



DL205 CPU Specifications

DL205 CPU Comparison				
System Capacity	D2-230	D2-240	D2-250-1	D2-260
Total memory available (words)	2.4K	3.8K	14.8K	30.4
Ladder memory (words)	2048 EEPROM	2560 EEPROM	7680 Flash	15872 Flash
V-memory (words)	256	1024	7168	14592
Battery backup	Yes	Yes	Yes	Yes
Total CPU memory I/O pts. available (actual I/O pts. depend on I/O configuration method selected)	256	896 (320 X + 320 Y + 256 CR)	2048 (512 X + 512 Y + 1024 CR)	8192 (1024 X + 1024 Y + 2048 CR + 2048 GX + 2048 GY)
Local I/O (pts.)	256	256	256	256
Local Expansion I/O (pts.)	none	none	768 (2 exp. bases max) (including local I/O)	1280 (4 exp. bases max.) (including local I/O)
Serial Remote I/O (pts.)	N/A	896 max. (including local I/O)	2048 max. (including local and exp. I/O)	8192 max. (including local & exp. I/O)
Remote I/O channels	N/A	2	8 (7+1 CPU port)	8 (7+1 CPU port)
I/O per remote channel	N/A	2048 (limited to 896)	2048	2048
Ethernet Remote I/O	N/A	Yes	Yes	Yes
Discrete I/O pts.	N/A	896 max. (including local I/O)	2048 max. (including local and exp. I/O)	8192 (including local and exp. I/O)
Analog I/O channels	N/A	Map into V-memory	Map into V-memory	Map into V-memory
Remote I/O channels	N/A	Limited by power budget	Limited by power budget	Limited by power budget
I/O per remote channel	N/A	16,384 (limited to 896)	16,384 (16 fully expanded H4-EBC slaves using V-memory and bit-of-word instructions)	16,384 (16 fully expanded H4-EBC slaves using V-memory and bit-of-word instructions)
Performance				
Contact execution (Boolean)	3.3µs	1.4µs	0.61µs	0.61µs
Typical scan (1K Boolean)	4-6ms	10-12ms	1.9ms	1.9ms
Programming and Diagnostics				
RLL Ladder Style	Yes	Yes	Yes	Yes
RLL ^{PLUS} /Flowchart Style (Stages)	Yes/256	Yes/512	Yes/1024	Yes/1024
Run time editing	Yes	Yes	Yes	Yes
Supports Overrides	No	Yes	Yes	Yes
Variable/fixd scan	Variable	Variable	Variable	Variable
Instructions	113	129	174	231
Control relays	256	256	1024	2048
Timers	64	128	256	256
Counters	64	128	128	256
Immediate I/O	Yes	Yes	Yes	Yes
Subroutines	No	Yes	Yes	Yes
For/Next loops	No	Yes	Yes	Yes
Timed Interrupt	No	Yes	Yes	Yes
Integer Math	Yes	Yes	Yes	Yes
Floating-point Math	No	No	Yes	Yes
Trigonometric functions	No	No	No	Yes
Table Instructions	No	No	No	Yes
PID	No	No	Yes, 4 loops	Yes, 16 loops
Drum Sequencers	No	No	Yes	Yes
Bit of Word	No	No	Yes	Yes
ASCII Print	No	No	Yes	Yes
Real-time clock/calendar	No	Yes	Yes	Yes
Internal diagnostics	Yes	Yes	Yes	Yes
Password security	Yes	Multi-level	Multi-level	Multi-level
System and user error log	No	No	Yes	Yes
Communications				
Built-in ports	Port 1 RS-232	Port 1 RS-232 and Port 2 RS-232	Port 1 RS-232 and Port 2 RS-232/422	Port 1 RS-232 and Port 2 RS-232/422/485)
K-sequence (proprietary protocol)	Yes	Yes	Yes	Yes
DirectNET™	No	Yes	Yes	Yes
Modbus RTU master/slave	No	No	Yes	Yes
ASCII communications	No	No	OUT	IN/OUT
Maximum baud rate	9600	19.2K port 2	38.4K port 2	38.4K port 2