I-7540D Series FAQ

Q1、How do I configure the Ethernet parameters, COM parameters and CAN bus parameters of I-7540D ? (2011/1/5,Bear) 2
Q2、How does these two parameter, Acceptance Code and Acceptance Mask, work in I-7540D? (2011/1/5,Bear) 2
Q3、How to send/receive CAN messages to/from I-7540D ? (2011/1/5,Bear) 2
Q4、How to configure I-7540D through TCP/IP protocol? (2011/1/5,Bear) 3
Q5、How do I know the I-7540D works correctly ? (2011/1/5,Bear) 3
Q6、How to update the firmware of I-7540D ? (2011/1/5,Bear) 3
Q7、Does I-7540D support VxComm technology? (2011/1/5,Bear) 3
Q8: How to set up the module to the default settings?? (2011/02/08, Andy) 4
Q9: I've got a problem with i-7540-D. I can\'t set the DHCP listening function to 0. Even if i reset the system with MiniOS7, it's always set to 1. (2011/02/08, Andy) 5
Q10: After power down and up, module has changed its IP addr itself to the 72.30.7.0. It is possible to ping it but no way to connect via I-7540 utlility.(2011/02/08,Andy) 6
Q11: How many time passed when a message sent by the computer to I7540-D Ethernet port is present in the CAN bus? (2011/02/08, Andy) 8
Q12: We would like to get a 'copy' of the CAN bus traffic sent to the Linux machine through the TCP/IP connection. Do we need the OS7 miniOS, how do we configure the port number, etc?(2011/02/08,Andy) 8
Q13: Can I connect 3 CAN Devices into one Ethernet Network using 3 I-7540D? One of them is configured as TCP/IP Server, the 2 others as TCP/IP Client, directed to the server?(2012/04/02,Andy) 9
Q14: When CAN bus off, the CAN bus of I-7540D does not recover by itself (2013/12/10,Alan) 9
Q15: When I-7540D sent CAN messages with 10Kbps CAN baud rate via using “polling send”, the module reboots continually (2013/12/10,Alan). 9
Q16: Can the higher priority CAN ID be sent first after the I-7540D received (2014/12/16, Alan)? 10
Q17: How to develop the application program of the I-7540D (2014/12/16, Alan)? 10
Q18. Does the I-7540D provide Labview driver? (2016/12/15, Alan) 10
Q19. Does the I-7540D support RP-1210? (2016/12/15, Alan) 10

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Q1、How do I configure the Ethernet parameters, COM parameters and CAN bus parameters of I-7540D ? (2011/1/5,Bear)

A：After installing the I-7540D Utility tools, users can use the “Settings” tag of Utility tool. Users can set and modify the Ethernet, CAN and COM parameters on this page of Utility. For more information, please refer to the section 3.1.2 of the I-7540D user’s manual.
(2011/1/5,Bear)

Q2、How does these two parameter, Acceptance Code and Acceptance Mask, work in I-7540D? (2011/1/5,Bear)

A：Acceptance Code and Acceptance Mask are the functions of CAN hardware filter of I-7540D. Users can use these two parameters to filter those unnecessary CAN messages. By setting Acceptance Code, users can set the CAN ID they wan to get. Setting Acceptance Mask can filter the unnecessary CAN ID. Please refer to the section 3.1.3 of the I-7540D user manual for more information.
(2011/1/5,Bear)

Q3、How to send/receive CAN messages to/from I-7540D ? (2011/1/5,Bear)

A：After connecting with I-7540D through Ethernet port 10003, users can send specific command strings to I-7540D. I-7540D will convert these strings to CAN messages and send these messages to CAN bus. If there are some CAN messages received by I-7540D, it will convert these CAN messages to specific command strings and send these command strings to the socket of client.
About the definitions of the specific command strings, please refer to the section 4 of the I-7540D user manual.
(2011/1/5,Bear)

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Q4、How to configure I-7540D through TCP/IP protocol? (2011/1/5,Bear)

A：I-7540D uses Ethernet port 10000 to do the configuration. Therefore, users can send specific command strings to configure I-7540D by this special port. About the definitions of the specific command strings, please refer to the section 4 of the I-7540D user manual.
(2011/1/5,Bear)

Q5、How do I know the I-7540D works correctly ? (2011/1/5,Bear)

A：(1) Users can judge the status of I-7540D by the ER LED and 7-segment LEDs.

