

M-7080 Module Release Note

The functionality of the M-7080 is the same as the I-7080. The M-7080 supports both the DCON and Modbus RTU protocols. Only one protocol is supported at a time and the default protocol is the Modbus RTU.

Default Settings

Default settings for M-7080 are:

- ☐ Protocol: Modbus RTU
- ☐ Module Address: 01
- ☐ Baud Rate: 9600 bps
- ☐ Type Code: 50, counter input

INIT Mode

When the module is powered on with the INIT terminal connected to the GND terminal, the module is in INIT mode and the settings are:

- ☐ Protocol: DCON
- ☐ Module Address: 00
- ☐ Baud Rate: 9600 bps
- ☐ No checksum

Address Mapping

Address	Description	Attribute
40001	Counter/frequency value of channel 0 (low word)	R
40002	Counter/frequency value of channel 0 (high word)	R
40003	Counter/frequency value of channel 1 (low word)	R
40004	Counter/frequency value of channel 1 (high word)	R

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Address	Description	Attribute
40065	Max. value of counter 0 (low word)	R/W
40066	Max. value of counter 0 (high word)	R/W
40067	Max. value of counter 1 (low word)	R/W
40068	Max. value of counter 1 (high word)	R/W
40097	Preset value of counter 0 (low word)	R/W
40098	Preset value of counter 0 (high word)	R/W
40099	Preset value of counter 1 (low word)	R/W
40100	Preset value of counter 1 (high word)	R/W
40161	Low level width threshold in us	R/W
40162	High level width threshold in us	R/W
40163	Low voltage trigger value in 0.1V	R/W
40164	High voltage trigger value in 0.1V	R/W
00001	DO 0	R/W
00002	DO 1	R/W
00065	Overflow flag of counter 0	R
00066	Overflow flag of counter 1	R
00129	Input mode of channel 0, 0:non-isolated, 1:isolated	R/W
00130	Input mode of channel 1, 0:non-isolated, 1:isolated	R/W
00131	0: gate is low active, 1: gate is high active, when gate control is enabled	R/W
00132	Gate control, 0: enable, 1:disable	R/W
00133	Set counter 0 to preset value	W
00134	Set counter 1 to preset value	W
00135	Start(1)/Stop(0) counter 0	R/W
00136	Start(1)/Stop(0) counter 1	R/W
00139	Enable(1)/disable(0) digital filter	R/W
00142	Frequency gate time, 0:0.1second, 1:1.0second	R/W
00143	LED configuration, 0:ch0, 1: ch1	R/W

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Address	Description	Attribute
00145 ^{*1}	Counter mode of channel 0, 1: stop counting on overflow, 0: continuous	R/W
00146 ^{*1}	Counter mode of channel 1, 1: stop counting on overflow, 0: continuous	R/W

*1: only available with firmware version 0A24 and later. In continuous counting mode, the maximum value is ignored. When the count reaches FFFFFFFFh, it restarts from 0 and the overflow flag is set. In this mode, the overflow flag can be cleared by writing zero to the overflow flag register. The default mode is stop counting on overflow.

For other Modbus commands please refer to Chapter 3 of the M-7018 user manual at <https://www.icpdas.com/en/download/file.php?num=6339>

Section	Description
3.3.1	Read the module name
3.3.2	Set the module address
3.3.3	Read the communication settings
3.3.4	Set the communication settings
3.3.5	Read the type code
3.3.6	Set the type code
3.3.7	Read the firmware version

The type code definition is the same as that of the I-7080. Please refer to section 1.9 of the I-7080 user manual at <https://www.icpdas.com/en/download/file.php?num=6444>

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Notes:

1. This release note is valid only for the M-7080 module.
2. The terminal assignment and the wiring are the same as those of the I-7080.
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.