



# CT35

## Compact Controller

01 High Performance    02 Compact Size    03 High Integration Density    04 Simplified Use    05 Strong Environmental Adaptability



## | Product Overview

The CT35 is the latest compact controller product launched by Practek. Inheriting the advanced technologies of Practek’s complex controllers, it further enhances performance and integration while reducing product size, providing customers with a more cost-effective solution. Beyond meeting traditional logic control functions, the CT35 also integrates motion control capabilities, supporting motion control requirements for up to 16 axes. Thus, it is widely applicable in industries such as coal mining, logistics, packaging, and wind power.

## | Technical Specifications

Power Supply	Wide-voltage design, input range:12~36 VDC
CPU Performance	Core processor frequency: 1.2 GHz
	Integrate 1 GB DDR3, 16 GB storage space
	Built-in 32 MB QSPI Flash data storage chip
Integrated Communication Method	4 Ethernet Ports Design: 2 for EtherCAT input/output,enabling ring network redundancy; 2 standard Ethernet ports.
	Integrate 2 channels of CAN2.0 communication, with a maximum communication rate of up to 1 Mbps
	2 channels RS-485 communication, support ModBus and other protocols
Integrated I/O	16 DI Channels: Support sink/source DC input, photocoupler isolation, input voltage 12~24 V.
	16 DO Channels: Sink output, control loop voltage DC 5~24 V, drive current 0.5 A, total drive current ≥ 2 A.
	16 AI Channels: Analog input interfaces, configurable for 4~20 mA current or 0~5/10 V voltage, sampling accuracy ≤ 0.1%. Every 8 channels share one shield terminal.
	4 Temperature Input Channels: 4-wire PT100 temperature signal input interfaces, accuracy ≤ 0.1 °C within operating temperature range
Terminal Design	External terminals, pluggable
Ambient Temperature	Operating Temperature: -20~55 °C; Storage Temperature: -25~80 °C
Protection Rating	IP 20
Humidity	95% relative humidity at 55 °C
Altitude	≤ 3000 m
Protective Coating	Reinforced coating, suitable for harsh working environments
Dimensions (L x W x H)	134 mm x 90 mm x 70 mm
EMC Compliance	Complies with GB/T 17626 standard
Insulation Characteristics	<b>Insulation Resistance</b> The insulation resistance, measured with a 500 V open-circuit voltage tester, is not less than 50 MΩ, complying with GB/T 14598.3 standards
	<b>Dielectric Strength</b> The device can withstand a dielectric strength test with an AC voltage of 2 kV (high-voltage circuits) or 500 V (low-voltage circuits), a frequency of 50 Hz, and a duration of 1 minute as specified in GB/T 145983 (eqv IEC 60255-5), without breakdown or flashover Impulse Voltage
	<b>Impulse voltage</b> The device can withstand the impulse voltage test of standard lightning waves with a peak value of 5 kV (high-voltage circuits) or 1 kV (low-voltage circuits) as specified in GB/T 145983 (eqv IEC 60255-5)

## | Product Features

### 01 High Performance

The CT35 is equipped with a 1.2 GHz core processor, integrated 1 GB DDR3, up to 16 GB storage space, and a built-in 32 MB QSPI Flash data storage chip—sufficient to meet the needs of most medium-small application scenarios.

### 02 Compact Size

Adopting an all-metal housing, the CT35 is smaller than most products on the market. Its CPU unit integrates multiple communication buses and I/O ports, offering a cost-effective solution for small-scale automation applications.

### 03 High Integration Density

CT35 features a more compact design, with the CPU unit incorporating 4 Ethernet ports, integrates 2CAN interfaces and 2 RS-485 interfaces as well as 16 channels of DI, 16 channels of DO, 16 channels of AI, and 4 channels of PT100, significantly enhancing the product's cost-effectiveness.

### 04 Simplified Use

The CT35 adopts a pluggable terminal design for easy on-site operation. In addition, the all metal shell design provides a more secure installation and good vibration resistance.

### 05 Strong Environmental Adaptability

The CT35 adopts reinforced coating, and the working environment temperature can reach -20~55 °C, which can meet the requirements of harsh operating environment.



PRACTEK TECHNOLOGY CO., LTD.

402,4F,Building1,No.10 kegu 1st Street,  
Beijing Economic&Technological Development Area,Beijing  
+86 18721635742

sales@practek.cn

www.practek.cn/en/