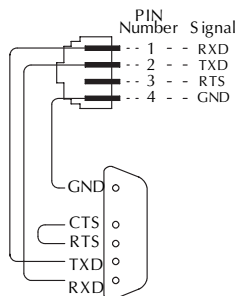
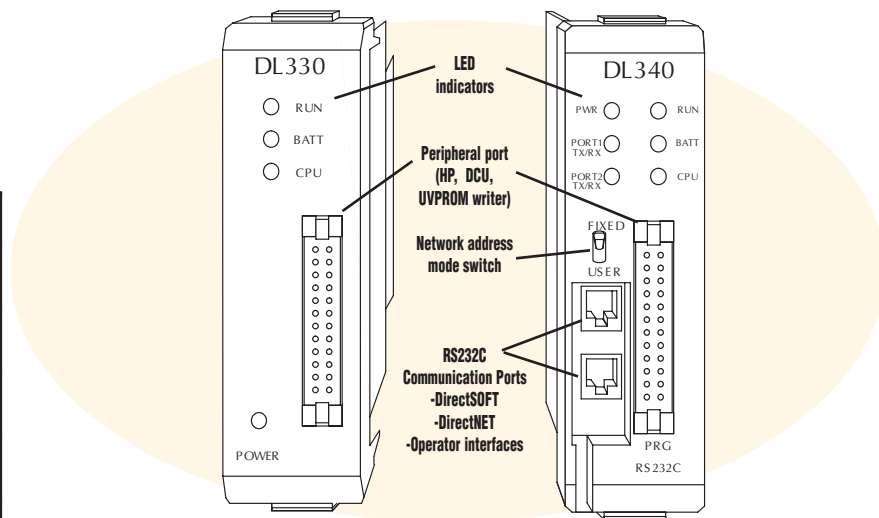


# D3-330 and D3-340 Key Features

D3-330 <--->  
D3-340 <--->

The diagram to the right shows the various hardware features found on the D3-330 and D3-340 CPUs.

CPU Status Indicators		
<b>RUN</b>	ON OFF	CPU is in RUN mode CPU is in Program mode
<b>BATT</b>	ON OFF	Memory backup voltage low Memory backup voltage good
<b>CPU</b>	ON OFF	CPU failure CPU is good
<b>PWR (Power)</b>	ON OFF	CPU power good CPU power failure
<b>Port1 RX/TX (D3-340)</b>	RED GREEN	Flashing red indicates the CPU port is receiving data Flashing green indicates the CPU port is sending data
<b>Port2 RX/TX (D3-340)</b>	RED Green	Flashing red indicates the CPU port is receiving data Flashing green indicates the CPU port is sending data



D3-340 RS232C Communication Port Specs	
Protocol	DirectNET
Connector	RJ11(handset connector)
Network address	01 to 90
Baud rate	38400, 19200, 9600, 4800, 2400, 1200, 600, 300
Parity-	None or odd
Transfer mode	HEX/ASCII Half-duplex Asynchronous
Data bits	8
Start bits	1
Stop bits	1
Turn around delay	0 to 1980 in 20ms intervals (preset with R777)

## EEPROM and UVPROM chips

The DL305 CPUs come with on-board RAM and a battery. If you need additional program security, you may want to choose the EEPROM or UVPROM memory.

**D3-CPU-UV** <---> Optional UVPROM memory. Four chips per pack. (Only one chip is required for the CPU.) A D3-PWU Prom Writer Unit is required for programming.

**D3-340-EE** <--->

Optional EEPROM memory for the D3-340 only. Four chips per pack. (Only one chip is required for the CPU.) No additional programming device is necessary.

