Address Mapping

Address	Description	Attribute
30001 ~ 30002	Analog input value of channel 0 to 1	R
30097	Counter value of digital input	R
40033	Output value of excitation voltage in mV, 0 ~ 10000	R/W
40193	Power on value of excitation voltage in mV, 0 ~ 10000	R/W
40161	Low source value for linear mapping	R/W
40162	High source value for linear mapping	R/W
40163	Low target value for linear mapping	R/W
40164	High target value for linear mapping	R/W
40225	Low limit of alarm value	R/W
40226	High limit of alarm value	R/W
40481	Firmware version (low word)	R
40482	Firmware version (high word)	R
40483	Module name (low word)	R
40484	Module name (high word)	R
40485	Module address, valid range: 1 ~ 247	R/W
40486	Bits 5:0 Baud rate, valid range: 3 ~ 10 Bits 7:6 00: no parity, 1 stop bit 10: even parity, 1 stop bit 11: odd parity , 1 stop bit	R/W
40487	Type code, 0 ~ 6	R/W
40488	Modbus response delay time in ms, valid range: 0 ~ 30	R/W
40489	Host watchdog timeout value, 0 ~ 255, in 0.1s	R/W
40490	Channel mode, 0: channel 0, 1: channel 1, 2: 2-channel mode	R/W

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40492	Host watchdog timeout count, write 0 to clear	R/W
40495	LED mode, 1: controlled by module, 2: controlled by host (for M-7016D only)	R/W
40496	LED data for host control mode, valid range: -19999 ~ +19999 (for M-7016D only)	W
40498	Moving average count, 1 ~ 255 (for firmware version B108 and later)	R/W
10001	Digital input value of channel 0	R
00033 ~ 00036	Digital output value of channel 0 ~ 3	R/W
00097 ~ 00100	Safe value of digital output channel 0 ~ 3	R/W
00193 ~ 00196	Power on value of digital output channel 0 ~ 3	R/W
00257	Protocol selection, 0: DCON, 1: Modbus	R/W
00259	Filter setting, 0: 60Hz rejection, 1: 50Hz rejection	R/W
00260	Modbus host watchdog mode 0: same as I-7000 1: can use AO and DO command to clear host watchdog timeout status	R/W
00261	1: enable, 0: disable host watchdog	R/W
00262	1: enable, 0: disable alarm	R/W
00263	Alarm type, 0: momentary, 1: latched	R/W
00264	Write 1 to clear latched alarm	W
00265	1: enable, 0: disable linear mapping	R/W
00266	Write 1 to clear counter	W
00269	Modbus data format, 0: hex, 1: engineering	R/W
00270	Host watch dog timeout status, write 1 to clear host watch dog timeout status	R/W
00273	Reset status, 1: first read after powered on, 0: not the first read after powered on	R

For address 300xx you can use Modbus function 3 and 4 to read. For address 100xx you can use Modbus function 1 and 2 to read.

Following is the engineering data format table for Modbus protocol. For the hex data format, please refer to Section 1.9 of the user's manual.

Type code	Input type	min	max
00	+/-15mV	-15000	15000
01	+/-50mV	-5000	5000
02	+/-100mV	-10000	10000
03	+/-500mV	-5000	5000
04	+/-1V	-10000	10000
05	+/-2.5V	-25000	25000
06	+/-20mA	-20000	20000

Host Watchdog

For Modbus protocol, when the host watchdog is enabled, every valid command can clear the host watchdog timer. Read from the register 12345 of address 0 can also clear the host watchdog timer.

Linear Mapping

For Modbus protocol, when linear mapping is enabled, the analog input values are calculated using the values of engineering format. If the value is less than the low source value, then the result is –32768. If the value is larger than the high source value, then the result is 32767. All of the high/low source/target values should be in the range –32768 ~ 32767.

Alarm Mode

For Modbus protocol, when linear mapping is enabled, the alarm limits are compared with the result of linear mapping. Otherwise, they are compared with the value of engineering format.

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Notes:

1. This release note is valid only for the M-7016/16D module.
2. The terminal assignment and the wiring are the same as those of the I-7016/16D.
3. The user's manual and the software utility can be downloaded from the ICP DAS web site http://www.icpdas.com.

Technical Service:

- Email problem report to service@icpdas.com if you have any questions.

Problem Report Items:

When reporting problems, please include the following information:

1) Is the problem reproducible? If yes, how to reproduce?
2) What kind and version of platform you are using?
   For example, Windows 98 SE, Windows ME, Windows XP Professional, etc.
3) What kind of our products that you are using?
   Please see the product's manual .
4) If a dialog box with an error message was displayed, please include the full text of the dialog box, including the text in the title bar.
5) If the problem involves other programs or hardware devices, what devices or version of the failing programs that you are using?
6) Other comments relative to this problem or any suggestions will be welcome.

After we have received your comments, we will take about two business days to test the problems that you described. And then reply to you as soon as possible. Please resend the problem report if you do not get response from us in three days and please keep contact with us.