(2) By the way of sending command string “99S” through Ethernet port 10000 to I-7540D, users can get a message includes the CAN Baud, CAN status, buffer status, and transmission/reception error counters of I-7540D.

Please refer to the section 2.4 of the I-7540D user manual for the LED meanings, and the section 4.5 for the command strings of I-7540D.
(2011/1/5,Bear)

Q6、How to update the firmware of I-7540D ? (2011/1/5,Bear)

A：After finishing the I-7540D Utility installation, users can see the update_steps.txt in the root I7540D\firmware. This file will show how to update I-7540D firmware step by step. Or users can get the update information file by visiting the following web site.
ftp://ftp.icpdas.com/pub/cd/can_cd/can/converter/i-7540d/firmware/update_steps.txt
(2011/1/5,Bear)

Q7、Does I-7540D support VxComm technology? (2011/1/5,Bear)

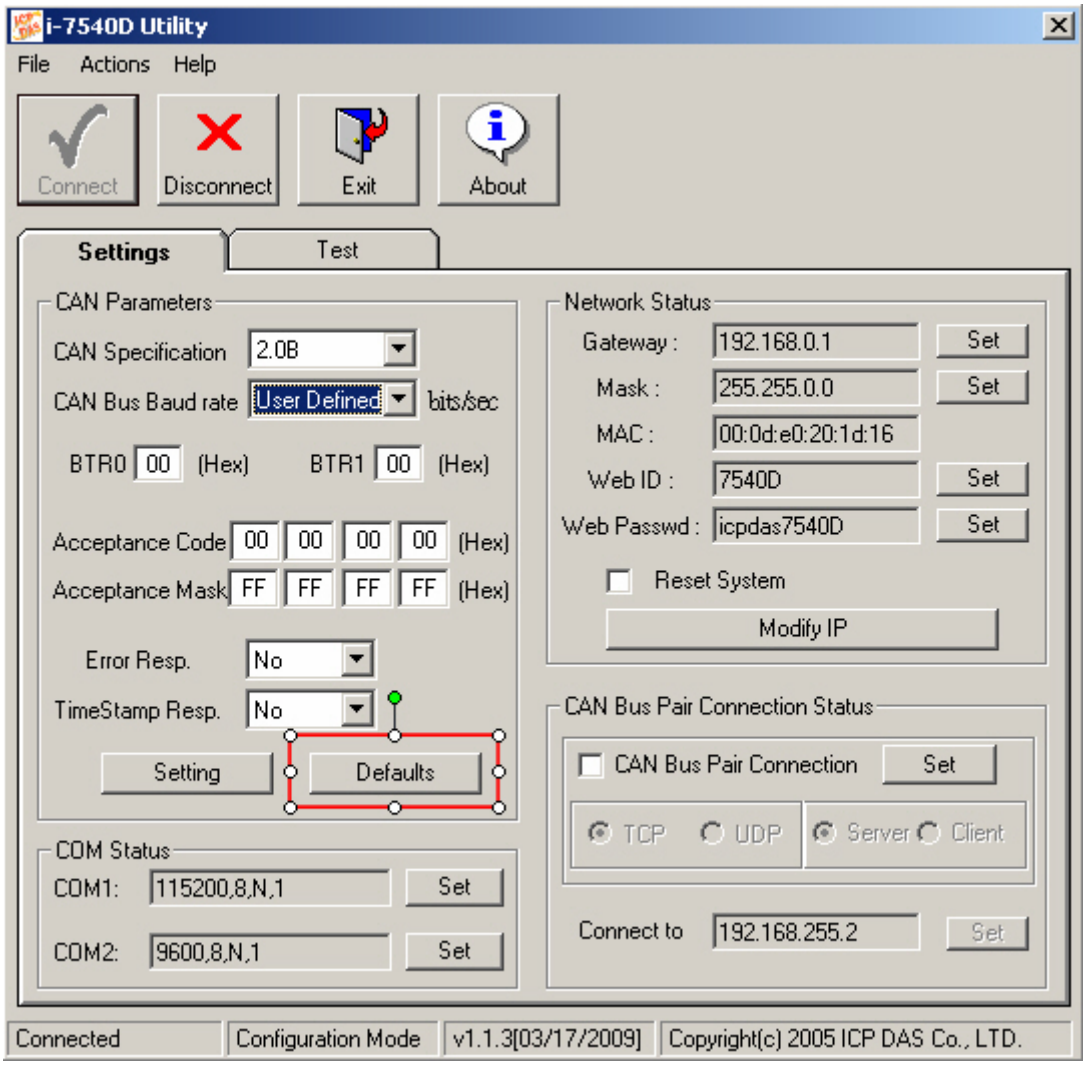
A：Yes. I-7540D is similar to 7188E/8000E. Users can set the RS-232/RS-485/CAN ports of I-7540D to be the PC’s virtual COM ports by using VxComm Utility.
(2011/1/5,Bear)

