

## Modbus RTU Mode

Register	Register Name	Type	Saved	Scaled	Units	Range	Register Description
1000	Σvoltage	R	N	V	V / (Scale Factor V)	0~32767	
1001	Σcurrent	R	N	A	mA / (Scale Factor A)	0~32767	
1002	Σwatt	R	N	E	W / (Scale Factor E)	0~+/-32767	
1003	Σvar	R	N	E	Var / (Scale Factor E)	0~+/-32767	
1004	ΣVA	R	N	E	VA / (Scale Factor E)	0~32767	
1005	ΣPF	R	N	N	COSθ	0~+/-1000	
1006	Frequency	R	N	N	0.01Hz	0~6600	
1007	Σwatt hour	R	Y	H	WH	0~9,999,999,999	
1008							
1009							
1010							
1011	Σvar hour	R	Y	H	VarH	0~9,999,999,999	
1012							
1013							
1014							
1015	Σdemand watt	R	Y	E	WD / (Scale Factor E)	0~+/-32767	Demand Watt (MP220)
1016	V (R-S) Voltage	R	N	V	V / (Scale Factor V)	0~32767	
1017	V (S-T) Voltage	R	N	V	V / (Scale Factor V)	0~32767	
1018	V (T-R) Voltage	R	N	V	V / (Scale Factor V)	0~32767	
1019	V (R-N) Voltage	R	N	V	V / (Scale Factor V)	0~32767	
1020	V (S-N) Voltage	R	N	V	V / (Scale Factor V)	0~32767	
1021	V (T-N) Voltage	R	N	V	V / (Scale Factor V)	0~32767	
1022	I (R) Current	R	N	A	mA / (Scale Factor A)	0~32767	
1023	I (S) Current	R	N	A	mA / (Scale Factor A)	0~32767	
1024	I (T) Current	R	N	A	mA / (Scale Factor A)	0~32767	
1025	Neutral Current	R	N	A	mA / (Scale Factor A)	0~32767	
1026	W (R)	R	N	E	W / (Scale Factor E)	0~+/-32767	Real power , Phase R
1027	W (S)	R	N	E	W / (Scale Factor E)	0~+/-32767	Real power , Phase S
1028	W (T)	R	N	E	W / (Scale Factor E)	0~+/-32767	Real power , Phase T
1029	Var (R)	R	N	E	Var / (Scale Factor E)	0~+/-32767	Reactive power , Phase R
1030	Var (S)	R	N	E	Var / (Scale Factor E)	0~+/-32767	Reactive power , Phase S
1031	Var (T)	R	N	E	Var / (Scale Factor E)	0~+/-32767	Reactive power , Phase T
1032	VA (R)	R	N	E	VA / (Scale Factor E)	0~32767	Apparent power , Phase R
1033	VA (S)	R	N	E	VA / (Scale Factor E)	0~32767	Apparent power , Phase S
1034	VA (T)	R	N	E	VA / (Scale Factor E)	0~32767	Apparent power , Phase T
1035	Pf (R)	R	N	N	COSθ	0~+/-1000	Power factor , Phase R
1036	Pf (S)	R	N	N	COSθ	0~+/-1000	Power factor , Phase S
1037	Pf (T)	R	N	N	COSθ	0~+/-1000	Power factor , Phase T
1038	Relay status	R	N	N	----	0 to 3	Bit0 : Relay H1 Bit1 : Relay H2
1039	Digital input ( Option )	R	N	N	----	0 to 3	Bit0 : Digital input 1 Bit1 : Digital input 2

## Modbus RTU Mode ( Maximum )

Register	Register Name	Type	Saved	Scaled	Units	Range	Register Description
1050	Maximum ΣVoltage	R	N	V	V / (Scale Factor V)	0~32767	
1051	MaximumΣCurrent	R	N	A	mA / (Scale Factor A)	0~32767	
1052	MaximumΣwatt	R	N	E	W / (Scale Factor E)	0~+/-32767	
1053	MaximumΣvar	R	N	E	Var / (Scale Factor E)	0~+/-32767	
1054	MaximumΣVA	R	N	E	VA / (Scale Factor E)	0~32767	
1055	MaximumΣPf	R	N	N	COSθ	0~+/-1000	
1056	Maximum Frequency	R	N	N	0.01Hz	0~6600	
1057	MaximumΣdemand watt	R	Y	E	WD / (Scale Factor E)	0~+/-32767	Demand Watt
1058	Maximum V (R-S) Voltage	R	N	V	V / (Scale Factor V)	0~32767	
1059	Maximum V (S-T) Voltage	R	N	V	V / (Scale Factor V)	0~32767	
1060	Maximum V (T-R) Voltage	R	N	V	V / (Scale Factor V)	0~32767	
1061	Maximum V (R-N) Voltage	R	N	V	V / (Scale Factor V)	0~32767	
1062	Maximum V (S-N) Voltage	R	N	V	V / (Scale Factor V)	0~32767	
1063	Maximum V (T-N) Voltage	R	N	V	V / (Scale Factor V)	0~32767	
1064	Maximum I (R) Current	R	N	A	mA / (Scale Factor A)	0~32767	
1065	Maximum I (S) Current	R	N	A	mA / (Scale Factor A)	0~32767	
1066	Maximum I (T) Current	R	N	A	mA / (Scale Factor A)	0~32767	
1067	Maximum Neutral Current	R	N	A	mA / (Scale Factor A)	0~32767	
1068	Maximum W (R)	R	N	E	W / (Scale Factor E)	0~+/-32767	Real power , Phase R
1069	Maximum W (S)	R	N	E	W / (Scale Factor E)	0~+/-32767	Real power , Phase S
1070	Maximum W (T)	R	N	E	W / (Scale Factor E)	0~+/-32767	Real power , Phase T
1071	Maximum Var (R)	R	N	E	Var / (Scale Factor E)	0~+/-32767	Reactive power , Phase R
1072	Maximum Var (S)	R	N	E	Var / (Scale Factor E)	0~+/-32767	Reactive power , Phase S
1073	Maximum Var (T)	R	N	E	Var / (Scale Factor E)	0~+/-32767	Reactive power , Phase T
1074	Maximum VA (R)	R	N	E	VA / (Scale Factor E)	0~32767	Apparent power , Phase R
1075	Maximum VA (S)	R	N	E	VA / (Scale Factor E)	0~32767	Apparent power , Phase S
1076	Maximum VA (T)	R	N	E	VA / (Scale Factor E)	0~32767	Apparent power , Phase T
1077	Maximum Pf (R)	R	N	N	COSθ	0~+/-1000	Power factor , Phase R
1078	Maximum Pf (S)	R	N	N	COSθ	0~+/-1000	Power factor , Phase S
1079	Maximum Pf (T)	R	N	N	COSθ	0~+/-1000	Power factor , Phase T

