GW-7433D FAQ

Q1. How to modify the GW-7433D IP?2
Q2. How to update the GW-7433D firmware?4
Q3. Why the GW-7433D can't send any CAN message after setting by GW-7433D Utility?
(the wire connection and baud rate setting are correctly)
Q4. Why the GW-7433D often appear error code 47 after some time and then the GW-7433D
can't receive the CANopen slave data?7
Q5. How SDO communication is initiated on CAN side? Does it send command when a
Modbus TCP command register is updated or on any flag or data change event?7
Q6. Does the gateway support storage of received PDOs in order to capture them? How much
is buffer size & how it informs the Modbus TCP master about availability of updated data in
the buffer?
Q7. GW-7433D will start to communication with CANopen devices after boot. Because some
CANopen devices on our network need more time to ready, and it may cause some unknown
issue. Is there any function can start/stop the communication of GW-7433D?8
Q8. When I set the GW-7433D from "Normal Mode" to "Listen Only". I see proper activity
on the indicators however all Modbus addresses freeze in the last state. Is the "Listen
Only" working correctly?
Q9. Why the CANopen slave often appears "Buffer Overflow" error after boot-up with
GW-7433D?



Q1. How to modify the GW-7433D IP?

A:

(1) Checking the IP address of the user's GW-7433D.



(2) Setting the IP and Mask address of the user's PC.



(3) Running the GW-7433D Utility, and then connecting the GW-7433D module as below.





(4) Modify the GW-7433D IP and Mask address by the GW-74433D Utility, and then pushing the "Save" button to configure the new parameters into the GW-7433D module, as below.

ct Save Export Import Mapping Test About GW-7433D CANopen Device 1 Normal Setting Modbus Station ID 1 (1 ~ 255) CANopen Device Amount 1 CANopen Device Amount 1 CANopen Baud Rate (kbps) 125 Save button CAN Message Interval (ms) 2 (1 ~ 127) Boot Up Delay (s) 0 (0 ~ 127) Length Max : 500 m (1640 ft) Advance Setting Ethernet Data Type Modbus RTU IP 192 168 20 Mask 255 255 0 0 Gateway 192 168 255 1 Socket Timeout 86400000 ms 1 1	📌 GW-7433D Utility	
GW-7433D CANopen Device 1 Save button Save button Image: Construction of the structure of the	ct Save Export Imp	port Mapping Test About
	GW-7433D CANopen Device 1 Save button Modify GW-7433D IP address to new one	Normal SettingModbus Station ID1(1 ~ 255)CANopen Device Amount1CANopen Baud Rate (kbps)125CAN Message Interval (ms)2CAN Message Interval (ms)2Boot Up Delay (s)0Length Max : 500 m (1640 ft)Advance SettingEthernetData TypeModbus RTUIP1921680Q0Gateway1921682551Socket Timeout86400000ms

(5) The GW-7433D module will automatically reboot after finish the Step 4, then the user can watch the 7-LED display which will display the new IP address, as below.



(2013/12/06, Ming Update)



ICP DAS Co., LTD

Q2. How to update the GW-7433D firmware?

A:

The steps as follows:

Connecting the COM1 of GW-7433D module to computer's COM1 by CA0910F cable and link the INT* pin to the GND, as follows.



- (2) Download the new firmware, executing 7188xw.exe, and turn on the GW-7433D. (<u>http://ftp.icpdas.com/pub/cd/fieldbus_cd/canopen/gateway/gw-7433d/firmware/</u>)
- (3) Pushing the Enter of computer's keyboard, and then the 7188XW will be showed as follows.





- (4) Pushing the F4 of computer's keyboard, and then the GW-7433D firmware will be reloaded automatically.
- (5) When the GW-7433D firmware is loaded successfully, then removes the wire of the INT* pin and reboot the GW-7433D.
- (6) Executing GW-7433D utility to check if the new firmware is updated successfully.

🗬 G W-7433D Utility	- Firmware Ve	rsion 20806			
Connect Save	Export Im	port Mapping	Test	About	
GW-7433D CANopen D	evice 1	Normal Setting Modbus Station ID CANopen Device A	1 Amount	(1 ~ 255)	•

(2013/12/06, Ming update)



Q3. Why the GW-7433D can't send any CAN message after setting by GW-7433D Utility? (the wire connection and baud rate setting are correctly)

A:

Please use GW-7433D Utility to connect to the GW-7433D and then select the "Test" form:

(1) Check if the "CAN bus Listen Mode" is checked. If yes, it means that the GW-7433D is in listen mode and it would not send any CAN message. Uncheck the "Listen Mode for CANopen data" check box at Main form-->Advance Setting-->Data Type could disable the listen mode function.

