

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				
ⓂⓂⓂ*	0000h	0~9999999999 (kWh)	+Energy(+kWh) *(High word)		R	
ⓂⓂⓂ*	0001h	0~9999999999 (kWh)	+Energy(+kWh) *(Middle word)		R	
ⓂⓂⓂ*	0002h	0~9999999999 (kWh)	+Energy(+kWh) *(Low word)		R	
-ⓂⓂⓂ*	0003h	-1999999999~0 (kWh)	-Energy(-kWh) *(High word)		R	
-ⓂⓂⓂ*	0004h	-1999999999~0 (kWh)	-Energy(-kWh) *(Middle word)		R	
-ⓂⓂⓂ*	0005h	-1999999999~0 (kWh)	-Energy(-kWh) *(Low word)		R	
ⓂⓂⓂⓂⓂ*	0006h	-1999999999~9999999999	Relay 1 Set Point *(High word)	10000	R/W	

Name	Address	Range	Explain	Initial	Write/Read	Note
rYISP*	0007h	-1999999999 ~9999999999	Relay 1 Set Point *(Middle word)	10000	R/W	
rYISP*	0008h	-1999999999 ~9999999999	Relay 1 Set Point *(Low word)	10000	R/W	
rY2SP*	0009h	-1999999999 ~9999999999	Relay 2 Set Point *(High word)	10000	R/W	
rY2SP*	000Ah	-1999999999 ~9999999999	Relay 2 Set Point *(Middle word)	10000	R/W	
rY2SP*	000Bh	-1999999999 ~9999999999	Relay 2 Set Point *(Low word)	10000	R/W	
rY3SP*	000Ch	-1999999999 ~9999999999	Relay 3 Set Point *(High word)	10000	R/W	
rY3SP*	000Dh	-1999999999 ~9999999999	Relay 3 Set Point *(Middle word)	10000	R/W	
rY3SP*	000Eh	-1999999999 ~9999999999	Relay 3 Set Point *(Low word)	10000	R/W	
rY4SP*	000Fh	-1999999999 ~9999999999	Relay 4 Set Point *(High word)	10000	R/W	
rY4SP*	0010h	-1999999999 ~9999999999	Relay 4 Set Point *(Middle word)	10000	R/W	
rY4SP*	0011h	-1999999999 ~9999999999	Relay 4 Set Point *(Low word)	10000	R/W	
RoLS*	0012h	-1999999999 ~9999999999	Analogue Output relatives to Low Scale *(High word)	0	R/W	
RoLS*	0013h	-1999999999 ~9999999999	Analogue Output relatives to Low Scale *(Middle word)	0	R/W	
RoLS*	0014h	-1999999999 ~9999999999	Analogue Output relatives to Low Scale *(Low word)	0	R/W	
RoHS*	0015h	-1999999999 ~9999999999	Analogue Output relatives to High Scale *(High word)	19999	R/W	
RoHS*	0016h	-1999999999 ~9999999999	Analogue Output relatives to High Scale *(Middle word)	19999	R/W	
RoHS*	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				
PU*	001Eh	-19999~+99999 (kW)	Present value of Power *(High word)		R	
PU*	001Fh	-19999~+99999 (kW)	Present value of Power *(Low word)		R	

Name	Address	Range	Explain	Initial	Write/Read	Note
ሂህብ ነ *	0020h	-19999~+99999 (kW)	Minimum value storage of Power *(High word)		R	
ሂህብ ነ *	0021h	-19999~+99999 (kW)	Minimum value storage of Power *(Low word)		R	
ሂህብላ *	0022h	-19999~+99999 (kW)	Maximum value storage of Power *(High word)		R	
ሂህብላ *	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				
ሆሆ	002Ah	-1999~+9999(V)	Present value of Voltage		R	
ላሆ	002Bh	-19999~+29999(A)	Present value of Current		R	
ሂብ ነ	002Ch	-1999~+9999(V)	Minimum value storage of Voltage		R	
ሂብላ	002Dh	-1999~+9999(V)	Maximum value storage of Voltage		R	
ላብ ነ	002Eh	-19999~+29999(A)	Minimum value storage of Current		R	
ላብላ	002Fh	-19999~+29999(A)	Maximum value storage of Current		R	
ሆሆሆ	0030h	0~4	Decimal point of Voltage 0: 00000 1: 0000.0 2: 000.00 3: 00.000 4: 0.0000	01h	R/W	
ላሆሆ	0031h	0~4	Decimal point of Current 0: 00000 1: 0000.0 2: 000.00 3: 00.000 4: 0.0000	01h	R/W	
ሂሆሆ	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	
ሂሆሆሆ	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	

