PROVEN PERFORMANCE

Customers in over 60 countries and in diverse markets and sectors.

Kinco

PLC	➡ Kinco PLC Product Brochure	K6S PLC
		Compact Modular PLC

Kinco® Automation

en.kinco.cn   Email: sales@kinco.cn

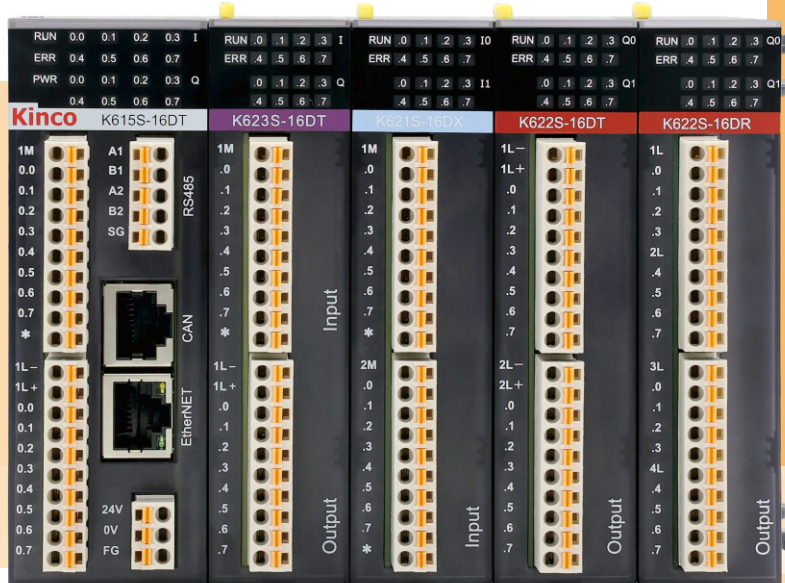# Thinner, High-performance, More powerful.

Multiple interface

CAN*1
-Support CANopen master, allows a maximum of 64 slave devices to connect.
-Support Kinco motion control functionality, with a maximum support for 16 nodes connection, and can easily connect to Kinco servo and stepper drives.
RS485*2
-Support programming protocols,Modbus master/slave, as well as custom communication protocols.
EtherNet*1
-Come with a standard 10M/100M Ethernet interface, making human-machine Interaction more convenient.
-Support Modbus TCP Client/Server industrial bus protocol, with free transmission in TCP Client/Server mode, and free transmission in UDP Peer mode.

Powerful Performance

-Faster instruction execution speed.
-Support 8,000 programming instructions, equipped with 20,000 bytes of data storage, providing assurance for the implementation of complex control systems.
-Support functions such as arrays and stacks.

Integrated High-Speed I/O

4-channel high-speed input
- 3 channel with a maximum counting frequency of 200kHz
- 1 channel with a maximum counting frequency of single-phase 20kHz / two-phase 10kHz
4-channel high-speed output
- 3 channel with a maximum pulse frequency of 200kHz
- 1 channel with a maximum pulse frequency of 10kHz

- The software also provides PLS (PWM or PTO), positioning control instruction sets, and PFLO_Follow instructions, etc.
This makes it easy for users to realize simple motion control applications..
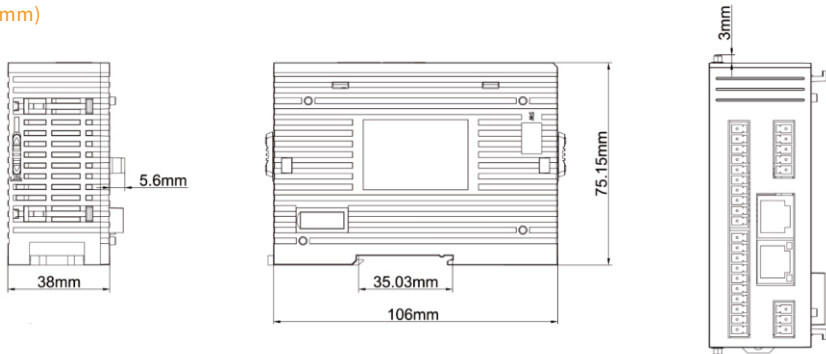
K6S Application Solutions

Modbus RTU

Modbus RTU

CANopen®

Modbus TCP/UDP

High-Speed Inputs (200kHz)

