VAW RS485 Communication address table

■ RS485(Modbus RTU Mode)

■ Modbus RTU Mode

一、Function 03H (Read Holding Registers)

Request Data Frame

SLAVE Address	FUNCTION	Starting Address Hi	Starting Address Lo	No. of Word Hi	No. of Word Lo	CRC Lo	CRC Hi
01H	03H	00H	00H	00H	01H	84H	0AH

Response Data Frame ex:

SLAVE Address	FUNCTION	Byte count	Data Hi	Data Lo	CRC Lo	CRC Hi
01H	03H	02H	00H	00H	B8H	44H

Request Data Frame

SLAVE Address	FUNCTION	Starting Address Hi	Starting Address Lo	No. of Word Hi	No. of Word Lo	CRC Lo	CRC Hi
01H	03H	00H	00H	00H	0AH	C5H	CDH

Response Data Frame

SLAVE Address	FUNCTION	Byte count	Data(1) Hi	Data(1) Lo	…	…	Data(10) Hi	Data(10) Lo	CRC Lo	CRC Hi
01H	03H	14H	00H	00H	…	…	01H	00H	--	--

二、Function 06H (Preset Single Register)

Request Data Frame

SLAVE Address	FUNCTION Code	Starting Address Hi	Starting Address Lo	Preset DATA Hi	Preset DATA Lo	CRC Lo	CRC Hi
01H	06H	00H	05H	00H	01H	58H	0BH

(Response Data Frame

SLAVE Address	FUNCTION Code	Starting Address Hi	Starting Address Lo	Preset DATA Hi	Preset DATA Lo	CRC Lo	CRC Hi
01H	06H	00H	05H	00H	01H	58H	0BH

■ Communication address table ** Address to hexadecimal values User Level

Name	Address	Range	Explain	Initial	Write/Read	Note
		3 words area				
ᴇᴜH*	0000h	0~9999999999 (kWh)	+Energy(+kWh) ***(High word)**		R	
ᴇᴜH*	0001h	0~9999999999 (kWh)	+Energy(+kWh) ***(Middle word)**		R	
ᴇᴜH*	0002h	0~9999999999 (kWh)	+Energy(+kWh) ***(Low word)**		R	
-ᴇᴜH*	0003h	-1999999999~0 (kWh)	-Energy(-kWh) ***(High word)**		R	
-ᴇᴜH*	0004h	-1999999999~0 (kWh)	-Energy(-kWh) ***(Middle word)**		R	
-ᴇᴜH*	0005h	-1999999999~0 (kWh)	-Energy(-kWh) ***(Low word)**		R	
ᵣᵧ ISP*	0006h	-1999999999 ~9999999999	Relay 1 Set Point ***(High word)**	10000	R/W	

Name	Address	Range	Explain	Initial	Write/Read	Note
r1 1SP*	0007h	-1999999999 ~9999999999	Relay 1 Set Point ***(Middle word)**	10000	R/W	
r1 1SP*	0008h	-1999999999 ~9999999999	Relay 1 Set Point ***(Low word)**	10000	R/W	
r2.2SP*	0009h	-1999999999 ~9999999999	Relay 2 Set Point ***(High word)**	10000	R/W	
r2.2SP*	000Ah	-1999999999 ~9999999999	Relay 2 Set Point ***(Middle word)**	10000	R/W	
r2.2SP*	000Bh	-1999999999 ~9999999999	Relay 2 Set Point ***(Low word)**	10000	R/W	
r3.3SP*	000Ch	-1999999999 ~9999999999	Relay 3 Set Point ***(High word)**	10000	R/W	
r3.3SP*	000Dh	-1999999999 ~9999999999	Relay 3 Set Point ***(Middle word)**	10000	R/W	
r3.3SP*	000Eh	-1999999999 ~9999999999	Relay 3 Set Point ***(Low word)**	10000	R/W	
r4.4SP*	000Fh	-1999999999 ~9999999999	Relay 4 Set Point ***(High word)**	10000	R/W	
r4.4SP*	0010h	-1999999999 ~9999999999	Relay 4 Set Point ***(Middle word)**	10000	R/W	
r4.4SP*	0011h	-1999999999 ~9999999999	Relay 4 Set Point ***(Low word)**	10000	R/W	
Ao.LS*	0012h	-1999999999 ~9999999999	Analogue Output relatives to Low Scale ***(High word)**	0	R/W	
Ao.LS*	0013h	-1999999999 ~9999999999	Analogue Output relatives to Low Scale ***(Middle word)**	0	R/W	
Ao.LS*	0014h	-1999999999 ~9999999999	Analogue Output relatives to Low Scale ***(Low word)**	0	R/W	
Ao.HS*	0015h	-1999999999 ~9999999999	Analogue Output relatives to High Scale ***(High word)**	19999	R/W	
Ao.HS*	0016h	-1999999999 ~9999999999	Analogue Output relatives to High Scale ***(Middle word)**	19999	R/W	
Ao.HS*	0017h	-1999999999 ~9999999999	Analogue Output relatives to High Scale ***(Low word)**	19999	R/W	
RESERVED	0018h				R	
RESERVED	0019h				R	
RESERVED	001Ah				R	
RESERVED	001Bh				R	
RESERVED	001Ch				R	
RESERVED	001Dh				R	
		2 words area				
PW*	001Eh	-19999~+99999 (kW)	Present value of Power ***(High word)**		R	
PW*	001Fh	-19999~+99999 (kW)	Present value of Power ***(Low word)**		R	

