

ELECTRONIC METER

MX2-A01E

MX2-C01E

MX2-C41E

MX2-B41E

MODBUS® RTU Interface Specifications

SPEC. NO. : MDD-T0026

CONTENTS

1. Functions.....	2
2. Checking before usage.....	2
3. System Configurations.....	2
4. Technical Characteristic.....	2
5. Specification for Communication.....	3
5.1 Standard Communication Frame.....	3
5.2 Bit Sequence.....	3
5.3 MODBUS Message RTU Framing.....	4
6. Framing of Query and Response.....	4
6.1 Read Holding Registers (03H).....	4
6.2 Write Multiple Registers (10H).....	5
7. Exception Codes.....	6
8. Data	8
8.1 List of Parameters	8
Appendix A Serial No.	17
Appendix B Slave Address	18

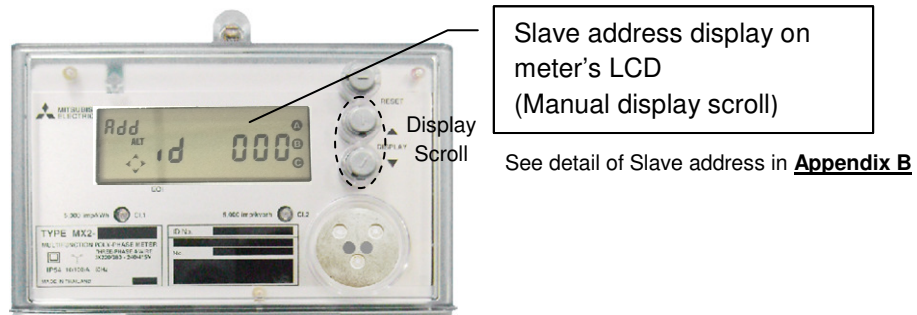
1. Functions

Electronic Meter (MX2-A01E, MX2-C01E, MX2-C41E and MX2-B41E) provides measurement values with MODBUS® RTU protocol to a PLC or PC via an RS-485 serial link (2 wires).

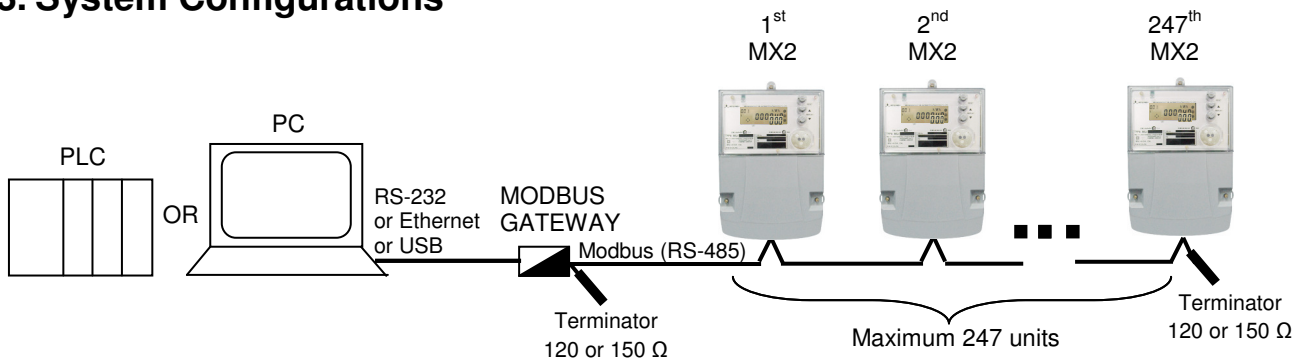
MODBUS is a registered trademark of SCHNIDER ELECTRIC USA, INC in the United States.

2. Checking before usage

LCD display will show the default slave address (Add) as “id 000”. Before communicating with Modbus protocol, user have to change slave address from “000” to new one (1-247) by using “Modbus Meter Setting” software.
 (download setting software from our website: www.meath-co.com/meter)



3. System Configurations



※ A terminator 120 or 150 ohm resistance must be connected at both ends of RS-485 bus, between line TR+ and TR- of each end.

