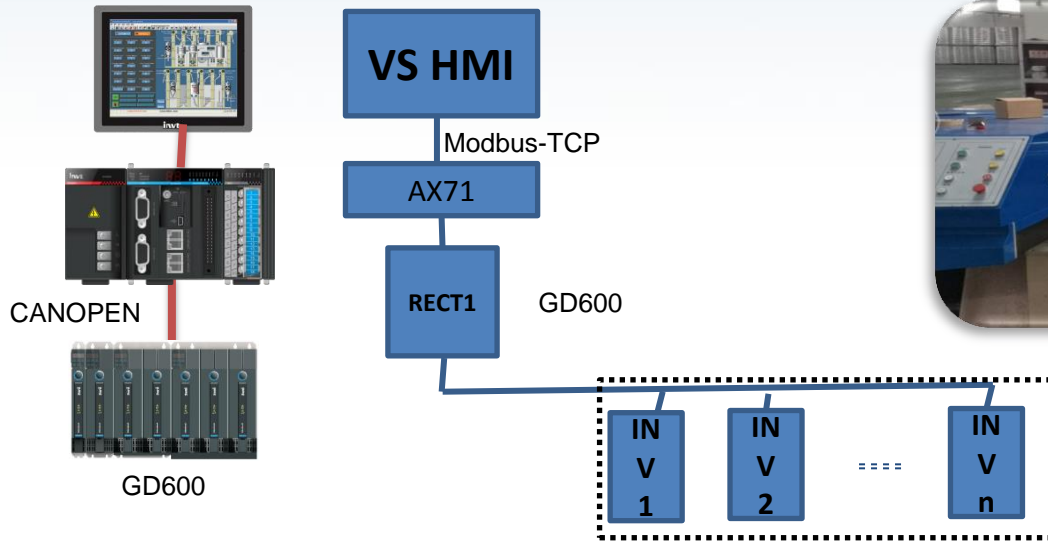
Application solutions

Parallel shaft machine

System configuration
➢ AX71 + 1*GD600-71+6*GD600-51+VS102SCH

Results achieved
➢ The unwinding efficiency of motor is twice as high as that of magnetic powder, and the speed reaches 300m / min
➢ PLC and GD600 are equipped with CANopen as standard, save communication cost and IO cost;
➢ Multi group PID parameters, stable tension control, stable start and stop.

CANOPEN

GD600

VS HMI

Modbus-TCP

AX71

RECT1   GD600

INV1   INV2   ====   INVn

Application solutions

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Electric control set of electric train

System configuration
- 4*GD350-19 +IVC3 + HMI

Results achieved
- The controller adopts IVC3 CANopen bus to ensure the synchronization.
- 3. Special torque given curve ensures smooth electric driving feeling and braking electric torque.

Electric control set of melt blown cloth

System configuration
- VS-102HCS +IVC3+GD600+GD200A

Results achieved
- CANopen communication, saves a lot of wiring and improves the production speed.
- GD600 modular multi drive, small size, saving a lot of cabinet space, greatly reducing low-voltage distribution wires.

Flexo printing machine

System configuration
- PLC: AX70 + VS-102HCS + GD20-2R2G-4
- Traction servo: DA200-4R4-4-NO, Printing servo DA200-2R0-4-N0,

Results achieved
- ECAM, there will be no acceleration and deceleration section resulting in color deviation. At the maximum production speed of 110m / min, the color deviation <0.8mm.

INVT Cloud

Your Trusted
Industry Automation Solution Provider