DESCRIPTION



- Four High-Speed Counters
- Multiple Pulse Train Outputs
- Relay and/or Transistor Outputs
- 26 Modes and Inputs of High-Speed Counters
- Multiple Communication Ports
- Rated Input voltage DC 24V
- 6 Direct Input, 6 Direct Output, and
 4 Direct Input/Output



The PLC-K205 series provides special I/O functions, a Micro USB (USB 2.0) programming port, 4 high-speed counters, 3 high-speed pulse outputs, two RS485 communication ports, integrated digital input and output channels, and more. The high speed counters come in 10 different operation modes, support a single-phase frequency up to 50 KHz, and a dual-phase (A/B phase) frequency up to 50 KHz. In the 10 different modes, each counter has its own inputs for clock, direction control, start and reset, and has a 32-bit present value. The built-in high-speed pulse outputs can reach a maximum frequency of 50 KHz, and support PWM. The free KincoBuilder software provides absolute and relative positioning, homing, jogging, and quick stop instructions. The PLC-K205 series is an ideal hub for data processing with field devices, such as temperature modules, servo drives, field busses and more.

| Parameter | K205-16DR | K205-16DT |
|------------------------------------|---|-----------|
| Input Points | 16 | 16 |
| Input Type | Sinking or Sourcing | |
| Input Voltage | Rated: 24 Vdc; Maximum: 30 Vdc | |
| Rated Input Current | 3.5 mA @ 24 Vdc | |
| Max Input Voltage of Logic "0" | 5V @ 7mA | |
| Minimum Input Voltage of Logic "1" | Common Channel: 11 Vdc @ 2.0 mA | |
| Input Delay Off-to-On On-to-Off | Normal Input: 15 μs; High-Speed Input: 10 μs Normal Input: 60 μs; High-Speed Input: 6 μs | |
| Isolation | Mode: Opto-Isolated Between Input and Internal Circuit Voltage: 500 Vac / 1 Min | |
| Signal Identification | Separate LED Indicators for Each Channel | |
| Module Width | 70mm | 70mm |

L011443



| Parameter | KNC-PLC-K205-16DR | KNC-PLC-K205-16DT | |
|--|--|------------------------|--|
| Digital Channel | 6 DI, 6 DO, 4 DIO | 6 DI / 6 Relay / 4 DIO | |
| Analog Channel | n/a | | |
| Expansion Modules | n/a | | |
| Programming Port | Micro USB 2.0 | | |
| Communication Port | 2 RS485, PORT1 and PORT2, Max. Baudrate 115.2kbps. Port1 supports Modbus RTU protocol (as a slave or master), free-protocol communication mode, also can work as programming port. PORT2 supports Modbus RTU protocol (as a slave or master) and free-protocol communication mode. | | |
| High Speed Counters Single Phase Two Phase | 4 4, HSC0 and HSC1: Max.50KHz. HSC2 and HSC3: Max. 20KHz 4, HSC0 and HSC1: Max.50KHz. HSC2 and HSC3: Max. 10KHz | | |
| High-Speed Pulse Output | 3 Q0.0 and Q0.1: Max.50KHz (The resistor of load must be less than 1.5KΩ). Q0.4: Max.10KHz | | |
| I/O Interrupts | 4 Rising / Falling Edge Interrupts, I0.0-I0.3 | | |
| | Memory Area | | |
| Max. User Porgram | 4K Instructions | | |
| User Data | M area: 1K bytes; V area: 4K bytes | | |
| DI Image Area | 2 Bytes | | |
| DO Image Area | 2 Bytes | | |
| Al Image Area | n/a | | |
| AO Image Area | n/a | | |
| Data Backup | E2PROM , 448 Bytes | | |
| Retentive Ranges | 4K Bytes, Lithium Cell as backup power, 3 years at normal temperature | | |
| | Others | | |
| Timers | 256 1ms time-base: 4 10ms time-base: 16 100ms time-base: 236 | | |
| Time Interrupts | 2 with 0.1ms time-base | | |
| Counters | 256 | | |
| | Yes, deviation less than 3 min/month at 25°C | | |
| Real-Time Clock | | | |
| Real-Time Clock | m | | |



