RS485 ModBus RTU Mode

1. Function 03H (Read Holding Registers)

Request Data Frame; EX: Read the data of display value(0000H starts from 1 Word)

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: The response value is ”0”

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

Request Data Frame (EX: Continue to request the data of 10 points)

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	--	--

2. Writing Command by 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	00H	00H	02H	08H	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	00H	00H	02H	08H	0BH

ADDRESS TABLE **Address numbers are Hexadecimal

➢ User Level

Name	Address	Range	Explain	Initial	Write/Read	Note
PV	0000h	-19999~29999	Present Value		R	
PV.HD	0001h		PV Hold		R	
n.in	0002h	-19999~29999	The Minimum of PV		R	
nAS	0003h	-19999~29999	The Maximum of PV		R	
SYSTEM STATUS	0004h		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	00h	R	
n.rSt	0005h	0~1	Reset Maximum & Minimum Value **0**:No **1**:Yes	00h	R/W	
rS485	0006h	-19999~29999	PV showing from RS485 command(data)	00h	R/W	

➢ Engineer Level

【Input Group】

Name	Address	Range	Explain	Initial	Write/Read	Note
RESERVED	0007h		**No use unless DP1-PR**			
A.tYP		0~5	**The address is for DP1-PR only** Analogue Input Type **0:** 0~10V **1:** 0~5V **2:** 1~5V **3:** 0~20mA **4:**4~20mA **5:**0~10mA			
Pu.dP	0008h	0~4	PV Decimal Point	00h	R/W	

			0: 00000 **1:** 0000.0 **2:** 000.00 **3:** 00.000 **4:** 0.0000			
LoSC	0009h	-19999~29999	Low Scale	0	R/W	
HiSC	000Ah	-19999~29999	High Scale	19999	R/W	
PuPro	000Bh	-19999~29999	PV ZERO	0	R/W	
PuSPn	000Ch	-19999~29999	PV SPAN	0	R/W	
P.S.rSt	000Dh	0~3	The clear of PV_ZERO and PV_SPAN **0:** None **1:** PV_ZERO **2:** PV_SPAN **3:** Both	00h	R/W	
dSPLY	000Eh	0~3	Display Mode **0:**PV **1:** Minimum Hold **2:** Maximum Hold **3:** RS485	00h	R/W	
LoCUt	000Fh	-19999~19999	Low Cut	0	R/W	
AuG	0010h	1~99	Average	5	R/W	
dFiLt	0011h	0~99	Digital Filter	0	R/W	
PCodE	0012h	0000~9999	Pass Code	1000	R/W	
FLoCt	0013h	0~3	Function Lock **0:** none **1:** User Level **2:** Engineer Level **3:** All	00h	R/W	

【RS485 Group】

Name	Address	Range	Explain	Initial	Write/Read	Note
AdrES	0014h	1~255	RS485 address	1	R/W	
bAUd	0015h	0~5	RS485 baud rate **0:**1200 **1:**2400 **2:**4800 **3:**9600 **4:**19200 **5:**38400	03h	R/W	
Pr itY	0016h	0~3	RS485 parity **0:** n-8-1 **1:** n-8-2, **2:** odd, **3:** even,	01h	R/W	