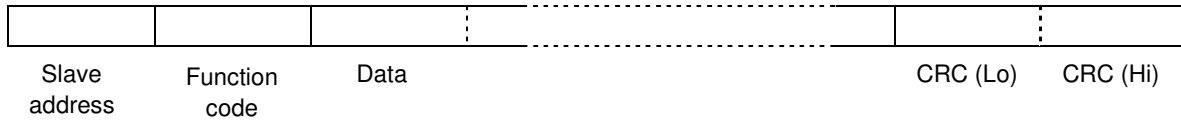
4. Technical Characteristic

Item	Specifications
Physical interface	RS-485 2wires half duplex
Protocol	RTU mode
Transmission wiring type	Multi-point bus (daisy-chain)
Baud rate	4,800 bps.
Data bit	8
Stop bit	1
Parity	Even
CRC polynomial	0xA001
Slave address	1~247 (F7h) (see detail in Appendix B)
Response time	9ms~200ms (programmable) Default 100 ms.
Distance	1,200 m
Max. number	247
Terminator	120 or 150Ω 1/2W
Recommended cable	Shielded twisted pair, recommend LiYCY 2x0.25 mm ²

5. Specification for Communication

5.1 Standard Communication Frame

The standard communication frame consists of:



Slave address : 01~F7H

Function code : 03H..... Read Holding Registers (maximum 250 bytes)

: 10H..... Write multiple registers

Data : 8 bit HEX data

: The Cyclical Redundancy Check (CRC) field is two bytes, containing a 16-bit binary value.

<NOTE>

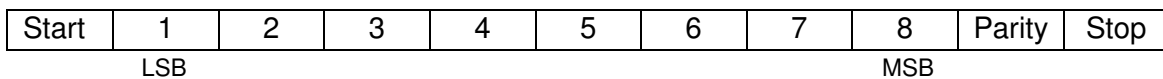
Procedure for generating CRC:

1. Load a 16-bit register with FFFF hex (all 1's). This is called the CRC register.
2. Exclusive OR the first 8-bit byte of the message with the low-order byte of the 16-bit CRC register, putting the result in the CRC register.
3. Shift the CRC register one bit to the right (toward the LSB), zero-filling the MSB. Extract and examine the LSB.
4. (If the LSB was 0): Repeat Step 3 (another shift).
(If the LSB was 1): Exclusive OR the CRC register with the polynomial value 0xA001 (1010 0000 0000 0001).
5. Repeat Step 3 and 4 until 8 shifts have been performed. When this is done, a complete 8-bit byte will have been processed.
6. Repeat Step 2 through 5 for the next 8-bit byte of the message. Continue this until all byte will have been processed.
7. The final content of the CRC register is the CRC value.
8. When the CRC is placed into the message, its upper and lower bytes must be swapped as described above.

5.2 Bit Sequence

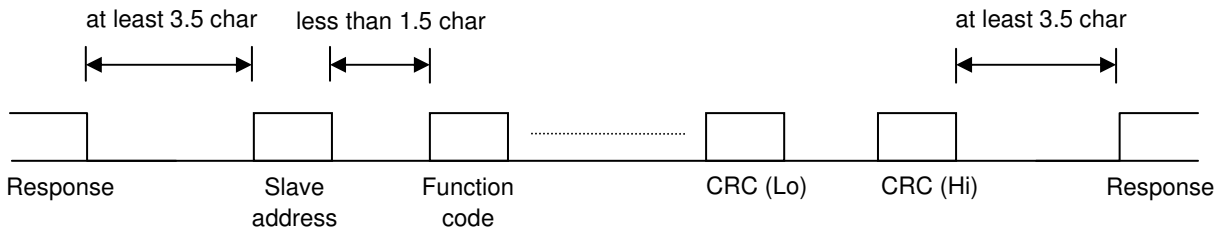
With RTU character framing, the bit sequence is below.

<Example> With Parity Checking and Stop bit is 1.



5.3 MODBUS Message RTU Framing

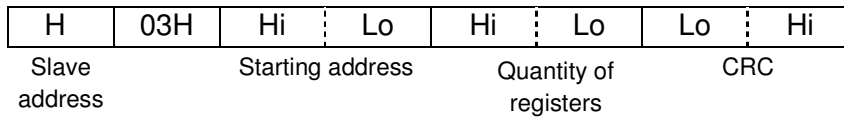
A MODBUS message is placed by transmitting device into a frame that has a known beginning and ending point. This allows devices to receive a new frame to begin at the start of the message, and to know when the message is completed. Partial messages must be detected and errors must be set as a result. In RTU mode, message frames are separated by a silent interval of at least 3.5 characters.