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Q8: How to set up the module to the default settings?? (2011/02/08, Andy)

A:

There supports a default button on the Utility tool for user to set the default value. After connecting with I-7540D, user can use it to set the CAN parameters to default value.



(2011/02/08,Andy)

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Q9: I've got a problem with i-7540-D. I can\'t set the DHCP listening function to 0. Even if i reset the system with MiniOS7, it's always set to 1. (2011/02/08, Andy)

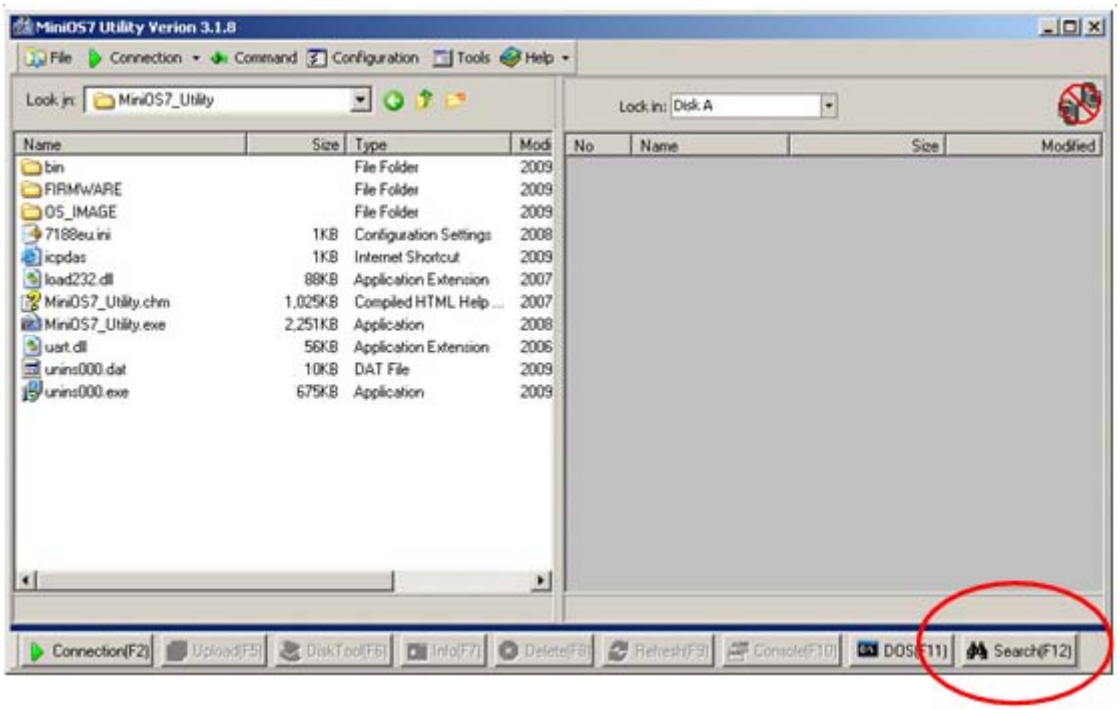
A:

