

December 18, 2012

## Do-more v/s Allen Bradley PLC's

### Introduction:

Automation Direct has introduced a new PLC – Do-more which can be used with DL205 bases and modules but with additional abilities and features which will definitely make a programmer's job easier. The Do-more H2 series micro modular CPUs are "superchargers" for the time-tested DL205 hardware. We started with a blank slate and included many features our customers have been asking for. It's superfast, has lots of memory, and embedded Ethernet.



## Features of Do-more:

- Can be used with same DL205 bases and modules
- All documentation on-board
- Includes built-in USB, serial and Ethernet ports
  - Two or three built-in communications ports:
    - RS-232 port - supports programming, K-sequence slave, MODBUS RTU master/slave and ASCII IN/OUT
    - USB port - supports programming
    - Ethernet port (**H2-DM1E**) - supports programming, TCP/IP, UDP/IP and Mod-bus/TCP
- Bump less run-time editing
- Practical counting/pulse as it has 4 independent timer/counter channels
- Supports up to 16 expansion I/O for each Master
- High performance processor
- Free programming software and user manual
- Offers more data and program memory – also no rigid or predefined blocks
  - 192k words total memory
    - 64k words ladder (flash memory)
    - 128k words user data memory (SRAM with battery backup)
- Built-in simulation tool and Ladder programming
- Real time clock/calendar
- Up to 2000 PID Loops
- User defined execution order for the tasks and programs
- Enhanced troubleshooting tools
- Practical high density module and Zip link connections
- Back-up battery included
- Coupon for 30-day free access to online video training included with every CPU module (limited time offer)
- One-year warranty

## Two Do-more CPU modules:

- **H2-DM1** - USB, RS-232 ports
- **H2-DM1E** - USB, RS-232, Ethernet ports



## Below are some Do-more v/s Allen Bradley PLCs comparisons:

1. Pricing is not always a key consideration, but still a factor. Do-more PLCs are less expensive. Rockwell's Allen Bradley least expensive safety PLC, the Compact Guard Logix, is at a higher entry cost.
2. Do-more PLCs have built-in safety/standard communication ports. Rockwell requires additional cards (Ethernet/IP, Device Net.)
3. Do-more does not require a rack or Do-more power supply for the rack, any external 24VDC works. Allen Bradley requires both Allen Bradley Rack and power supply.
4. Rockwell charges for technical support based on the amount of installed hardware. Automation Direct and Quantum Automation provides standard technical support at no charge.

5. Rockwell's development is perceived by some as intuitive and easy to use. Do-more is perceived as extremely capable, but developed more for engineers than for maintenance and support personnel.
6. In case of Allen Bradley the complete Program Download requires much more time and also you cannot download individual routine. In Do-more on the other hand the program download is completed faster.
7. In case of Allen Bradley one need to export the tags in CSV file which is less convenient, but in Do-more you can export tag database easily.
8. Allen Bradley uses 32 bits minimum for creating any Tag, in case we are creating a tag of Boolean, BYTE, INT type we waste the remaining bits of the memory. Do-more utilizes the memory in more efficient manner as it has many different data types for different tags.
9. Drag and drop hardware configuration is less convenient in Allen Bradley. Also the hardware configuration cannot be saved separately in Allen Bradley but these all features are present in Do-more.
10. Only Full Trail Version of Allen Bradley Software with License (14 days) is available as you can't run the software without license. Do-more software can be downloaded for free from Automation Direct website.
11. Allen Bradley PLC Simulation has very limited features. You can't test the real program with simulator. If you need to simulate the program you would need to go through a painful procedure and still you can't test everything. (In other words not fully supportive). But Do-more program can be simulated by selecting an option in the software.
12. No tags and so no tag database in Allen Bradley. Tag database is an Excellent Feature of Do-more.

13. In Do-more what you see is what you get, though it's not necessarily true in Allen Bradley as it do not supports online monitoring of the process.

14. As compared to Allen Bradley, Do-more also has a huge list of instructions and many of them are more efficient and improved. A lot more inbuilt features and functions.

## Conclusion:

The Do-more Series PLC is the next generation programmable controller built on a strong PLC foundation that makes control applications easier to implement.

Do-more uses proven *Direct LOGIC* DL205 hardware for a flexible control platform and introduces a powerful, intuitive set of new programming tools.

This combination of Do-more H2 Series CPUs and the existing line of Automation Direct 205 series I/O modules and base units creates an incredibly powerful micro modular PLC at a fraction of the cost of comparable PLCs and PACs.

Shivani Palia, MSEE  
Applications Engineer  
Quantum Automation  
714-854-0800  
shivani@quantumautomation.com