6. Framing of Query and Response

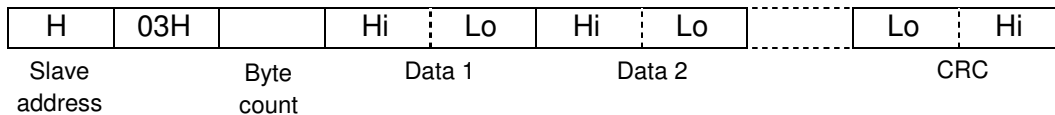
6.1 Read Holding Registers (03H)

- Query framing



- Slave address : 1 to F7H
- Starting address : 2 bytes
- Quantity of registers : Maximum 125
- CRC : 2 bytes

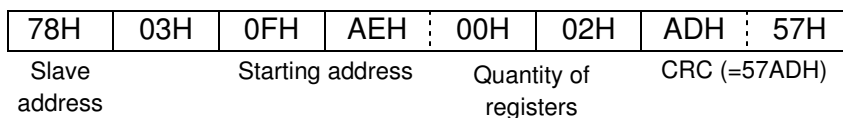
- Response framing (Maximum 255 bytes)



- Byte count : Byte count of response data (Maximum 250).

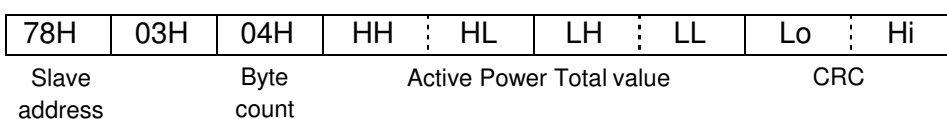
<Example1> In case of reading Active Power Total* value Slave address is 78H.

- Query framing



* Register address Active Power Total is 0FAEH-0FAFH (see section 8.1).

- Response framing



<Example2> In case of reading Frequency Phase A* value to Frequency Phase C* value. Slave address is 78H.

Query framing

78H	03H	0FH	D8H	00H	03H	8DH	4DH
Slave address	Starting address	Quantity of registers		CRC (=4D8DH)			

* Register address of Frequency Phase A, B and C is 0FD8H, 0FD9 and 0FDAH respectively (see section 8.1).

▪ Response framing

78H	03H	06H	Hi	Lo	Hi	Lo	Hi	Lo	Lo	Hi
Slave address	Byte count	Frequency Phase A value	Frequency Phase B value		Frequency Phase C value		CRC			

<Example3> In case of reading Active Energy Total value (unit: 0.1kWh fixed). Slave address is 78H.

▪ Query framing

78H	03H	0FH	AAH	00H	02H	ECH	96H
Slave address	Starting address	Quantity of registers		CRC (=96ECH)			

* Register address of Active Energy Total is 0FAAH-0FABH (see section 8.1).

▪ Response framing

78H	03H	04H	HH	HL	LH	LL	Lo	Hi	
Slave address	Byte count	Active Energy Total value (unit: 0.1 kWh fixed)				CRC			

6.2 Write Multiple Registers (10H)

▪ Query framing

H	10H	Hi	Lo	Hi	Lo		Hi	Lo	Hi	Lo	Lo	Hi
Slave address	Starting address	Quantity of registers		Byte count	Data1	Data2			CRC			

- Slave address : 1 to F7H
- Starting address : 2 bytes
- Quantity of registers : Maximum 123
- Byte count : Maximum 246
- Data1~ : Write data (Minimum 2 bytes)
- CRC : 2 bytes

▪ Response framing

H	10H	Hi	Lo	Hi	Lo	Lo	Hi
Slave address	Starting address	Quantity of registers		CRC			

<Example> In case of setting Slave Address*. Change Slave Address from 78H to 01H.

▪ Query framing

78H	10H	10H : 00H	00H : 01H	02H	00H : 01H	Lo : Hi
Slave address	Starting address	Quantity of registers	Byte count	Data1	CRC	

* Register address of Slave Address is 1000H (see section 8.1).

▪ Response framing

78H	10H	10H : 00H	00H : 01H	Lo : Hi
Slave address	Starting address	Quantity of registers	CRC	

7. Exception Codes

ERROR	Meaning	Exception code
Framing error	Query framing is incorrect.	No response is returned.
Overrun error	1 byte data length is incorrect.	
Parity error	1 byte data is incorrect.	
CRC error	Framing data is incorrect.	
Illegal function	The function code received in the query was except 03H and 10H.	01H
Illegal data address	The data address received in the query is not an allowable address for the slave.	02H
Illegal data value	The data value received in the query is not an allowable data value for the slave.	03H

▪ Response framing

H	※1	Exception code	Lo	Hi
Slave address	Function code		CRC	

※1 Function code: In an exception response, the server sets the MSB of the function code.