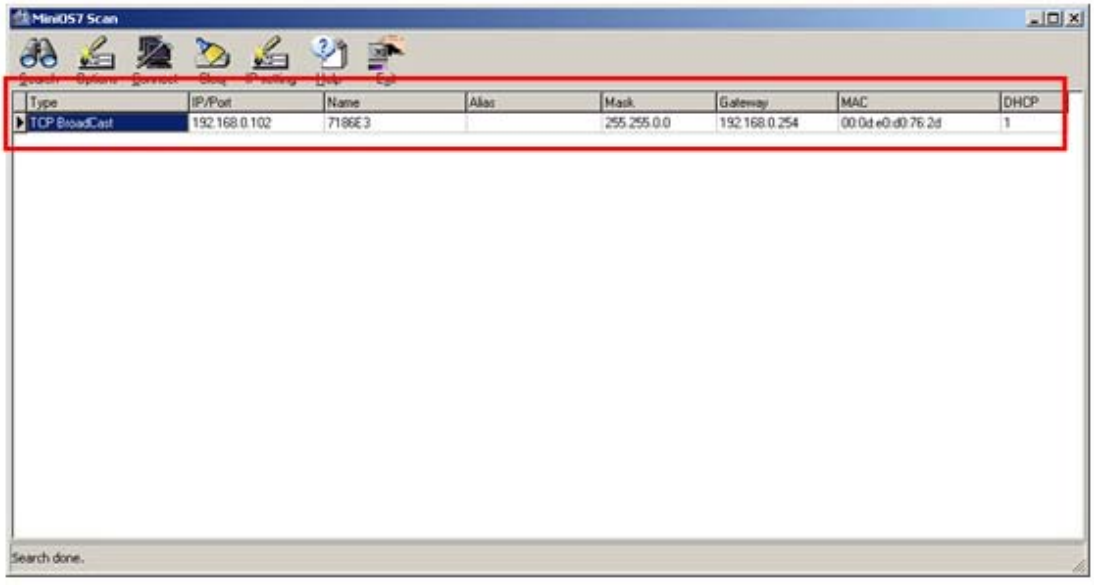
Please refer to the following steps to modify the DHCP setting of the module.

Step1: Connect PC with the I-7540D via network cable and execute the MiniOS7 Utility tool. Then press the "F12" button to start to search the I-7540D.

You can download the Utility tool from

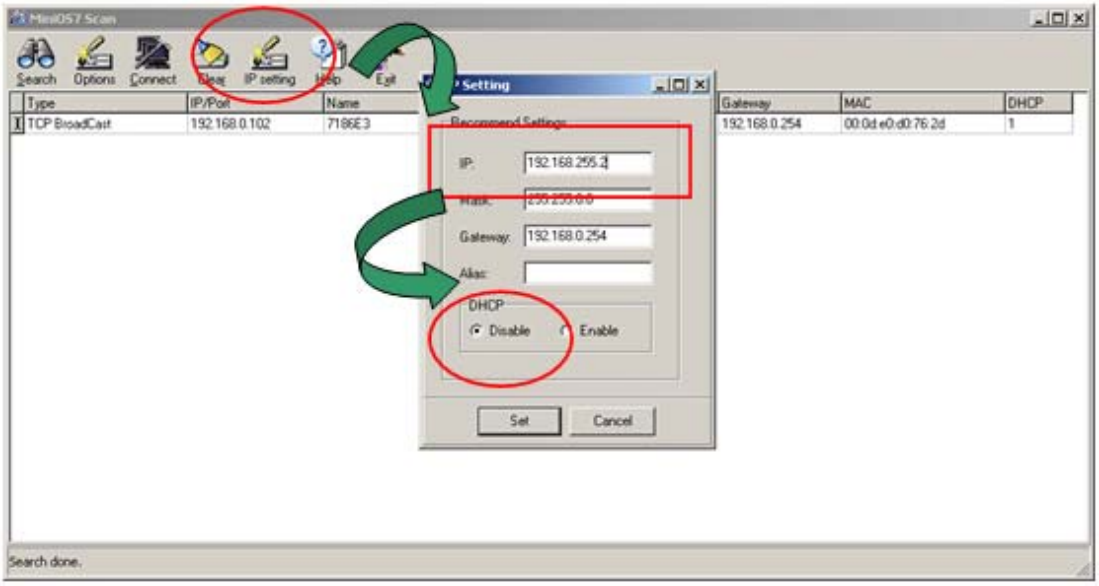
ftp://ftp.icpdas.com/pub/cd/8000cd/napdos/minios7/utility/minios7_utility/