## Modbus RTU Mode ( Configuration )

Register	Register Name	Type	Saved	Scaled	Units	Range	Register Description
2000	Voltage scale factor V	R	N	N	----	-2 to 1	-2 : Scale by 0.01
							-1 : Scale by 0.1
							0 : Scale by 1
							1 : Scale by 10
2001	Current scale factor A	R	N	N	----	-4 to 0	-4 : Scale by 0.0001
							-3 : Scale by 0.001
							-2 : Scale by 0.01
							-1 : Scale by 0.1
2002	Watt, Var , VA scale factor E	R	N	N	----	-7 to 1	-7 : Scale by 0.000001
							-6 : Scale by 0.00001
							-5 : Scale by 0.0001
							-4 : Scale by 0.001
							-3 : Scale by 0.01
							-2 : Scale by 0.1
							-1 : Scale by 0.1
							0 : Scale by 1
1 : Scale by 10							
2003	Reversed	R	N	N	----	0	
2004	PT	R/W	Y	N	----	1~9999	Voltage Ratio
2005	CT	R/W	Y	N	----	1~9999	Current Ratio
2006	Power Demand interval	R/W	Y	N	Minute	Note 1	Demand interval
2007	Relay type H2	R/W	Y	N	----	0 to 3	0 : $\Sigma$ voltage
							1 : $\Sigma$ current
							2 : $\Sigma$ watt
							3: Pulse
2008	Relay Hi Set 2 Value	R/W	Y	N	----	0~9999	Relay Hi Set 2 Value ( secondary value )
2009	Relay Hi Set 1 Value	R/W	Y	N	----	0~9999	Relay Hi Set 1 Value ( secondary value )
2010	Reset Maximum Value	W	N	N	----	0 to 1	1 : reset other : illegal
2011	Reset Maximum Demand	W	N	N	----	0 to 1	1 : reset other : illegal
2012	Reset Energy Value	W	N	N	----	0 to 1	1 : reset other : illegal
2013	Relay type H1	R/W	Y	N	----	0 to 3	0 : $\Sigma$ voltage
							1 : $\Sigma$ current
							2 : $\Sigma$ watt
							3: Pulse
2030	D-MOD	R/W	Y	N	----	0 or 1	0:block 1:roll
2031	D-NUM	R/W	Y	N	----	Note 2	
2032	T-MOD	R/W	Y	N	----	0 OR 1	0:V 1:A
2033	Reset S-TIM	W	N	N	----	0 or 1	1:reset
2034	Ip0	R/W	Y	N	----	0~255	
2035	Ip1	R/W	Y	N	----	0~255	
2036	Ip2	R/W	Y	N	----	0~255	
2037	Ip3	R/W	Y	N	----	0~255	
2038	PORT NUM	R/W	Y	N	----	0 or 1	0.348611111
							0.390972222
2039	Subnet_Mask0	R/W	Y	N	----	0~255	
2040	Subnet_Mask1	R/W	Y	N	----	0~255	
2041	Subnet_Mask2	R/W	Y	N	----	0~255	
2042	Subnet_Mask3	R/W	Y	N	----	0~255	
2043	Gateway0	R/W	Y	N	----	0~255	
2044	Gateway1	R/W	Y	N	----	0~255	
2045	Gateway2	R/W	Y	N	----	0~255	
2046	Gateway3	R/W	Y	N	----	0~255	

Note 1:1,2,3,4,5,6,10,12,15,20,30,60

Note 2:1,2,3,4,5,6,10

## WATTHOUR Set-up start value 瓦時通訊填入預設值

Register	Register Name	Type	Saved	Scaled	Units	Range	Register Description
2020	$\Sigma$ watt hour Set-up start value	W	Y	H	BCD	0	(MSB)
2021		W	Y	H	BCD	1234	
2022		W	Y	H	BCD	5678	
2023		W	Y	H	BCD	9000	(LSB)
2024		W	Y				1 : 寫入資料

Ex : 1 2 3 4 5 6 7 8 9 . 0 0 0 KWH

SETP1	2020	:	0	(Hex)
SETP 2	2021	:	1234	(Hex)
SETP 3	2022	:	5678	(Hex)
SETP 4	2023	:	9000	(Hex)
SETP 5	2024	:	1	