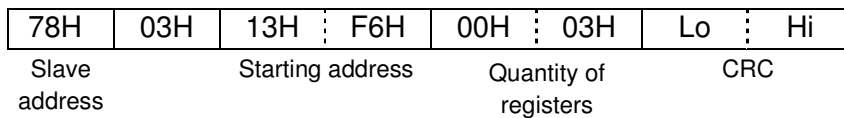
<Example>

Function code in a query	Function code in an exception response
03h	83h
10h	90h

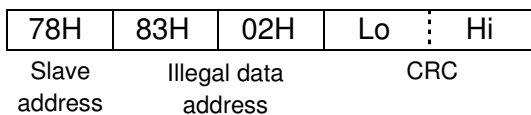
Example of illegal data address is shown as follows.

<Example> In case of reading from 13th Harmonic I Neutral (register address 13F6H) to undefined register (address 13F8H). Slave address is 78H.

▪ Query framing



▪ Response framing



8. Data

8.1 List of Parameters

At the list of parameters, precautions are following.

※1 R/W : Read and writes register.

R : Reads only register.

※2 Support register are different by the model.

○ : Applicable

× : Reserved, please ignore value from the Reserved area.

(1) Setup Registers

Register Address		Byte Count	R/W ※1	Register Name	RANGE	Unit	Applicable ※2			
							MX2-A01E	MX2-C01E	MX2-C41E	MX2-B41E
Dec.	Hex.						1P2W	3P4W	3P4W	3P3W
44097	1000h	2	R/W	Slave Address ※3 (see detail Appendix B)	1 to 247	-	○	○	○	○
44098	1001h	2	R/W	Response Time ※4	9 to 200 (default 100)	1ms	○	○	○	○

※3  **Warning: Do not write slave address “0” to the meter.**

This case communication mode will change and meter cannot communication.

※4 Response Time is waiting time that slave (MX2 meter) wait to send response after receive a complete query. The response time must be longer than 3.5 char (see section 5.3).

(2) Instantaneous Value

Register Address		Byte Count	R/W ※1	Register Name	RANGE	Unit	Applicable ※2			
							MX2-A01E	MX2-C01E	MX2-C41E	MX2-B41E
Dec.	Hex.						1P2W	3P4W	3P4W	3P3W
44015	0FAEh	4	R	Active Power Total (W)	Positive value 0 to 2147483647 (00000000h-7FFFFFFFh) Negative value -1 to -2147483648 (FFFFFFFFh-80000000h)	0.001kW	○	○	○	○
44017	0FB0h	4	R	Active Power Phase A (W)		0.001kW	○	○	○	○
44019	0FB2h	4	R	Active Power Phase B (W)		0.001kW	×	○	○	×
44021	0FB4h	4	R	Active Power Phase C (W)		0.001kW	×	○	○	○

(2) Instantaneous Value (continue)

Register Address		Byte Count	R/W ※1	Register Name	RANGE	Unit	Applicable ※2			
							MX2-A01E	MX2-C01E	MX2-C41E	MX2-B41E
Dec.	Hex.						1P2W	3P4W	3P4W	3P3W
44023	0FB6h	4	R	Reactive Power Total (Var)	Positive value 0 to 2147483647 (00000000h-7FFFFFFFh) Negative value -1 to -2147483648 (FFFFFFFFh-80000000h)	0.001kVar	○	○	○	○
44025	0FB8h	4	R	Reactive Power Phase A (Var)		0.001kVar	○	○	○	○
44027	0FBAh	4	R	Reactive Power Phase B (Var)		0.001kVar	×	○	○	×
44029	0FBCh	4	R	Reactive Power Phase C (Var)		0.001kVar	×	○	○	○
44031	0FBEh	4	R	Apparent Power Total (VA)	Positive value 0 to 2147483647 (00000000h-7FFFFFFFh) Negative value -1 to -2147483648 (FFFFFFFFh-80000000h)	0.001kVA	○	○	○	○
44033	0FC0h	4	R	Apparent Power Phase A (VA)		0.001kVA	○	○	○	○
44035	0FC2h	4	R	Apparent Power Phase B (VA)		0.001kVA	×	○	○	×
44037	0FC4h	4	R	Apparent Power Phase C (VA)		0.001kVA	×	○	○	○
44039	0FC6h	4	R	Voltage Phase A (RMS)	0 to 16777215	0.01V	○	○	○	×
				Voltage AB (RMS)		0.01V	×	×	×	○
44041	0FC8h	4	R	Voltage Phase B (RMS)		0.01V	×	○	○	×
				Voltage CA (RMS)		0.01V	×	×	×	○
44043	0FCAh	4	R	Voltage Phase C (RMS)		0.01V	×	○	○	×
				Voltage BC (RMS)		0.01V	×	×	×	○
44045	0FCCh	4	R	Current Phase A (RMS)	0 to 16777215	0.01A	○	○	○	○
44047	0FCEh	4	R	Current Phase B (RMS)		0.01A	×	○	○	×
44049	0FD0h	4	R	Current Phase C (RMS)		0.01A	×	○	○	○
44051	0FD2h	4	R	Current Neutral (RMS)		0.01A	×	○	○	×
44053	0FD4h	2	R	Power factor Total	Positive value 0 to 32767 (0000h-7FFFh) Negative value -1 to -32768 (FFFFh-8000h)	0.01%	○	○	○	○
44054	0FD5h	2	R	Power factor Phase A		0.01%	○	○	○	○
44055	0FD6h	2	R	Power factor Phase B		0.01%	×	○	○	×
44056	0FD7h	2	R	Power factor Phase C		0.01%	×	○	○	○

