

ABB EtherNet/IP (Implicit Messaging)

Supported Series: ABB EtherNet/IP (Implicit Messaging)

HMI Setting:

| Parameters | Recommended | Options | Notes |
|--------------------------|--------------------------------------|--|-------|
| PLC type | ABB EtherNet/IP (Implicit Messaging) | | |
| PLC I/F | Ethernet | | |
| Port no. | 44818 | | |
| Assembly instance | Input::101 Output:111 | Input::101~106 Output:111~116 | |
| Mode | Anybus Adapter (IRC5-DSQC669) | Anybus Adapter (IRC5-DSQC669) EIP Adapter (IRC5-DSQC10XX) | |

| | |
|-------------------------|-----|
| Online simulator | YES |
|-------------------------|-----|

Device Address:

| Bit/Word | Device type | Format | Range | Memo |
|----------|-------------|--------|-----------|------|
| B | Input_Bit | DDDdd | 0 ~ 51215 | |
| B | Output_Bit | DDDdd | 0 ~ 51215 | |
| B | Input | DDD | 0 ~ 512 | |
| B | Output | DDD | 0 ~ 512 | |

Application Example:

ABB robot's parameter settings are very flexible; almost all of its functions can be performed through communication with HMI. The below is a list showing how ABB robot's parameters map to HMI function. Contents in this mapping list are all user-defined. This list shows that HMI can directly control the robot to accomplish miscellaneous tasks, while at the same time allowing users to monitor robot status.

| Sample Robot I/O List | | | | | |
|-------------------------------|---------------|----------------|--------|-----|--|
| Parameters | Input Address | Output Address | Format | Bit | HMI Function |
| Start At Main | 0 | | Bool | 1 | Start Button |
| Servo On | 1 | | Bool | 1 | Start Button |
| Product to be Produced | 2-17 | | Word | 16 | Product Selection Button (1~16) |
| Reserved Variable 1 | 18-33 | | Word | 16 | Reserved Variable |
| Coordinate Offset 1 | 34-65 | | Float | 32 | Offset (e.g. -3.734mm) |
| ... | | | | | |
| Task Executing | | 0 | Bool | 1 | Status: In Operation |
| Auto On | | 1 | Bool | 1 | Status: In Auto. Mode |
| Production in Progress #1~#16 | | 2~17 | Word | 16 | Status: Product No. in Production |
| Robot's Reserved Variable 1 | | 18~33 | Word | 16 | Reserved Variable 1 (e.g. Production is OK/NG) |
| Robot's Reserved Variable 2 | | 34~49 | Word | 16 | Reserved Variable 2 (e.g. Extend the time for 217 seconds) |

Wiring Diagram:

Ethernet cable

