

Kinco

GK Series Integrated Controller

Control & Interaction in One
Redefining the Future of Integrated Control



ST
Programming

Up to 50
Built-in I/O

Expandable
Architecture

Display +
Control + Expansion

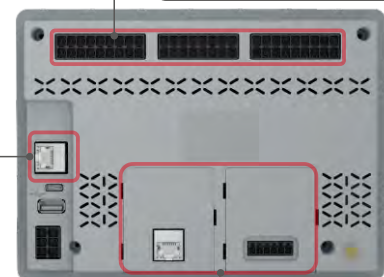
Cabinet-
less Trend

Cost
Efficiency

HD Display

| Product Advantages

- Compact integrated architecture for space-efficient machine deployment
- Up to 50 built-in digital and analog I/O points with integrated control and interaction capability
- Optimized cost-performance balance without compromising control capability
- Shared Ethernet architecture for reduced hardware complexity and compact system design
- Two flexible onboard expansion interfaces for application-oriented scalability
- Dual-platform architecture powered by KincoBuilderPro and DToolsPro
- HD display and enhanced memory configuration for refined visualization performance
- Integrated software coordination mechanism for simplified engineering and rapid deployment

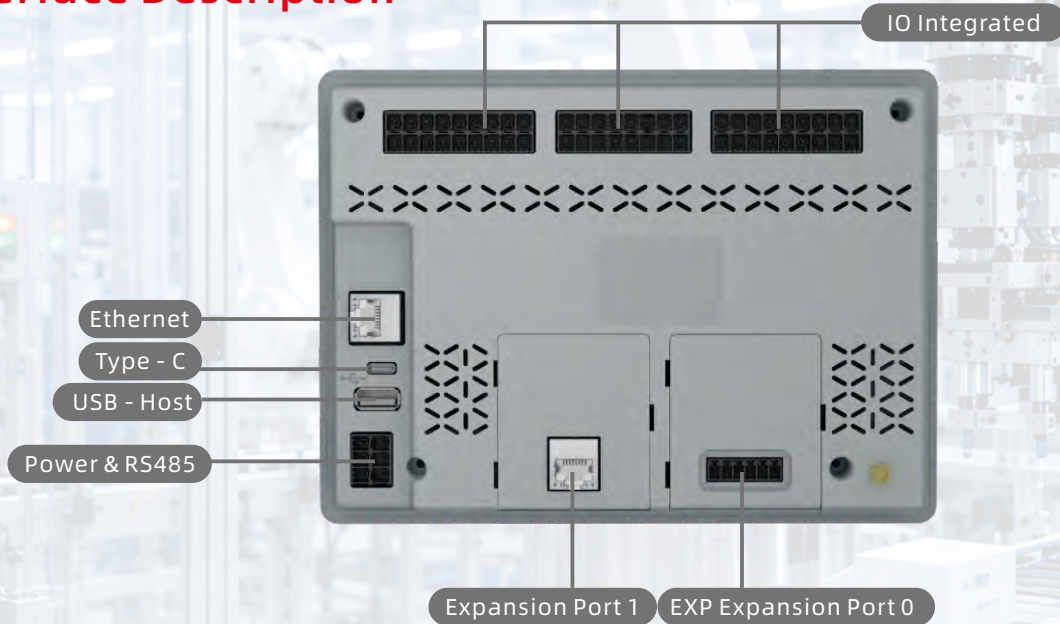


High-density built-in digital and analog I/O (16-bit) reduces device interconnections and simplifies system architecture

Shared Ethernet architecture between HMI and PLC platforms minimizes hardware footprint while meeting communication requirements

Equipped with two flexible onboard expansion interfaces for application-oriented scalability

I Interface Description



I Industry Applications



Suitable for packaging, labeling, conveyor and multi-station machine applications.

Supports equipment monitoring, recipe management and touch interaction, helping improve commissioning efficiency and deployment consistency.



Suitable for fans, pumps, boilers and environmental control applications.

Supports equipment monitoring, parameter interaction and remote maintenance, meeting long-term operation and unattended application requirements.



Suitable for dosing, liquid handling, fluid control and process monitoring applications.

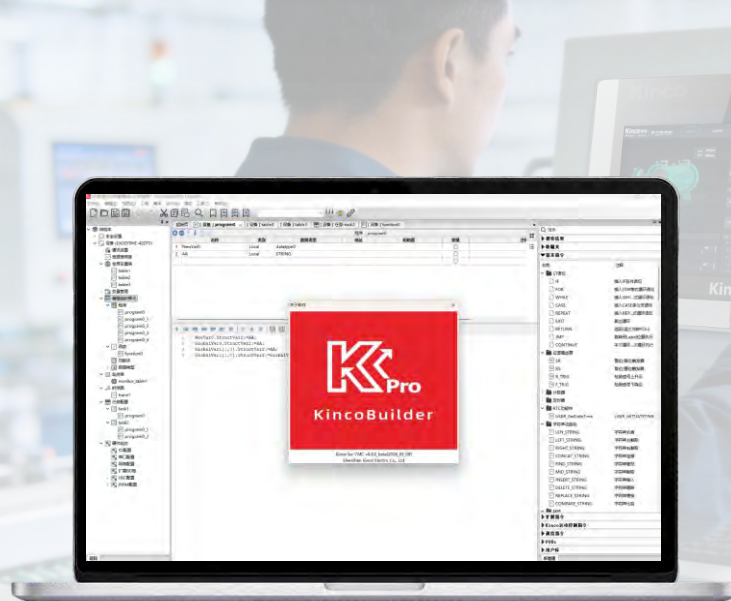
Supports centralized parameter management and equipment status monitoring, ensuring stable operation for continuous-process equipment.