**D3-D4-BAT** <--->

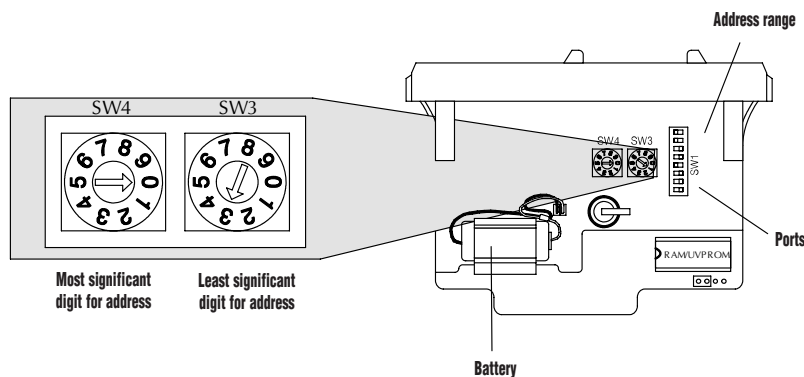
Spare battery (lithium 3.0V). Also used for D4-430 and D4-440 CPUs.

## Hardware switches

Below is a side view of a D3-340 CPU that shows several types of hardware switches.

The D3-330 has a 2-position dipswitch for selecting retentive memory and jumpers for selecting UVPROM and RAM options.

The D3-340 has a jumper switch for selecting UVPROM, EEPROM and RAM options, two rotary switches to select network addresses and an eight-position dipswitch for selecting baud rates (300 to 38.4K baud), communication mode (slave, master, Modbus RTU) and memory options.



- 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

# CPU Specifications

DL305 CPU Specifications			
System Capacity	D3-330	D3-340	D3-350
Total memory (K words)	3.91	3.98	14.8
Ladder memory (K words)	3.7	3.7	7.6
User data memory	116 bytes	172 bytes	7.1K words
CMOS RAM	Yes	Yes	No
UVPROM	Opt.	Opt.	No
EEPROM	No	Opt.	Flash
Total I/O points using:			
Local I/O	128	136	144
Local and Expansion I/O	176	184	368
Remote I/O <sup>1</sup>	N/A	N/A	512
I/O point density	8/16	8/16	8/16
Slots per base (CPU requires 1 slot)	5/8/10	5/8/10	5/8/10
Performance			
Contact execution (boolean)	6.6µs	87µs	.61µs
Typical scan (1K boolean) <sup>2</sup>	15ms	4-5ms	5-6ms
Programming & Diagnostics			
RLL ladder style	Yes	Yes	Yes
RLL <sup>PLUS</sup> (stage)	No	No	Yes
RunTime Editing	No	No	Yes
Variable/fixed scan	variable	variable	either
Handheld programmer port	Yes	Yes	Yes
Built-in RS232C ports	No <sup>3</sup>	2	2
Real-time clock/calendar	No	No	Yes
Instructions	61	63	129
Control relays(CR)	140	196	1024
Shift register bits	128	128	use CRs
Stages (RLL <sup>PLUS</sup> only)	N/A	N/A	1024
Timers/counters	64	64	256/128
Immediate I/O	No	No	Yes
Subroutines	No	No	Yes
For/Next Loops	No	No	Yes
Timed interrupt	No	No	Yes
Integer math	Yes	Yes	Yes
Floating point math	No	No	Yes
PID	No	No	Yes
Drum sequence	No	No	Yes
Bit of word	No	No	Yes
ASCII print	No	No	Yes
Data registers	128	192	7168
Internal diagnostics	Yes	Yes	Yes
Password security	Yes	Yes	Multi-level
Battery backup	Yes	Yes	Yes
Communications			
Built-in ports <sup>3</sup>	No	Yes	Yes
DirectNET master	No	Yes	Yes
DirectNET slave	w/DCU	Yes	Yes
MODBUS RTU master	No	No	Yes
MODBUS RTU slave	No	Yes	Yes
Data communications unit	Yes	Yes	N/A
Specialty modules			
Thermocouple	Yes	Yes	Yes
Analog Input (#channels max.)	112	128	368
Analog output (#channels max.)	28	32	48
High-speed counter (10KHz)	Yes	Yes	No



1. The D3-350 bottom port supports DL205 remote I/O.
2. 1K program includes contacts, coils, and scan overhead. If you compare to other products, make sure to include their scan overhead.
3. The D3-330 requires a Data Communications Unit (DCU) for programming with DirectSOFT software.

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