

How to use Excel file Modbus Memmap of Co-ordinator

FEB-2022

1. Introduce

When we add a sensor to the Co-ordinator WS433-CL or iConnector integrated Co-ordinator, the added sensor will be in the corresponding Modbus area in the Co-ordinator. The sensor's Modbus area can be monitored with our excel file. You can then read the data from the respective Modbus addresses using the PLC,HMI,... or use our Modbus Configuration Tool to view the values from the sensor.

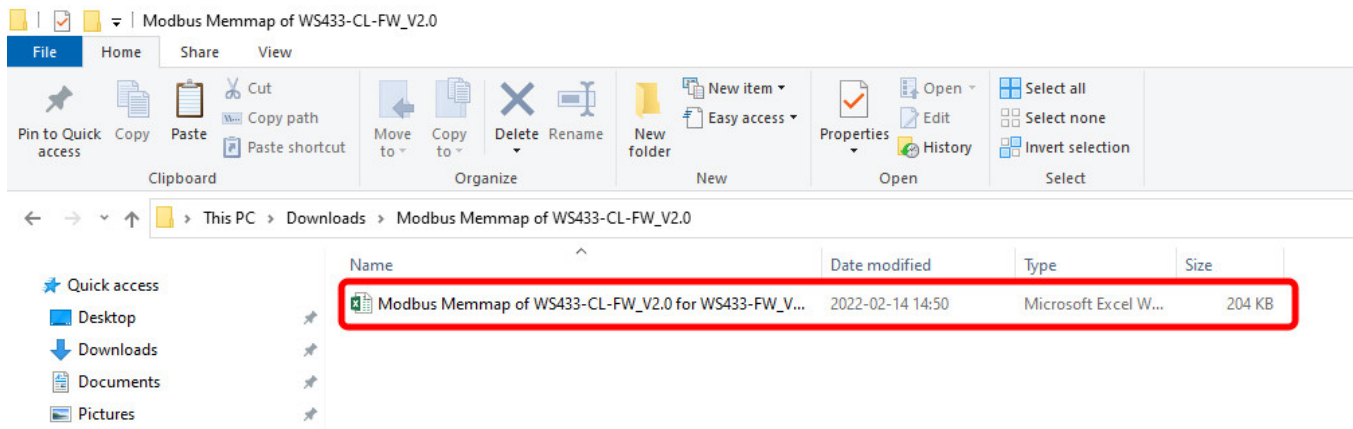
1.1 Download Excel file

Download the Modbus Memmap Excel file in the link below:

<https://filerun.daviteq.com/wl/?id=BKEaUzdArkoc0Hc7nfpRShdPVTovrQqQZ>

1.2 Excel file

After **unzip** file, open the excel file (**Modbus Memmap of WS433-CL-FW_Vxx**)



MODBUS MEMORY MAP FOR WIRELESS HUMIDITY SENSOR WS433-M12F WITH ATH

Please enter Sensor Node's ID (1 .. 40):

3

to get the correct address of registers in column (1)

* A standard register in Modbus is a WORD (2 bytes, comprise Hi-Byte and Lo-Byte)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
	Modbus Register	Modbus Register (Decimal)	Modbus Register (HEX)	Function Code (Read)	Function Code (Write)	# of register	Byte Size	Description	Value Range	Default	Format	Property	Explanation	Remarks
OPERATION DATA * This operation data will be sent to Co-ordinator in every Cycle_wakeup and/or Cycle_healthsta	30065	64	40	4	1	2	2	%Battery of sensor Node	10.30,60,93		uint16	Read	Battery level, only 04 levels: 10%, 30%, 60% and 93% (full). When 10% ==> should replace the battery	
	30066	65	41	4	2	4	4	Humidity value of sensor Node (parameter 1)	0..100%		float	Read	Value from humidity sensor. This value is parameter 1 of a wireless sensor node	
	30068	67	43	4	1	2	2	Status bytes of sensor Node			uint16	Read	Hi-Byte is error code, Lo-Byte is sensor type	
	30069	68	44	4	2	4	4	Temperature value of sensor Node (parameter 2)			float	Read	Value from humidity sensor. This value is parameter 2 of a wireless sensor node	for sensor with V5.x
	30071	70	46	4	1	2	2	Logic status of parameters			uint16	Read	Hi-Byte is Logic status of parameter 1, Lo-Byte is Logic status of parameter 2	for sensor with V5.x
	30072	71	47	4	2	4	4	Timer up 1			uint32	Read	Total time when Hi-Byte of Logic status = 1	for sensor with V5.x
	30074	73	49	4	2	4	4	Timer down 1			uint32	Read	Total time when Hi-Byte of Logic status = 0	for sensor with V5.x
	30076	75	4B	4	2	4	4	RisingEdge counter 1			uint32	Read	Counter value when Hi-Byte of Logic status changes from 0 to 1	for sensor with V5.x
	30078	77	4D	4	2	4	4	FallingEdge counter 1			uint32	Read	Counter value when Hi-Byte of Logic status changes from 1 to 0	for sensor with V5.x
	30080	79	4F	4	2	4	4	Timer up 2			uint32	Read	Total time when Lo-Byte of Logic status = 1	for sensor with V5.x
	30082	81	51	4	2	4	4	Timer down 2			uint32	Read	Total time when Lo-Byte of Logic status = 0	for sensor with V5.x
	30084	83	53	4	2	4	4	RisingEdge counter 2			uint32	Read	Counter value when Lo-Byte of Logic status changes from 0 to 1	for sensor with V5.x
	30086	85	55	4	2	4	4	FallingEdge counter 2			uint32	Read	Counter value when Lo-Byte of Logic status changes from 1 to 0	for sensor with V5.x
STATUS DATA * Read this data to know the RF signal	40030	29	1D	3	1	2	2	Data status of Node	0-3, 39		byte	Read	If the Node ID is odd ==> read the Hi-Byte only If the Node ID is even ==> read the Lo-Byte only	
	40070	69	45	3	1	2	2	RF Signal strength of Node	0-4		byte	Read	If the Node ID is odd ==> read the Hi-Byte only If the Node ID is even ==> read the Lo-Byte only	
	40190	189	BD	3	1	2	2	Sync status of Node	0-2		byte	Read	If the Node ID is odd ==> read the Hi-Byte only If the Node ID is even ==> read the Lo-Byte only	for sensor with V5.x

