



Wisco AI300 Protocol



Analog Input Module

AI300

Supports all 5 basic Modbus functions, details as follows.

| Code | Address | Table Name | Action | Description |
|------|---------|----------------------|--------|-------------------------------|
| 01 | 0xxxx | Read Output Status | Read | Read Digital Output |
| 02 | 1xxxx | Read Input Status | Read | Read Digital Input |
| 04 | 3xxxx | Read Input Registers | Read | Read Analog Input |
| 05 | 0xxxx | Force Single Coil | Write | Write Single Digital Output |
| 15 | 0xxxx | Force Multiple Coil | Write | Write Multiple Digital Output |

Modbus Register Address Table

Function Code 01: Read Output Status

| Register (DEC) | Name | Quantity | Data Type | Description |
|----------------|---------|----------|-----------|---------------------|
| 00001 | DO CH 1 | 1 | Bit | Read Digital Output |
| 00002 | DO CH 2 | 1 | Bit | |
| 00003 | DO CH 3 | 1 | Bit | |
| 00004 | DO CH 4 | 1 | Bit | |
| 00005 | DO CH 5 | 1 | Bit | |
| 00006 | DO CH 6 | 1 | Bit | |
| 00007 | DO CH 7 | 1 | Bit | |
| 00008 | DO CH 8 | 1 | Bit | |

Function Code 02: Read Input Status

| Register (DEC) | Name | Quantity | Data Type | Description |
|----------------|---------|----------|-----------|--------------------|
| 10001 | DI CH 1 | 1 | Bit | Read Digital Input |
| 10002 | DI CH 2 | 1 | Bit | |
| 10003 | DI CH 3 | 1 | Bit | |
| 10004 | DI CH 4 | 1 | Bit | |
| 10005 | DI CH 5 | 1 | Bit | |
| 10006 | DI CH 6 | 1 | Bit | |
| 10007 | DI CH 7 | 1 | Bit | |
| 10008 | DI CH 8 | 1 | Bit | |

Function Code 04: Read Input Register

| Register (DEC) | Name | Quantity | Data Type | Description |
|----------------|--------------------|----------|-----------|--|
| 30001 | AI CH 1 | 2 | FLOAT | Analog Input Value Show in Float Value |
| 30003 | AI CH 2 | 2 | FLOAT | |
| 30005 | AI CH 3 | 2 | FLOAT | |
| 30007 | AI CH 4 | 2 | FLOAT | |
| 30009 | AI CH 5 | 2 | FLOAT | |
| 30011 | AI CH 6 | 2 | FLOAT | |
| 30013 | AI CH 7 | 2 | FLOAT | |
| 30015 | AI CH 8 | 2 | FLOAT | |
| 30017 | AI CH 9 | 2 | FLOAT | |
| 30019 | CNT CH 1 | 2 | FLOAT | Scaled Value of Counter |
| 30021 | CNT CH 2 | 2 | FLOAT | |
| 30023 | CNT CH 3 | 2 | FLOAT | |
| 30025 | CNT CH 4 | 2 | FLOAT | |
| 30027 | CNT CH 5 | 2 | FLOAT | |
| 30029 | CNT CH 6 | 2 | FLOAT | |
| 30031 | CNT CH 7 | 2 | FLOAT | |
| 30033 | CNT CH 8 | 2 | FLOAT | |
| 30035 | DI 1 - DI 8 | 1 | UINT16 | Digital Input Value (LSB = DI 1) |
| 30036 | DO 1 - DO 8 | 1 | UINT16 | Digital Output Value (LSB = DO 1) |
| 30037 | Counter CH 1 | 2 | INT32 | Raw Value of Counter |
| 30039 | Counter CH 2 | 2 | INT32 | |
| 30041 | Counter CH 3 | 2 | INT32 | |
| 30043 | Counter CH 4 | 2 | INT32 | |
| 30045 | Counter CH 5 | 2 | INT32 | |
| 30047 | Counter CH 6 | 2 | INT32 | |
| 30049 | Counter CH 7 | 2 | INT32 | |
| 30051 | Counter CH 8 | 2 | INT32 | |
| 30053 | Ambient Temp. CH 1 | 2 | FLOAT | Ambient Temperature at Analog Input Connector |
| 30055 | Ambient Temp. CH 2 | 2 | FLOAT | |
| 30057 | Ambient Temp. CH 3 | 2 | FLOAT | |
| 30059 | Ambient Temp. CH 4 | 2 | FLOAT | |
| 30061 | Ambient Temp. CH 5 | 2 | FLOAT | |
| 30063 | Ambient Temp. CH 6 | 2 | FLOAT | |
| 30065 | Ambient Temp. CH 7 | 2 | FLOAT | |
| 30067 | Ambient Temp. CH 8 | 2 | FLOAT | |
| 30069 | Ambient Temp. CH 9 | 2 | FLOAT | |

| | | | | |
|-------|---------|---|-------|---|
| 30071 | AI CH 1 | 1 | INT16 | Analog Input Value Show in Integer Value |
| 30072 | AI CH 2 | 1 | INT16 | |
| 30073 | AI CH 3 | 1 | INT16 | |
| 30074 | AI CH 4 | 1 | INT16 | |
| 30075 | AI CH 5 | 1 | INT16 | |
| 30076 | AI CH 6 | 1 | INT16 | |
| 30077 | AI CH 7 | 1 | INT16 | |
| 30078 | AI CH 8 | 1 | INT16 | |
| 30079 | AI CH 9 | 1 | INT16 | |

The remaining details on Modbus can be found in the 'Modbus Reference Guide' or at <http://www.modbus.org/specs.php>

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