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Step2: Then press the "IP setting" button to modify to IP and DHCP function of the I-7540D



Step4: After modify to IP and DHCP function of the I-7540D, it will reboot automatically. And the DHCP function of the I-7540D will be disabled.
(2011/02/08,Andy)

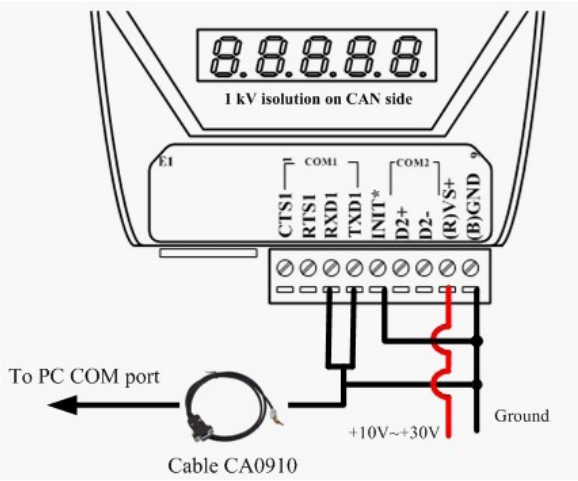
Q10: After power down and up, module has changed its IP addr itself to the 72.30.7.0. It is possible to ping it but no way to connect via I-7540 utlility.(2011/02/08,Andy)

A:
The data store in the I-7540D's EEPROM might be error and cause the Utility tool can't not connect with it. Please refer to the following steps to fix it.

Step1: Set the jump of the I-7540D on the back plane to Init mode. Then reboot the module.

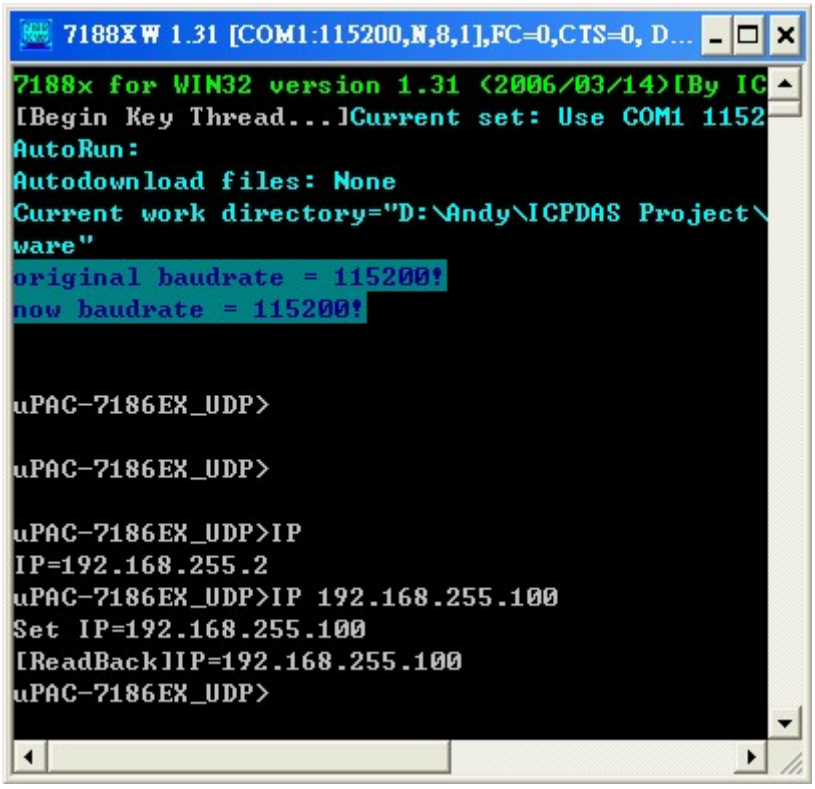
Step2: Connect the PC's RS-232 port with the I-7540D's COM1.

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Step3: Execute the 7188xw.exe file on the firmware directory. Then press “Enter” button to make sure there is a “uPAC-7186EX_UDP” response message came from the I-7540D.

Sep4: Press "ip"+Enter to readback the IP setting of it, and "ip 192.168.xxx.xxx" to modify to ip to "192.168.xxx.xxx".
Same as "mask" and "gateway" command.