(2) Instantaneous Value (continues)

Register Address		Byte Count	R/W ※1	Register Name	RANGE	Unit	Applicable ※2			
							MX2-A01E 1P2W	MX2-C01E 3P4W	MX2-C41E 3P4W	MX2-B41E 3P3W
Dec.	Hex.									
44057	0FD8h	2	R	Frequency Phase A	0 to 65535	0.01 Hz	○	○	○	○
44058	0FD9h	2	R	Frequency Phase B		0.01 Hz	×	○	○	×
44059	0FDAh	2	R	Frequency Phase C		0.01 Hz	×	○	○	○
44060	0FDBh	2	R	THD V Phase A	0 to 65535	0.01%	○	○	○	×
				THD V _{AB}		0.01%	×	×	×	○
44061	0FDC h	2	R	THD V Phase B		0.01%	×	○	○	×
				THD V _{CA}		0.01%	×	×	×	○
44062	0FDDh	2	R	THD V Phase C		0.01%	×	○	○	×
				THD V _{BC}		0.01%	×	×	×	○
44063	0FDEh	2	R	THD I Phase A	0 to 65535	0.01%	○	○	○	○
44064	0FDFh	2	R	THD I Phase B		0.01%	×	○	○	×
44065	0FE0h	2	R	THD I Phase C		0.01%	×	○	○	○
44066	0FE1h	2	R	Phase Angle V _B (°)	0 to 65535	0.01°	×	○	○	×
44067	0FE2h	2	R	Phase Angle V _C (°)		0.01°	×	○	○	×
				Phase Angle V _{CA} (°)		0.01°	×	×	×	○
44068	0FE3h	2	R	Phase Angle I _A (°)		0.01°	○	○	○	○
44069	0FE4h	2	R	Phase Angle I _B (°)		0.01°	×	○	○	×
44070	0FE5h	2	R	Phase Angle I _C (°)	0.01°	×	○	○	○	
44072- 44096	0FE7h- 0FFFh	-	-	Reserved	-	-	×	×	×	×
44099- 45000	1002h- 1387h	-	-	Reserved	-	-	×	×	×	×

(2) Instantaneous Value (continue)

Register Address		Byte Count	R/W ※1	Register Name	RANGE	Unit	Applicable ※2			
							MX2-A01E 1P2W	MX2-C01E 3P4W	MX2-C41E 3P4W	MX2-B41E 3P3W
Dec.	Hex.									
45001	1388h	4	R	Harmonic V Phase A (1 st order)	0 to 16777215	0.01V	○	○	○	×
				Harmonic V _{AB} (1 st order)		0.01V	×	×	×	○
45003	138Ah	4	R	Harmonic V Phase A (2 nd order)		0.01V	○	○	○	×
				Harmonic V _{AB} (2 nd order)		0.01V	×	×	×	○
45005	138Ch	4	R	Harmonic V Phase A (3 rd order)		0.01V	○	○	○	×
				Harmonic V _{AB} (3 rd order)		0.01V	×	×	×	○
45007	138Eh	4	R	Harmonic V Phase A (5 th order)		0.01V	○	○	○	×
				Harmonic V _{AB} (5 th order)		0.01V	×	×	×	○
45009	1390h	4	R	Harmonic V Phase A (7 th order)		0.01V	○	○	○	×
				Harmonic V _{AB} (7 th order)		0.01V	×	×	×	○
45011	1392h	4	R	Harmonic V Phase A (9 th order)		0.01V	○	○	○	×
				Harmonic V _{AB} (9 th order)		0.01V	×	×	×	○
45013	1394h	4	R	Harmonic V Phase A (11 th order)		0.01V	○	○	○	×
				Harmonic V _{AB} (11 th order)		0.01V	×	×	×	○
45015	1396h	4	R	Harmonic V Phase A (13 th order)		0.01V	○	○	○	×
				Harmonic V _{AB} (13 th order)		0.01V	×	×	×	○