High-Speed Outputs (200kHz)

Dedicated Bus Protocol

Kinco

CPU K615S

K615S-16DT

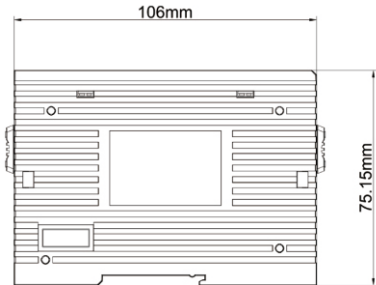| Model	K615S-16DT
Power Supply	24VDC±10%(21.6VDC~26.4V DC)@ 5W
Program Capacity	8K programming instructions
Data Capacity	M Zone:4K Bytes
	V Zone:16K Bytes
Integrated I/O	8 Digital Inputs: Source/Sink Type, DC24V, Maximum Allowable DC30V
	8 Digital Outputs :Transistor PNP Output,300mA @ 24VDC
High-speed Input	4 channels of high-speed pulse input, support AB phase, P (pulse)/D (direction) mode. For 3 channels, the maximum requency is 200kHz; for 1 channel, the maximum frequency is 20kHz for single-phase or 10KHz for double-phase.
High-speed Output	4 channels of high-speed pulse output, support PWM function. For 3 channels, the maximum requency is 200kHz (load current greater than 20mA); for 1 channel, the maximum frequency is 10kHz.
RS485	2 RS485 (isolated, intergrated termination resistor). Support programming protocols, Modbus RTU master and slave, and free communication.
EtherNet	1 Ethernet, support Modbus TCP Client/Server industrial bus protocol. Support free transmission in TCP client/TCP server mode, free transmission in UDP peer mode, program upload/download, and firmware upgrades.
CAN	1 CAN (RJ45, with terminal resistor) Support CANOPEN, free communication in CAN, supports Kinco motion control functions, and Kinco motion control protocol supports a maximum of 16 connected nodes.
Expansion	Supports connecting up to 16 K6S-series expansion modules.
Power-off Retention	V Zone: 1908 bytes(VB0-VB1907)
	C Zone: C0~C63
RTC	Suppor RTC (Real-Time Clock), with an error of less than 5 minutes per month at 25°C
Dimension	38.00mm x 75.15mm x 106.00 mm

Dimensional Drawing (mm)

K6S Series Expansion Modules - Digital I/O Module

K622S-16DT

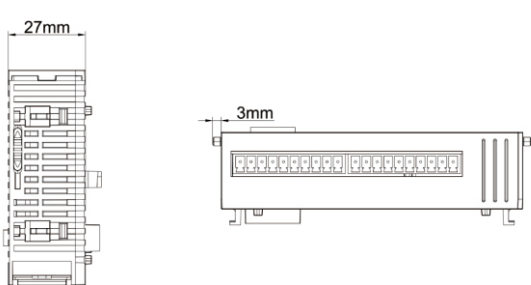| Model	K622S-16DT
Overview	Module for 16-channel PNP-type digital outputs.
Type	Transistor PNP Output (source type)
Channels	16 channels (8 channels/ group)
Power Supply	Powered by Expansion Bus
Output Voltage	DC20.4V-DC28.8V
Output Current per Channel	300mA @ 24VDC
Output Leakage Current	10µA
Output Impedance	0.20Ω
Output Delay	Turn-on <30µs
	Turn-off <50µs
Protection	Inductive load output protection
	Output polarity reversal protection
	Short-circuit protection
Isolation	Optical isolation, 500VAC/min
Dimension	27.00mm x 75.15mm x 106.00mm

Dimensional Drawing (mm)

