

DL05: Super Powerful yet small

Top eight reasons to choose a DL05 micro PLC for discrete control applications (and we've even added a little motion control!)

What is it?

The DL05 is our least expensive PLC, but it's not short on features. For small I/O applications, the DL05 can do the job of some of our larger PLCs.

What's it got?

- Eight inputs and six outputs (integrated)
- Six I/O models of AC, DC and relay I/O
- 2K program memory
- 4K data memory
- 129 instructions, including four PID loops
- Powerful functions like FOR/NEXT loops, subroutines, and drum sequencers
- Removable terminal block

What discrete control can I perform with it?

- Control a small material positioning machine using built-in high-speed counting or pulse output I/O for cut-to-length, pick-and-place, speed monitoring, and more.
- Create a sequence controller using the drum instruction and discrete I/O for piece counting, sortation, stamping, filling, level control, and more.
- Build an events recorder using sensors and discrete I/O with the real-time clock option module installed.
- Use the 10-30 VDC-powered units in remote locations for data monitoring and control.

1 Super low prices

The DL05 micro PLC offers incredible features at a disposable price.

2 Practical communications

Two RS-232 serial communication ports are included on all models.

This allows connectivity to an operator interface and networking with an AC drive or

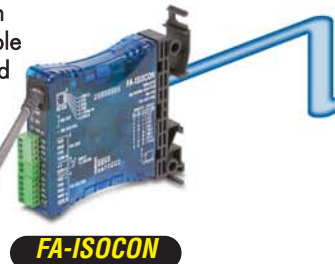
another PLC at the same time. The DL05 also supports industry standard

Modbus RTU protocol (both master and slave on

Port 2 up to 38.4K baud). Or, if you need additional ports, check out the new D0-DCM module with connection speed up to 115.2 Kbps.



Two built-in RS-232 serial communication ports. Port 2 configurable up to 38.4K baud and supports master/slave on DirectNET and Modbus RTU.



FA-ISOCOM



Built-in high-speed counting and pulse output I/O.

3 Simple high-speed counting or pulse output built in (on specific models)

The DL05 includes built-in configurable high-speed I/O. There's no need to purchase a separate motion controller or programmable limit switch (PLS) if your application only includes one simple motion requirement. For motion control on a budget, consider one of these options already included in the DL05:

- 5 kHz max. inputs for two up-only counters or one quadrature encoder
- One external interrupt input or pulse catch input (minimum pulse width 100 µSec)
- One 7 kHz maximum pulse output (step and direction or clockwise and counter clockwise pulse outputs selectable)



High-performance H0-CTRIO High-speed counter option module

H0-CTRIO Features

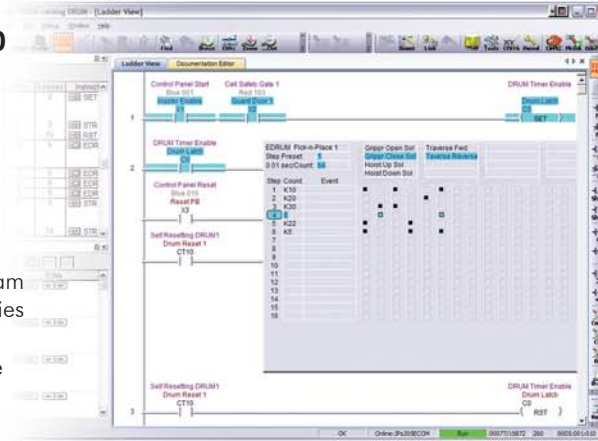
- One channel 100 kHz max. inputs for two up counters or one quadrature encoder
- Two high-speed inputs for edge timing, pulse catch, count reset/inhibit/capture or home search
- Two configurable high-speed outputs or one channel pulse output control (20 Hz-25 kHz)



Modbus RTU master/slave communication to GS1 AC drive

FREE Software - PC-DS100 Simple programming for your applications

5 Our NEW *DirectSOFT* (version 5.0) PLC programming software offers our traditional full package version, which will program every CPU in the *DirectLOGIC* series of PLCs. The new PC-DS100 package has all the features of the full package, but restricts you to a 100-word program download. Many of our DL05, DL105 and DL06 customers are taking advantage of this free programming software with all of its new enhancements, like *IBox* instructions, configurable tool bars, dockable and floatable windows and more.



6 Memory cartridge/ real-time clock

Install our D0-01MC into the option module slot and enable the DL05 for event scheduling or data logging applications. The D0-01MC also protects data during extended power removal with its on-board battery. Integrated upload and download buttons allow quick loading of a CPU program without the need for software.

7 Expansion I/O using option modules

Add up to 16 more discrete I/O points by installing an option module. Choose from nine different discrete modules, including DC in, AC in, DC out, DC in/out, and relay out.



4 Easy connection to ZIPLink modules

The 16-point option modules can connect to a variety of *ZIPLink* modules, including the low-cost feedthrough terminals, optional fuse, LED and even *ZIPLink* relay modules. The powerful 10A *ZIPLink* relay system will allow a DL05 to connect to high-current loads like contactors, solenoids and hydraulic valves.

(See *ZIPLink* section for our "five-second wiring solution.")



ZIPLink feed-through module ZL-CM056 and feed-through cable ZL-CBL056

D0-10ND3 10-pt. DC In

D0-10TD1 10-pt. DC Out

D0-10ND3F 10-pt. Fast Response

F0-08NA-1 8-pt. AC In

D0-10TD2 10-pt. DC Out

D0-08CDD1 4-pt. DC In/4pt DC Out

F0-08SIM Simulator

D0-07CDR 4-pt. DC In/3pt Relay Out

D0-08TR 8-pt. Relay Out

F0-04TRS 4-pt. Isolated Relay

D0-16ND3 16-pt. DC In

D0-16TD1 16-pt. DC Out

D0-16TD2 16-pt. DC Out

8 Connectivity to the most popular networks

You can implement advanced networking solutions for the DL05 with our **DeviceNet** Slave Module, **Ethernet** Communications Module (10 or 100 MBit), or our **Profibus** Slave Communications Module. The new D0-DCM module supports *DirectNet* and Modbus (slave) protocols.

NEW!



Modbus DeviceNet Ethernet Profibus
(Modbus TCP)

PLC Overview

DL05/06 PLC

DL105 PLC

DL205 PLC

DL305 PLC

DL405 PLC

Field I/O

Software

C-more HMIs

Other HMI

AC Drives

Motors

Steppers/Servos

Motor Controls

Proximity Sensors

Photo Sensors

Limit Switches

Encoders

Pushbuttons/Lights

Process

Relays/Timers

Comm.

TB's & Wiring

Power

Enclosures

Appendix

Part Index