(2) Instantaneous Value (continue)

Register Address		Byte Count	R/W ※1	Register Name	RANGE	Unit	Applicable ※2			
							MX2-A01E	MX2-C01E	MX2-C41E	MX2-B41E
Dec.	Hex.						1P2W	3P4W	3P4W	3P3W
45017	1398h	4	R	Harmonic V Phase B (1 st order)	0 to 16777215	0.01V	×	○	○	×
				Harmonic V _{CA} (1 st order)		0.01V	×	×	×	○
45019	139Ah	4	R	Harmonic V Phase B (2 nd order)		0.01V	×	○	○	×
				Harmonic V _{CA} (2 nd order)		0.01V	×	×	×	○
45021	139Ch	4	R	Harmonic V Phase B (3 rd order)		0.01V	×	○	○	×
				Harmonic V _{CA} (3 rd order)		0.01V	×	×	×	○
45023	139Eh	4	R	Harmonic V Phase B (5 th order)		0.01V	×	○	○	×
				Harmonic V _{CA} (5 th order)		0.01V	×	×	×	○
45025	13A0h	4	R	Harmonic V Phase B (7 th order)		0.01V	×	○	○	×
				Harmonic V _{CA} (7 th order)		0.01V	×	×	×	○
45027	13A2h	4	R	Harmonic V Phase B (9 th order)		0.01V	×	○	○	×
				Harmonic V _{CA} (9 th order)		0.01V	×	×	×	○
45029	13A4h	4	R	Harmonic V Phase B (11 th order)		0.01V	×	○	○	×
				Harmonic V _{CA} (11 th order)		0.01V	×	×	×	○
45031	13A6h	4	R	Harmonic V Phase B (13 th order)		0.01V	×	○	○	×
				Harmonic V _{CA} (13 th order)		0.01V	×	×	×	○

(2) Instantaneous Value (continue)

Register Address		Byte Count	R/W ※1	Register Name	RANGE	Unit	Applicable ※2			
							MX2-A01E 1P2W	MX2-C01E 3P4W	MX2-C41E 3P4W	MX2-B41E 3P3W
Dec.	Hex.									
45033	13A8h	4	R	Harmonic V Phase C (1 st order)	0 to 16777215	0.01V	×	○	○	×
				Harmonic V _{BC} (1 st order)		0.01V	×	×	×	○
45035	13AAh	4	R	Harmonic V Phase C (2 nd order)		0.01V	×	○	○	×
				Harmonic V _{BC} (2 nd order)		0.01V	×	×	×	○
45037	13ACh	4	R	Harmonic V Phase C (3 rd order)		0.01V	×	○	○	×
				Harmonic V _{BC} (3 rd order)		0.01V	×	×	×	○
45039	13AEh	4	R	Harmonic V Phase C (5 th order)		0.01V	×	○	○	×
				Harmonic V _{BC} (5 th order)		0.01V	×	×	×	○
45041	13B0h	4	R	Harmonic V Phase C (7 th order)		0.01V	×	○	○	×
				Harmonic V _{BC} (7 th order)		0.01V	×	×	×	○
45043	13B2h	4	R	Harmonic V Phase C (9 th order)		0.01V	×	○	○	×
				Harmonic V _{BC} (9 th order)		0.01V	×	×	×	○
45045	13B4h	4	R	Harmonic V Phase C (11 th order)		0.01V	×	○	○	×
				Harmonic V _{BC} (11 th order)		0.01V	×	×	×	○
45047	13B6h	4	R	Harmonic V Phase C (13 th order)		0.01V	×	○	○	×
				Harmonic V _{BC} (13 th order)		0.01V	×	×	×	○

(2) Instantaneous Value (continue)