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Step5: After setting the IP/Gatweway/Mask of it, please set the jump of the I-7540D on the back plane to Normal mode and reboot the module.
(2011/02/08,Andy)

Q11: How many time passed when a message sent by the computer to I7540-D Ethernet port is present in the CAN bus? (2011/02/08, Andy)

A:
The time of receiving a message from ethernet port and present it to CAN bus is about 1.5 ms to 3.5 ms.
(2011/02/08,Andy)

Q12: We would like to get a 'copy' of the CAN bus traffic sent to the Linux machine through the TCP/IP connection. Do we need the OS7 miniOS, how do we configure the port number, etc?(2011/02/08,Andy)

A:
The I-7540D acts as a TCP server.
It maps three TCP/IP ports for the communication of RS-232/485/CAN port.
port 10000 => used for I-7540D parameters configuration
port 10001 => used for RS-232 communication
port 10002 => used for RS-485 communication
port 10003 => used for CAN bus communication

Linux Machine <=> Ethernet TCP/IP port 10003 <=> I-7540D <=> CAN bus

Via sending the command string that the I-7540D supported to the Ethernet port 10003 of the I-7540D, it will process the string and send it to the CAN bus.
And receiving a CAN message, the I-7540D will process and convert the CAN message to ASCII command string. Then it will send the ASCII command string to the client site (Linux machine). The ASCII command strings that I-7540D supported are listed in section 4 of its user manual.
About the user's manual, user can download it from

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ftp://ftp.icpdas.com/pub/cd/fieldbus_cd/can/converter/i-7540d/manual/i7540dmanual.pdf
http://ftp.icpdas.com/pub/cd/fieldbus_cd/can/converter/i-7540d/manual/i7540dmanual.pdf
(2011/02/08,Andy)

Q13: Can I connect 3 CAN Devices into one Ethernet Network using 3 I-7540D? One of them is configured as TCP/IP Server, the 2 others as TCP/IP Client, directed to the server?(2012/04/02,Andy)

A :
This application is working. The CAN messages on the server will be sent to the other two clients. And the CAN messages on these two clients will be sent to the server.
But

a. The CAN messages on the two clients will not exchange with each other.

b. We can not guarantee that the performance of the server is the same as the method of one to one. If there are too many CAN messages sent to the server's CAN side, data may be lost.

(2012/04/02, Andy)

Q14: When CAN bus off, the CAN bus of I-7540D does not recover by itself (2013/12/10,Alan).

A:
Firmware v1.18 or later supports this function.
(2013/12/10, Alan)

Q15: When I-7540D sent CAN messages with 10Kbps CAN baud rate via using “polling send”, the module reboots continually (2013/12/10,Alan).

A:
Using “polling send” to transmit CAN messages, the firmware of I-7540D will wait for CAN status (transmitting completely), and it spends more time to make WDT reset. This problem has been fixed in the new firmware version (version 1.18).

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(2013/12/10, Alan)

Q16: Can the higher priority CAN ID be sent first after the I-7540D received (2014/12/16, Alan)?

A:

No. I-7540D has software buffers.

After it gets the commands from Ethernet, it will transmit CAN message by FIFO method, and vice versa

(2014/12/16, Alan)

Q17: How to develop the application program of the I-7540D (2014/12/16, Alan)?

A:

There are three methods to develop the application program of the I-7540D.

(1) I-7540D supports OPC function. Thus, it is suit for developing general application such as Indusoft.

(2) I-7540D supports virtual CAN technique. By virtual driver, it can help users to develop Windows platform programs easily and quickly.

(3) I-7540D supports VxComm technique. The users can develop Ethernet socket programs by this technique.

(2014/12/16, Alan)

Q18. Does the I-7540D provide Labview driver? (2016/12/15, Alan)

A: The I-7540D does not provide Labview driver.

If the user would like to use the module via Labview, he could use the TCP socket port 10003.

(2016/12/15, Alan)

Q19. Does the I-7540D support RP-1210? (2016/12/15, Alan)

A：The RP-1210 is a standard API for controlling CAN and SAE J1939 network.

The I-7540D does not support the API.

(2016/12/15, Alan)

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