Name	Address	Range	Explain	Initial	Write/Read	Note
PWR Min*	0020h	-19999~+99999 (kW)	Minimum value storage of Power ***(High word)**		R	
PWR Min*	0021h	-19999~+99999 (kW)	Minimum value storage of Power ***(Low word)**		R	
PWR MAX*	0022h	-19999~+99999 (kW)	Maximum value storage of Power ***(High word)**		R	
PWR MAX*	0023h	-19999~+99999 (kW)	Maximum value storage of Power ***(Low word)**		R	
Run Hour*	0024h	0~99999999(Hr)	Run Hour ***(High word)**		R	
Run Hour*	0025h	0~99999999(Hr)	Run Hour ***(Low word)**		R	
RESERVED	0026h				R	
RESERVED	0027h				R	
RESERVED	0028h				R	
RESERVED	0029h				R	
		1 words area				
U.PU	002Ah	-1999~+9999(V)	Present value of Voltage		R	
A.PU	002Bh	-19999~+29999(A)	Present value of Current		R	
U.Min	002Ch	-1999~+9999(V)	Minimum value storage of Voltage		R	
U.MAX	002Dh	-1999~+9999(V)	Maximum value storage of Voltage		R	
A.Min	002Eh	-19999~+29999(A)	Minimum value storage of Current		R	
A.MAX	002Fh	-19999~+29999(A)	Maximum value storage of Current		R	
U.PU.dP	0030h	0~4	Decimal point of Voltage **0:** 00000 **1:** 0000.0 **2:** 000.00 **3:** 00.000 **4:** 0.0000	01h	R/W	
A.PU.dP	0031h	0~4	Decimal point of Current 電流顯示值小數點 **0:** 00000 **1:** 0000.0 **2:** 000.00 **3:** 00.000 **4:** 0.0000	01h	R/W	
PW.dP	0032h	0~5	Decimal point of Power **0:** 00000 **1:** 0000.0 **2:** 000.00 **3:** 00.000 **4:** 0.0000 **5:** Auto	01h	R/W	
PW.H.dP	0033h	0~4	Decimal point of Energy **0:** 00000 **1:** 0000.0 **2:** 000.00 **3:** 00.000 **4:** 0.0000	01h	R/W	
RELAY STATUS	0034h	0~1	RELAY STATUS **bit0~bit3:**relay1~relay4; **0**=Relay off **1**=Relay on	00h	R/W	
SYSTEM STATUS	0035h		SYSTEM STATUS **bit0**=1 EEP fail; **bit1**=1 Input calibration fail; **bit2**=1 Input calibration NG; **bit3**=1 Analogue Output calibration fail; **bit4**=1 Analogue Output calibration NG		R	

Name	Address	Range	Explain	Initial	Write/Read	Note
ECI STATUS	0036h	0~1	ECI STATUS **bit0~bit1:**ECI.1~ECI.2; **0**=untried **1**:triged	00h	R	

n.rSt	0037h	0~4	Reset Maximum & Minimum Value **0:** None **1:** V.RST **2:** A.RST **3:** kW.RST **4:** ALL RST	0	R/W	