- We will see the parameters in the address column will change

Please enter Sensor Node's ID (1 .. 40):

3

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
	Modbus Register	Modbus Register (Decimal)	Modbus Register (HEX)	Function Code (Read)	Function Code (Write)	# of register	Byte Size	Description
OPERATION DATA <i>* This operation data will be sent to Co-ordinator in every Cycle_wakeup and/or Cycle_healthsta</i>	30065	64	40	4		1	2	%Battery of sensor Node
	30066	65	41	4		2	4	Humidity value of sensor Node (parameter 1)
	30068	67	43	4		1	2	Status bytes of sensor Node
	30069	68	44	4		2	4	Temperature value of sensor Node (parameter 2)
	30071	70	46	4		1	2	Logic status of parameters
	30072	71	47	4		2	4	Timer up 1
	30074	73	49	4		2	4	Timer down 1
	30076	75	4B	4		2	4	RisingEdge counter 1
	30078	77	4D	4		2	4	FallingEdge counter 1
	30080	79	4F	4		2	4	Timer up 2
30082	81	51	4		2	4	Timer down 2	
30084	83	53	4		2	4	RisingEdge counter 2	
30086	85	55	4		2	4	FallingEdge counter 2	
STATUS DATA <i>* Read this data to know the RF signal</i>	40030	29	1D	3		1	2	Data status of Node
	40070	69	45	3		1	2	RF Signal strength of Node
	40190	189	BD	3		1	2	Sync status of Node

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

MODBUS MEMORY MAP FOR WIRELESS HUMIDITY SENSING

Please enter Sensor Node's ID (1 .. 40):

6

(1)

(2)

(3)

(4)

(5)

(6)

(7)

Modbus Register

Modbus Register (Decimal)

Modbus Register (HEX)

Function Code (Read)

Function Code (Write)

of register

Byte Size

Description

OPERATION DATA

* This operation data will be sent to Co-ordinator in every Cycle_wakeup and/or Cycle_healthsta

30161

160

A0

4

1

2

%Battery of sensor Node

30162

161

A1

4

2

4

Humidity value of sensor Node (parameter 1)

30164

163

A3

4

1

2

Status bytes of sensor Node

30165

164

A4

4

2

4

Temperature value of sensor Node (parameter 2)

30167

166

A6

4

1

2

Logic status of parameters

30168

167

A7

4

2

4

Timer up 1

30170

169

A9

4

2

4

Timer down 1

30172

171

AB

4

2

4

RisingEdge counter 1

30174

173

AD

4

2

4

FallingEdge counter 1

30176

175

AF

4

2

4

Timer up 2

30178

177

B1

4

2

4

Timer down 2

30180

179

B3

4

2

4

RisingEdge counter 2

30182

181

B5

4

2

4

FallingEdge counter 2

STATUS DATA

* Read this data to know the RF signal

40031

30

1E

3

1

2

Data status of Node

40071

70

46

3

1

2

RF Signal strength of Node

40191

190

BE

3

1

2

Sync status of Node

3. Troubleshooting

No.	Phenomena	Reason	Solutions
1	Cannot type into yellow frame of excel file	Edit mode is not open yet	Click Enable Editing to edit the number in yellow frame
2	No suitable sensor found	Old memmap or other modified sensor name	<ul style="list-style-type: none"> Check HERE the latest memmap file Contact us for support

4. Support contacts



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