Register Address		Byte Count	R/W ※1	Register Name	RANGE	Unit	Applicable ※2			
							MX2-A01E	MX2-C01E	MX2-C41E	MX2-B41E
Dec.	Hex.						1P2W	3P4W	3P4W	3P3W
45049	13B8h	4	R	Harmonic I Phase A (1 st order)	0 to 16777215	0.01A	○	○	○	○
45051	13BAh	4	R	Harmonic I Phase A (2 nd order)		0.01A	○	○	○	○
45053	13BCh	4	R	Harmonic I Phase A (3 rd order)		0.01A	○	○	○	○
45055	13BEh	4	R	Harmonic I Phase A (5 th order)		0.01A	○	○	○	○
45057	13C0h	4	R	Harmonic I Phase A (7 th order)		0.01A	○	○	○	○
45059	13C2h	4	R	Harmonic I Phase A (9 th order)		0.01A	○	○	○	○
45061	13C4h	4	R	Harmonic I Phase A (11 th order)		0.01A	○	○	○	○
45063	13C6h	4	R	Harmonic I Phase A (13 th order)		0.01A	○	○	○	○
45065	13C8h	4	R	Harmonic I Phase B (1 st order)		0.01A	×	○	○	×
45067	13CAh	4	R	Harmonic I Phase B (2 nd order)		0.01A	×	○	○	×
45069	13CCh	4	R	Harmonic I Phase B (3 rd order)		0.01A	×	○	○	×
45071	13CEh	4	R	Harmonic I Phase B (5 th order)		0.01A	×	○	○	×
45073	13D0h	4	R	Harmonic I Phase B (7 th order)		0.01A	×	○	○	×
45075	13D2h	4	R	Harmonic I Phase B (9 th order)		0.01A	×	○	○	×
45077	13D4h	4	R	Harmonic I Phase B (11 th order)		0.01A	×	○	○	×
45079	13D6h	4	R	Harmonic I Phase B (13 th order)		0.01A	×	○	○	×

(2) Instantaneous Value (continue)

Register Address		Byte Count	R/W ※1	Register Name	RANGE	Unit	Applicable ※2			
							MX2-A01E 1P2W	MX2-C01E 3P4W	MX2-C41E 3P4W	MX2-B41E 3P3W
Dec.	Hex.									
45081	13D8h	4	R	Harmonic I Phase C (1 st order)	0 to 16777215	0.01A	×	○	○	○
45083	13DAh	4	R	Harmonic I Phase C (2 nd order)		0.01A	×	○	○	○
45085	13DCh	4	R	Harmonic I Phase C (3 rd order)		0.01A	×	○	○	○
45087	13DEh	4	R	Harmonic I Phase C (5 th order)		0.01A	×	○	○	○
45089	13E0h	4	R	Harmonic I Phase C (7 th order)		0.01A	×	○	○	○
45091	13E2h	4	R	Harmonic I Phase C (9 th order)		0.01A	×	○	○	○
45093	13E4h	4	R	Harmonic I Phase C (11 th order)		0.01A	×	○	○	○
45095	13E6h	4	R	Harmonic I Phase C (13 th order)		0.01A	×	○	○	○
45097	13E8h	4	R	Harmonic I Neutral (1 st order)		0.01A	×	○	○	×
45099	13EAh	4	R	Harmonic I Neutral (2 nd order)		0.01A	×	○	○	×
45101	13ECh	4	R	Harmonic I Neutral (3 rd order)		0.01A	×	○	○	×
45103	13EEh	4	R	Harmonic I Neutral (5 th order)		0.01A	×	○	○	×
45105	13F0h	4	R	Harmonic I Neutral (7 th order)		0.01A	×	○	○	×
45107	13F2h	4	R	Harmonic I Neutral (9 th order)		0.01A	×	○	○	×
45109	13F4h	4	R	Harmonic I Neutral (11 th order)		0.01A	×	○	○	×
45111	13F6h	4	R	Harmonic I Neutral (13 th order)		0.01A	×	○	○	×

(3) Counting of Energy Registers

Register Address		Byte Count	R/W ×1	Register Name	RANGE	Unit	Applicable ※2			
							MX2-A01E	MX2-C01E	MX2-C41E	MX2-B41E
Dec.	Hex.						1P2W	3P4W	3P4W	3P3W
44011	0FAAh	4	R	Active Energy Total (Wh) imp+exp	0 to 99999999	0.1kWh	○	○	○	○
44013	0FACH	4	R	Reactive Energy Total (Varh) Q1+Q4	0 to 99999999	0.1kVarh	○	○	○	○

(4) General information

Register Address		Byte Count	R/W ×1	Register Name	RANGE	Unit	Applicable ※2			
							MX2-A01E	MX2-C01E	MX2-C41E	MX2-B41E
Dec.	Hex.						1P2W	3P4W	3W4P	3W3P
44001	0FA0h	4	R	Serial No. (see Appendix A)	0 to 9999999	-	○	○	○	○
44071	0FE6h	2	R	lb	0 to 255	1A	○	○	○	○
44010	0FA9h	2	R	lmax	0 to 255	1A	○	○	○	○

Appendix A Serial No.