■ Engineer Level

【Input Group】

Name	Address	Range	Explain	Initial	Write/Read	Note
u.Lo.SC	0038h	-1999~9999	Low Scale of Voltage display	0	R/W	
u.H i.SC	0039h	-1999~9999	High Scale of Voltage display	19999	R/W	
A.Lo.SC	003Ah	-19999~29999	Low Scale of Current display	0	R/W	
A.H i.SC	003Bh	-19999~29999	High Scale of Current display	19999	R/W	
u.Pu.Po	003Ch	-1999~9999	Voltage display Zero fine adjustment	0	R/W	
u.Pu.Sn	003Dh	-1999~9999	Voltage display Span fine adjustment	0	R/W	
u.P.S.CL	003Eh	0~3	The clear of V.PV_ZERO and V.PV_SPAN **0:** None **1:** V.PV_ZERO **2:** V.PV_SPAN **3:** Both	0	R/W	
A.Pu.Po	003Fh	-19999~29999	Current display Zero fine adjustment	0	R/W	
A.Pu.Sn	0040h	-19999~29999	Current display Span fine adjustment	0	R/W	
A.P.S.CL	0041h	0~3	The clear of A.PV_ZERO and A.PV_SPAN **0:** None **1:** A.PV_ZERO **2:** A.PV_SPAN **3:** Both	0	R/W	
u.Lo.Ct	0042h	-1999~9999	Low Cut for voltage display	0	R/W	
A.Lo.Ct	0043h	-1999~9999	Low Cut for current display	0	R/W	
Au.G	0044h	1~99	Average display for voltage and current	5	R/W	
n.Au.G	0045h	1~10	Moving Average display for voltage and current	1	R/W	
dF iLt	0046h	0~99	Digital Filter for voltage and current	0	R/W	
P.CodE	0047h	0000~9999	Pass Code	1000	R/W	
F.LoCK	0048h	0~3	Function Lock **0:** none **1:** User Level **2:** Engineer Level **3:** All	00h	R/W	
tL.r.dt.	0049h	0~1	Reset for +energy **0:** No **1:** Yes	00h	R/W	

Name	Address	Range	Explain	Initial	Write/Read	Note
r.Hr St	004Ah	0~1	Reset for energy **0:** No **1:** Yes	00h	R/W	
RESERVED	004Bh				R	
RESERVED	004Ch				R	

【Relay Group】						
Name	**Address**	**Range**	**Explain**	**Initial**	**Write/Read**	**Note**
u.r Y.Sb	004Dh	0000~9999	Voltage start band of Relay	0	R/W	
u.r Y.Sd	004Eh	0000~5999 (0.1second)	Voltage start delay time of Relay	0	R/W	
A.r Y.Sb	004Fh	0000~9999	Current start band of Relay	0	R/W	
A.r Y.Sd	0050h	0000~5999 (0.1second)	Current start delay time of Relay	0	R/W	
W.r Y.Sb	0051h	0000~9999	Power(kW) start band of Relay	0	R/W	
W.r Y.Sd	0052h	0000~5999 (0.1second)	Power(kW) start delay time of Relay	0	R/W	
r 1SEL	0053h	0~4	Relay 1 corresponds to parameter selection **(kW)/ (±kWh)** **0:** V.PV **1:** A.PV **2:** kW.PV **3: +**kWH **4: -**kWH	0	R/W	
rY 1nd	0054h	0~8	Relay 1 Energized Mode **0: oFF**(no use); **1: Lo**(Low Energized); **2: Hi**(High Energized) **3: Lo Hold**(Low Energized Hold) **4: High Hold**(High Energized Hold) **5: DO**(Digital Output); **6: N.Mode 7: R.Mode 8: C.Mode**	0	R/W	
rY 1HY	0055h	0000~5000	Hysteresis of Relay 1	0	R/W	
rY 1rd	0056h	0000~5999 (0.1second)	Energized Delay Time of Relay 1 繼電器 **1** 動作延遲時間	0	R/W	
rY 1Fd rY 1ot	0057h	0000~5999 (0.1second)	rY 1nd is N/R/C mode，display rY 1ot De-Energized Delay Time of Relay 1	0	R/W	
r2.SEL	0058h	0~4	Relay 2 corresponds to parameter selection (kW)/ (±kWh) **0:** V.PV **1:** A.PV **2:** kW.PV **3: +**kWH **4: -**kWH	0	R/W	
rY2.nd	0059h	0~8	Relay 2 Energized Mode **0:** oFF(no use); **1:** Lo(Low Energized); **2:** Hi(High Energized) **3:** Lo Hold(Low Energized Hold) **4:** High Hold(High Energized Hold) **5:** DO(Digital Output); **6:** N.Mode **7:** R.Mode **8:** C.Mode	0	R/W	