ሩፍት	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
ሀ.ሊ.ዕ.ፍ.ር	0038h	-1999~9999	Low Scale of Voltage display	0	R/W	
ሀ.ዘ.ሲ.ፍ.ር	0039h	-1999~9999	High Scale of Voltage display	19999	R/W	
ላ.ሊ.ዕ.ፍ.ር	003Ah	-19999~29999	Low Scale of Current display	0	R/W	
ላ.ዘ.ሲ.ፍ.ር	003Bh	-19999~29999	High Scale of Current display	19999	R/W	
ሀ.ፆ.ሀ.ፆ.ዕ	003Ch	-1999~9999	Voltage display Zero fine adjustment	0	R/W	
ሀ.ፆ.ሀ.ፍ.ገ	003Dh	-1999~9999	Voltage display Span fine adjustment	0	R/W	
ሀ.ፆ.ፍ.ር.ሊ	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	
ላ.ፆ.ሀ.ፆ.ዕ	003Fh	-19999~29999	Current display Zero fine adjustment	0	R/W	
ላ.ፆ.ሀ.ፍ.ገ	0040h	-19999~29999	Current display Span fine adjustment	0	R/W	
ላ.ፆ.ፍ.ር.ሊ	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	
ሀ.ሊ.ዕ.ር.ፎ.ት	0042h	-1999~9999	Low Cut for voltage display	0	R/W	
ላ.ሊ.ዕ.ር.ፎ.ት	0043h	-1999~9999	Low Cut for current display	0	R/W	
ላ.ሀ.ገ	0044h	1~99	Average display for voltage and current	5	R/W	
ሎ.ሀ.ላ.ሀ.ገ	0045h	1~10	Moving Average display for voltage and current	1	R/W	
ደ.ፍ.ሲ.ፎ.ት	0046h	0~99	Digital Filter for voltage and current	0	R/W	
ፆ.ር.ዕ.ደ.ፎ.ት	0047h	0000~9999	Pass Code	1000	R/W	
ፍ.ሊ.ዕ.ር.ፎ.ት	0048h	0~3	Function Lock 0: none 1: User Level 2: Engineer Level 3: All	00h	R/W	
ፎ.ሊ.ሩ.ደ.ፎ.ት	0049h	0~1	Reset for +energy 0: No 1: Yes	00h	R/W	

Name	Address	Range	Explain	Initial	Write/Read	Note
ሩ.ዘ.ሩ.ፍ.ት	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
ur 4.5b	004Dh	0000~9999	Voltage start band of Relay	0	R/W	
ur 4.5d	004Eh	0000~5999 (0.1second)	Voltage start delay time of Relay	0	R/W	
Ar 4.5b	004Fh	0000~9999	Current start band of Relay	0	R/W	
Ar 4.5d	0050h	0000~5999 (0.1second)	Current start delay time of Relay	0	R/W	
ur 4.5b	0051h	0000~9999	Power(kW) start band of Relay	0	R/W	
ur 4.5d	0052h	0000~5999 (0.1second)	Power(kW) start delay time of Relay	0	R/W	
r 15EL	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	
r 4 lnd	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	
r 4 lHY	0055h	0000~5000	Hysteresis of Relay 1	0	R/W	
r 4 lrd	0056h	0000~5999 (0.1second)	Energized Delay Time of Relay 1	0	R/W	
r 4 lFd r 4 lot	0057h	0000~5999 (0.1second)	r 4 lnd is N/R/C mode , display r 4 lot De-Energized Delay Time of Relay 1	0	R/W	
r 25EL	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	
r 42nd	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
r 42HY	005Ah	0000~5000	Hysteresis of Relay 2	0	R/W	
r 42rd	005Bh	0000~5999 (0.1second)	Energized Delay Time of Relay 2	0	R/W	
r 42Fd r 42ot	005Ch	0000~5999 (0.1second)	r 42nd is N/R/C mode , display r 42ot De-Energized Delay Time of Relay 2	0	R/W	

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	
005Eh	0~8	Relay 3 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	
005Fh	0000~5000	Hysteresis of Relay 3	0	R/W	
0060h	0000~5999 (0.1second)	Energized Delay Time of Relay 3	0	R/W	
0061h	0000~5999 (0.1second)	0060h is N/R/C mode , display 0060h De-Energized Delay Time of Relay 3	0	R/W	
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	
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	
0064h	0000~5000	Hysteresis of Relay 4	0	R/W	
0065h	0000~5999 (0.1second)	Energized Delay Time of Relay 4	0	R/W	
0066h	0000~5999 (0.1second)	0065h is N/R/C mode , display 0065h De-Energized Delay Time of Relay 4	0	R/W	
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
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		

EC I2	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	ECl debouncing 5~255 *12mSec	12	R/W	

【 AO Group 】

Name	Address	Range	Explain	Initial	Write/Read	Note
RoSEL	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	
RoTYP	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	
PSCLR	006Fh	0~3	The clear of AO_ZERO and AO_SPAN 0: None 1: AO_ZERO 2: AO_SPAN 3: Both	0	R/W	
RoLnt	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	