Suitable for livestock, environmental control, feeding and irrigation applications.

Supports temperature and humidity monitoring, equipment linkage and remote management, meeting long-term operation and unattended application requirements.

I Kincobuilder Pro (PLC Programming Software)



IEC 61131-3 multi-language programming support including ST, LD, SFC, FBD and IL

Structured engineering management architecture based on Project / POU / Task

Graphical and drag-and-drop engineering development

One-click Kinco servo configuration with dedicated motion function libraries

Real-time task scheduling and multi-task execution capability

Support for code reuse and user-defined libraries

Integrated simulation, trace and virtual debugging functions

I Kinco DToolsPro (HMI Config Software)



1.RFID Login

Driver-free RFID access with user permission management

2.Screen Reuse

Switch multiple data groups through index values to reduce screen quantity

3.Dynamic Alarm

Multi-dimensional alarm query and dynamic alarm information display

4.I/O Monitoring

Batch import support with unified I/O status and description display

5.Operation Log

Supports operation records for recipes, users and system-level actions

6.Multi-screen Networking

Project reuse for multi-screen applications with adaptive screen size replacement

7.Recipe Management

Discrete address binding with mixed data type support and direct table editing

8.Centralized Management

Unified management of user permissions, recipes and historical data

GK2070HE-42DTP

Model	GK2070HE-42DTP
Power Specifications	
Rated Power	DC 24V(DC 19.2V~DC 28.8V)
PLC Section	
Digital I/O	DI*24*DC24V(PNP/NPN) DO*16*DC24V(PNP)
Analog I/O	2*AI supports 4~20mA / 0~20mA / 1~5V / 0~10V
Expansion	2 EXP expansion slots EXP0:GK20-04DI/04DT/02AI/02AO/02TC/02RD/04XR/COM EXP1:GK20-04DI/04DT/02AI/02AO/02TC/02RD/04XR/CAN
Ethernet	10M/100M adaptive (shared for display and control, independent IP)
Programming Interface	Ethernet/RS485/HMI Pass-through
Serial Port	1*RS485, max. communication rate up to 115.2kbps, isolated Supports Modbus RTU master/slave and free protocol communication
High-speed Inputs	4 channels Supports AB-phase pulse input, max. counting frequency: 200kHz
PWM	4 channels
Edge Interrupts	4 channels, I0.0-I0.3, supports rising/falling edge interrupts
Program Capacity	60kB
Data Capacity	16kB
Data Retention	4kB
Programming Software	KincoBuilder Pro
HMI Section	
LCD Size	7" TFT LCD
Resolution	1024*600
Display Colors	16.77M
Brightness	450cd/m ²
Backlight	LED
Touch Screen	4 - wire Precision resistive touch
LCD Lifetime	> 30000h
Processor	Dual-core A7 1GHz
Ethernet	10M/100M adaptive (shared for display and control, independent IP)
Memory	Dual-core A7 1GHz CPU +256MB RAM
Recipe Memory	Built-in real-time clock
External Storage	USB HOST(USB-A)
Program Download	USB SLAVE(USB-C)/Ethernet /USB HOST(USB-A)
Printer Port	USB HOST(USB-A)
Configuration Software	DToolsPro+ EdgeAccess2.0 + Miot
Others	
Dimensions	204*150*62.1mm (including terminals)
Cutout Dimensions	192*138mm
Protection Rating	Front panel IP65
Certification	
CE	Compliant

Quick Selection Guide

Quick Selection Guide		
Category	Model	Product Description
HMI+PLC All-in-One	GK2070HE-42DTP	Powered by DC 24V, 1 × Ethernet port (shared by HMI and PLC) PLC section: 24 × DI (including 4-channel high-speed counter inputs), 16 × DO (including 4-channel PWM outputs), 2 × AI (4-20mA / 0-20mA / 0-10V / 1-5V), 2 × EXP Slots (for GK20 module expansion), 1 × RS485 HMI section: 7-inch TFT, resolution 1024 × 600, USB HOST (USB-A), USB SLAVE (USB-C)
Expansion Board	GK20-04DI	4-channel digital input, support PNP and NPN
	GK20-04DT	4-channel transistor digital output, support PNP and NPN
	GK20-CAN	CAN 2.0B, support CANOPEN Master, Free communication and Kinco motion control
	GK20-COM	Communication with 1 X RS485 and 1 X RS232 port, support Modbus RTU master/slave and free communication
	*GK20-02AI	2-channel analog input, support 0-20mA, 4-20mA, 0-10V, 1-5V
	*GK20-02AO	2-channel analog output, support 0-20mA, 4-20mA, 0-10V, 1-5V
	*GK20-02RD	2-channel RD (resistance temperature detector), support PT100, PT1000 and Cu50
	*GK20-02TC	2-channel thermocouple, support J/K/E/S/T/0-100mV
	*GK20-04XR	4-channel relay digital output

* Indicates that the product has not yet been released.

[illegible]

Figure 1 shows the dimensions and appearance of the GK20-04DT. The side view indicates a height of 56.47 and a width of 47.93. The top view shows a width of 22. The front view shows the device's face with the model number 'GK20-04DT' and a 4-pin connector labeled '1 2 3 4'.

Note: The silkscreen markings are subject to the actual model.

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