Name	**Address**	**Range**	**Explain**	**Initial**	**Write/Read**	**Note**
rY2.HY	005Ah	0000~5000	Hysteresis of Relay 2	0	R/W	
rY2.rd	005Bh	0000~5999 (0.1second)	Energized Delay Time of Relay 2	0	R/W	
rY2.Fd rY2.ot	005Ch	0000~5999 (0.1second)	若 rY2.nd is N/R/C mode，display rY2.ot De-Energized Delay Time of Relay 2	0	R/W	

r3SEL	005Dh	0~4	Relay 3 corresponds to parameter selection **(kW)/ (±kWh)** **0:** V.PV **1:** A.PV **2:** kW.PV **3: +**kWH **4: -**kWH	1	R/W	
ry3nd	005Eh	0~8	Relay 3 Energized Mode 繼電器 3 動作模式 **0: oFF**(no use); **1: Lo**(Low Energized); **2: Hi**(High Energized) **3: Lo Hold**(Low Energized Hold) **4: High Hold**(High Energized Hold) **5: DO**(Digital Output); **6: N.Mode 7: R.Mode 8: C.Mode**	0	R/W	
ry3HY	005Fh	0000~5000	Hysteresis of Relay 3	0	R/W	
ry3rd	0060h	0000~5999 (0.1second)	Energized Delay Time of Relay 3	0	R/W	
ry3Fd ry3ot	0061h	0000~5999 (0.1second)	若 ry3nd is N/R/C mode，display ry3ot De-Energized Delay Time of Relay 3 繼電器 **3** 復歸延遲時間	0	R/W	
r4SEL	0062h	0~4	Relay 4 corresponds to parameter selection **(kW)/ (±kWh)** **0:** V.PV **1:** A.PV **2:** kW.PV **3: +**kWH **4: -**kWH	1	R/W	
ry4nd	0063h	0~8	Relay 4 Energized Mode **0: oFF**(no use); **1: Lo**(Low Energized); **2: Hi**(High Energized) **3: Lo Hold**(Low Energized Hold) **4: High Hold**(High Energized Hold) **5: DO**(Digital Output); **6: N.Mode 7: R.Mode 8: C.Mode**	0	R/W	
ry4HY	0064h	0000~5000	Hysteresis of Relay 4	0	R/W	
ry4rd	0065h	0000~5999 (0.1second)	Energized Delay Time of Relay 4	0	R/W	
ry4Fd ry4ot	0066h	0000~5999 (0.1second)	若 ry4nd is N/R/C mode，display ry4ot De-Energized Delay Time of Relay 4	0	R/W	
ry.rSt	0067h	0~1	Reset for Relay Energized Hold **0:** No **1:** Yes	0	R/W	
RESERVED	0068h				R	
RESERVED	0069h				R	

【ECI Group】

Name	Address	Range	Explain	Initial	Write/Read	Note
EC.1	006Ah	0~7	External Control Input 1 **0:nonE** (None); **1:rEL.PV**(Relative PV); **2:PV.HLd**(PV Hold); **3: M.rSt**(Reset for Maximum & Minimum); **4:rY.rSt**(Reset for Relay Hold); **5:di**(Digital Input); **6: GAtE**(Gate for Energy±kWh) **7: rESEt**(Reset for Energy±kWh)	1	R/W	

ECi2	006Bh	0~7	External Control Input 2 **0:nonE** (None); **1:rEL.PV**(Relative PV); **2:PV.HLd**(PV Hold); **3: M.rSt**(Reset for Maximum & Minimum); **4:rY.rSt**(Reset for Relay Hold); **5:di**(Digital Input); **6: GAtE**(Gate for Energy±kWh) **7: rESEt**(Reset for Energy±kWh)	2	R/W	
dEbnC	006Ch	5~255	ECI debouncing 5~255 *12mSec	12	R/W	

【AO Group】

Name	Address	Range	Explain	Initial	Write/Read	Note
AoSEL	006Dh	0~4	Analogue output corresponds to parameter selection **(kW)/ (±kWh)** **0:** V.PV **1:** A.PV **2:** kW.PV **3: +**kWH **4: -**kWH	0	R/W	
AotYP	006Eh	0~5	Analog Output Type **0:** 0~10V **1:** 0~5V **2:**1~5V **3:** 0~20mA **4:** 4~20mA **5:** 0~10mA	4	R/W	
P.SCLr	006Fh	0~3	The clear of AO_ZERO and AO_SPAN **0:** None **1:** AO_ZERO **2:** AO_SPAN **3:** Both	0	R/W	
AoLnt	0070h	00.00%~110.00%	Analogue Output High Limit	110.00%	R/W	
RESERVED	0071h					
RESERVED	0072h					

【RS485 Group】

Name	Address	Range	Explain	Initial	Write/Read	Note
AdrES	0073h	1~255	RS485 address	1	R/W	
bAUd	0074h	0~5	RS485 baud rate **0:**1200 **1:**2400 **2:**4800 **3:**9600 **4:**19200 **5:**38400	03h	R/W	
Pr tY	0075h	0~3	RS485 parity **0:** n-8-1 **1:** n-8-2, **2:** odd, **3:** even,	01h	R/W	