The *Serial No.* of each meter is on meter name plate.

<Example A1> Serial No. of meter which has ID No. 2720504 is 2720504.

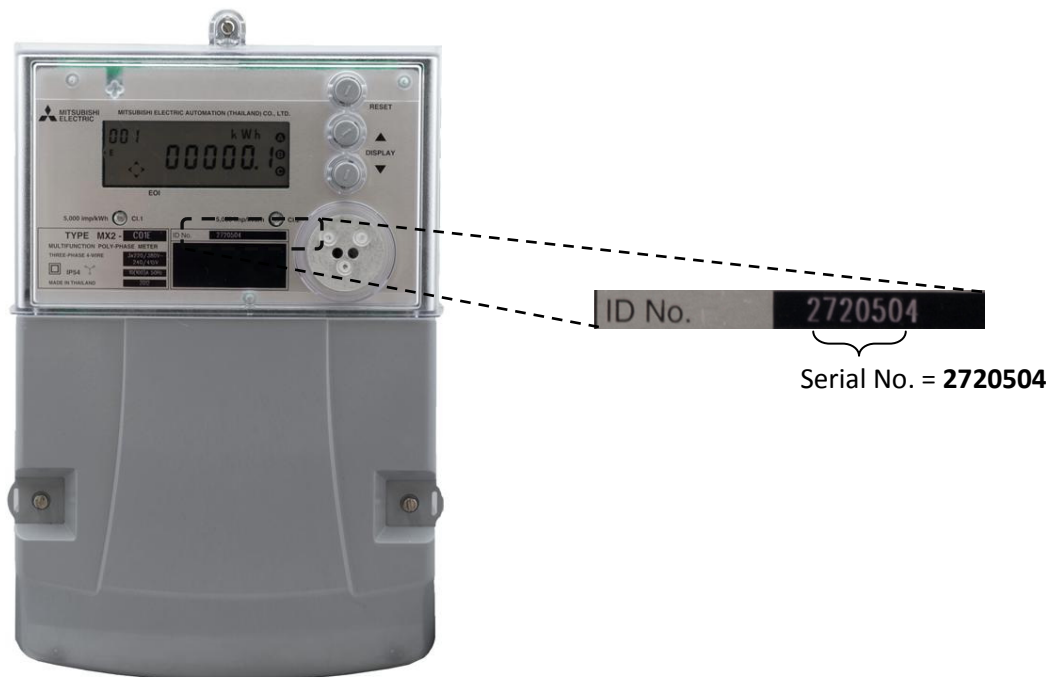
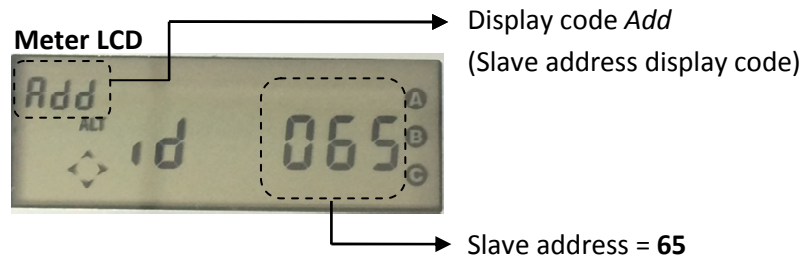


Figure A1 Serial No. on meter name plate.

Appendix B Slave Address

A slave address of any meter is shown on meter LCD by manual scrolling display. The slave address shown by display item, code *Add*.

<Example B1>



Note: Meter which not show Slave Address display item (Add) does not support Modbus protocol.
Please contact factory.

A slave address must be unique on a Modbus serial bus. If some slave addresses are duplicated on bus, slave address changing must be done by software “Modbus Meter Setting” (download setting software from our website: www.meath-co.com/meter)

Meter Technical Support



0-2540-6992



support.025406992 (Line ID)

Working Hours: Mon.– Fri. / 8.00a.m.–5.00p.m.

MITSUBISHI ELECTRIC AUTOMATION (THAILAND) Co., LTD.

BANG-CHAN INDUSTRIAL ESTATE, 111 SOI SERITHAI 54, T. KANNAYAO, A. KANNAYAO,
BANGKOK 10230, THAILAND

Website: www.meath-co.com/meter
E-mail: meter_support@meath.co.th