🗬 G W-7433D Utility	
Connect Save Export	Import Mapping Test About
GW-7433D	Normal Setting Modbus Station ID 1 (1 ~ 255) CANopen Device Amount 1 Image: Canada and the state of the st

- (2) Check the error code of "GW-7433D Error State". If it is 50, it means that the GW-7433D initialized error. Be sure that the utility and firmware is the least version. If yes and the problem is still appear after setting by GW-7433D utility, please contact to your sales.
- (3) Check the error code of "GW-7433D Error State". If it is 49, it means that the GW-7433D is bus off. Please remove the CAN connect from GW-7433D and try again. If the error code becomes to 47 or 48, please check that if there is other CAN device's problem to let the GW-7433D running error. Or if the GW-7433D is still



getting error code 50, please contact to your sales.

(2013/12/06, Ming)

Q4. Why the GW-7433D often appear error code 47 after some time and then the GW-7433D can't receive the CANopen slave data?

A:

Please check if the "Guarding Time" or "Heartbeat Time" timer setting is too short. Or you can increase the "CAN Message Interval" timer setting to reduce the CAN bus loading to provide this error.

(2013/12/06, Ming)

Q5. How SDO communication is initiated on CAN side? Does it send command when a Modbus TCP command register is updated or on any flag or data change event?

A:

For SDO Read (TxSDO):

The GW-7433D will auto polling the TxSDO of slaves and update data to Modbus side.

For SDO Write (RxSDO):

The GW-7433D will send a SDO write command to a CAN slave when Modbus Master send a related write command to the GW-7433D.

(2012/12/25, Ming)

Q6. Does the gateway support storage of received PDOs in order to capture them? How much is buffer size & how it informs the Modbus TCP master about availability of updated data in the buffer?

A:

GW-7433D has no any buffer, every CAN data or Modbus data will be updated directly. On the other hand, every time you get from the GW-7433D is the newest data. Because GW-7433D is a Modbus TCP server (or RTU slave), it would not inform Modbus Master actively. It could only wait to the message send by Modbus master.

(2012/12/25, Ming)



ICP DAS Co., LTD

Q7. GW-7433D will start to communication with CANopen devices after boot. Because some CANopen devices on our network need more time to ready, and it may cause some unknown issue. Is there any function can start/stop the communication of GW-7433D?

A:

There are two ways to do this:

(1) Boot Up Delay:

You can set the parameter (at Utility Normal Setting) to let GW-7433D delay boot.

Ex: Assume the CANopen device need 10 seconds to ready after power on, you can set the "Boot Up Delay" to 10 (s). When you boot your system include GW-7433D, it will start to work after 10 seconds.

(2) Use Listen Mode first:

You can set GW-7433D to "Listen Mode" first (at Utility Advance Setting -- Data Type). And then set GW-7433D to normal mode through Modbus command after the CANopen device is ready. (About the Modbus address of "Listen Mode", please refer to utility Mapping table -- AO Mapping.)

(2012/12/25, Ming)

Q8. When I set the GW-7433D from "Normal Mode" to "Listen Only". I see proper activity on the indicators however all Modbus addresses freeze in the last state. Is the "Listen Only" working correctly?

A:

As the word "Listen Only" is just listening the CANopen bus data but not sends any command to output/request data. So if there is no other CANopen Master polling the CANopen device or the CANopen device doesn't send CAN data automatically, the "Listen Only" GW-7433D will not receive any data to update the Modbus buffer data.

Ex: User can set all the TxPDO data of the CANopen device in "Event Timer" mode. Then these TxPDO data will be send per "time" milliseconds automatically. And the "Listen Only" GW-7433D will can update it's modbus buffer immediately.

(2012/12/25, Ming)



ICP DAS Co., LTD

Q9. Why the CANopen slave often appears "Buffer Overflow" error after boot-up with GW-7433D?

A:

Maybe the boot-up speed of the CANopen slave is slower than GW-7433D. GW-7433D will communicate with slave after boot-up completely. But if the slave is still in startup, the data buffer of the slave may be filling the CAN messages by GW-7433D and the buffer overflow error will occur. You can use the Boot Up Delay's ting to delay the GW-7433D boot-up.

🕫 G W-7433D Utility	
Connect Save Export	Import Mapping Test About
GW-7433D	Normal Setting Modbus Station ID 1 (1 ~ 255) CANopen Device Amount 1 Image: Canada and the state st

(2013/12/06,Ming)