K622S-16DR

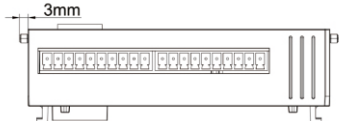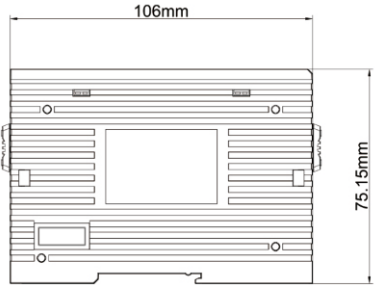| Model	K622S-16DR
Overview	Module for 16-channel relay-type outputs.
Type	Relay-type output
Channels	16 channels (4 channels/ group)
Power Supply	Powered by Expansion Bus
Permissible load voltage	DC24V/AC250V
Current with resistive load	2A per point, 4A per group 1A per point, 4A per group
Current with capacitive load	1A per point, 4A per group
Output Delay	Turn-on ≤ 10ms Turn-off ≤ 5ms
Expected mechanical lifespan	No-load 20,000,000 times (1200 times/min)
Expected electrical lifespan	Rated load 1,000,000 times (6 times/min)
Isolation	Relay isolation Isolation voltage 2000Vms
Dimension	27.00mm x 75.15mm x 106.00 mm

K623S-16DT   **K621S-16DX**

Model	K623S-16DT	K621S-16DX
Overview	Module for 16-channel transistor input/output mixed (8DI/8DO)	Module for 16-channel PNP/NPN-type digital inputs.
Type	Transistor Inputs(NPN/PNP) Transistor Outputs(PNP)	Transistor Inputs(PNP/NPN)
Channels	16 channels(8 channels/group) 8DI/8DO	16 channels(8 channels/group)
Power Supply	Powered by Expansion Bus	Powered by Expansion Bus
Input Range	The maximum input voltage for signal "0" is 5V and the current is 0.8mA. The minimum input voltage for signal "1" is 11V and the current is 2mA.	The maximum input voltage for signal "0" is 5V and the current is 0.8mA. The minimum input voltage for signal "1" is 11V and the current is 2mA.
Input Delay	Turn-on <18μs Turn-off <50μs	Turn-on <18μs Turn-off <50μs
Isolation	Optical isolation, 500VAC/min	-
Rated Output Voltage	DC20.4V-DC28.8V	-
Output Current per Channel	300mA @ 24VDC	-
Output Leakage Current	10μA	
Output Impedance	0.20Ω	-
Output Delay	Turn-on <30μs Turn-off <50μs	-
Protection	Inductive load output protection Output polarity reversal protection Short-circuit protection	-
Dimension	27.00mm x 75.15mm x 106.00mm	27.00mm x 75.15mm x 106.00mm

Dimensional Drawing (mm)

106mm

75.15mm

27mm

3mm

Quick Selection List for K6S Series

Model	Description	
CPU		
K615S-16DT	Power Supply: DC24V	
	Digital Inputs: 8 channels, DC24V (PNP/NPN)	
	Digital Outputs: 8 channels, DC24V (PNP)	
	Support 3 channels of high-speed Input at 200KHz, 1 channel at single-phase 20KHz/double-phase 10KHz	
	Support 3 channels of high-speed Output output at 200KHz, 1 channel at maximum 10KHz	
	Communication Interfaces: 2 * RS485, 1 * Ethernet, 1 * CAN	
	Support connecting up to 16 K6S-series expansion modules	
Expansion Module		
K621S-16DX	Powered by Expansion Bus, DI 16 * DC24V (NPN/PNP)	
K622S-16DT	Powered by Expansion Bus, DO 16*DC24V（PNP)	
K622S-16DR	Powered by Expansion Bus, DO 16*Relay	
K623S-16DT	Powered by Expansion Bus, DI 8*DC24V（NPN/PNP) , DO 8*DC24V (PNP)	
*K622S-16DTN	Powered by Expansion Bus, DO 16*DC24V (NPN)	
*K633S-06IV	Powered by Expansion Bus, 12-bit resolution, accuracy 0.3% F.S. (Full Scale) AI * 4: 4-20mA,1-5V,0-20mA,0-10V AO * 2: 4-20mA,1-5V,0-20mA,0-10V	
*K631S-04TC	Powered by Expansion Bus 4 channels of thermocouple input Support J-type, K-type, E-type, S-type thermocouples Cold junction compensation, external compensation optional 24-bit resolution, accuracy 0.1% F.S. (Full Scale)	**Stay tuned for future updates**
*K631S-04RD	Powered by Expansion Bus 4 channels of thermal resistance (RTD) input Support Pt100, Cu50, Pt1000 resistance forms Support two-wire, three-wire, or four-wire connection methods 24-bit resolution Temperature: ±0.6℃; Resistance: ±10	