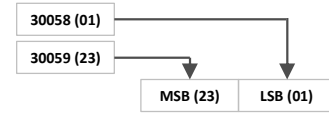


Modbus Parameters		Default
Mode:	RTU (LSB first, apply address offset of +1 for Function 3 Holding Registers)	
Baudrate:	300 / 600 / 1200 / 2400 / 4800 / 9600 / 19200 bps	9600
Data Bit:	8	
Stop Bits:	1 or 2	1
Parity:	None / Odd / Even	None
Functions:	3 / 4	
Scan Rate:	≤ 100mS	

FLOAT REVERSE WORD Data-structure example:

Start Register: 30058 - Total Active Energy (System) kWh
 Data Registers: 30058 = LSB (01), 30059 = MSB (23)
 FLOAT ordering = MSB.LSB (2301)



Register List

Starting Address (Decimal)	Starting Register (Hex)	Parameter	Unit	Function	Read / Write	Length	Data structure	Range / Value	Default
30000	0x00	Voltage V1-N	V	3	R	2	FLOAT REVERSE WORD	-	-
30002	0x02	Voltage V2-N	V	3	R	2	FLOAT REVERSE WORD	-	-
30004	0x04	Voltage V3-N	V	3	R	2	FLOAT REVERSE WORD	-	-
30006	0x06	Average Voltage L-N	V	3	R	2	FLOAT REVERSE WORD	-	-
30008	0x08	Voltage V1-2	V	3	R	2	FLOAT REVERSE WORD	-	-
30010	0x0A	Voltage V2-3	V	3	R	2	FLOAT REVERSE WORD	-	-
30012	0x0C	Voltage V3-1	V	3	R	2	FLOAT REVERSE WORD	-	-
30014	0x0E	Average Voltage L-L	V	3	R	2	FLOAT REVERSE WORD	-	-
30016	0x10	Current I1	A	3	R	2	FLOAT REVERSE WORD	-	-
30018	0x12	Current I2	A	3	R	2	FLOAT REVERSE WORD	-	-
30020	0x14	Current I3	A	3	R	2	FLOAT REVERSE WORD	-	-
30022	0x16	Average Current	A	3	R	2	FLOAT REVERSE WORD	-	-
30024	0x18	kW1	kW	3	R	2	FLOAT REVERSE WORD	-	-
30026	0x1A	kW2	kW	3	R	2	FLOAT REVERSE WORD	-	-
30028	0x1C	kW3	kW	3	R	2	FLOAT REVERSE WORD	-	-
30030	0x1E	kVA1	kVA	3	R	2	FLOAT REVERSE WORD	-	-
30032	0x20	kVA2	kVA	3	R	2	FLOAT REVERSE WORD	-	-
30034	0x22	kVA3	kVA	3	R	2	FLOAT REVERSE WORD	-	-
30036	0x24	kVAr1	kVAr	3	R	2	FLOAT REVERSE WORD	-	-
30038	0x26	kVAr2	kVAr	3	R	2	FLOAT REVERSE WORD	-	-
30040	0x28	kVAr3	kVAr	3	R	2	FLOAT REVERSE WORD	-	-
30042	0x2A	Total kW	kW	3	R	2	FLOAT REVERSE WORD	-	-
30044	0x2C	Total kVA	kVA	3	R	2	FLOAT REVERSE WORD	-	-
30046	0x2E	Total kVAr	kVAr	3	R	2	FLOAT REVERSE WORD	-	-
30048	0x30	PF1		3	R	2	FLOAT REVERSE WORD	-	-
30050	0x32	PF2		3	R	2	FLOAT REVERSE WORD	-	-
30052	0x34	PF3		3	R	2	FLOAT REVERSE WORD	-	-
30054	0x36	Average PF		3	R	2	FLOAT REVERSE WORD	-	-
30056	0x38	Frequency	Hz	3	R	2	FLOAT REVERSE WORD	-	-
30058	0x3A	Total net kWh	kWh	3	R	2	FLOAT REVERSE WORD	-	-
30060	0x3C	Total net kVAh	kVAh	3	R	2	FLOAT REVERSE WORD	-	-
30062	0x3E	Total net kVArh	kVArh	3	R	2	FLOAT REVERSE WORD	-	-
30064	0x40	kW Max Active Power	kW	3	R	2	FLOAT REVERSE WORD	-	-
30066	0x42	kW Min Active Power	kW	3	R	2	FLOAT REVERSE WORD	-	-
30068	0x44	kVAr Max Reactive Power	kVAr	3	R	2	FLOAT REVERSE WORD	-	-
30070	0x46	kVAr Min Reactive Power	kVAr	3	R	2	FLOAT REVERSE WORD	-	-
30072	0x48	kVA Max Apparent Power	kVA	3	R	2	FLOAT REVERSE WORD	-	-
30074	0x4A	Max I1 Current Demand	A	3	R	2	FLOAT REVERSE WORD	-	-
30076	0x4B	Max I2 Current Demand	A	3	R	2	FLOAT REVERSE WORD	-	-
30078	0x4E	Max I3 Current Demand	A	3	R	2	FLOAT REVERSE WORD	-	-
30080	0x50	Max Average Current Demand	A	3	R	2	FLOAT REVERSE WORD	-	-
30082	0x52	Run hour	hrs	3	R	2	FLOAT REVERSE WORD	-	-
30084	0x54	kWh1 (Imp)	kWh	3	R	2	FLOAT REVERSE WORD	-	-
30086	0x56	kWh2 (Imp)	kWh	3	R	2	FLOAT REVERSE WORD	-	-
30088	0x58	kWh3 (Imp)	kWh	3	R	2	FLOAT REVERSE WORD	-	-
30090	0x5A	kWh1 (Exp)	kWh	3	R	2	FLOAT REVERSE WORD	-	-
30092	0x5C	kWh2 (Exp)	kWh	3	R	2	FLOAT REVERSE WORD	-	-
30094	0x5E	kWh3 (Exp)	kWh	3	R	2	FLOAT REVERSE WORD	-	-
30096	0x60	Total kWh (Imp)	kWh	3	R	2	FLOAT REVERSE WORD	-	-
30098	0x62	Total kWh (Exp)	kWh	3	R	2	FLOAT REVERSE WORD	-	-
30100	0x64	kVArh1 (Imp)	kVArh	3	R	2	FLOAT REVERSE WORD	-	-
30102	0x66	kVArh2 (Imp)	kVArh	3	R	2	FLOAT REVERSE WORD	-	-
30104	0x68	kVArh3 (Imp)	kVArh	3	R	2	FLOAT REVERSE WORD	-	-
30106	0x6A	kVArh1 (Exp)	kVArh	3	R	2	FLOAT REVERSE WORD	-	-
30108	0x6C	kVArh2 (Exp)	kVArh	3	R	2	FLOAT REVERSE WORD	-	-
30110	0x6E	kVArh3 (Exp)	kVArh	3	R	2	FLOAT REVERSE WORD	-	-
30112	0x70	Total kVArh (Imp)	kVArh	3	R	2	FLOAT REVERSE WORD	-	-
30114	0x72	Total kVArh (Exp)	kVArh	3	R	2	FLOAT REVERSE WORD	-	-
30116	0x74	kVAh1	kVAh	3	R	2	FLOAT REVERSE WORD	-	-
30118	0x76	kVAh2	kVAh	3	R	2	FLOAT REVERSE WORD	-	-
30120	0x78	kVAh3	kVAh	3	R	2	FLOAT REVERSE WORD	-	-
30122	0x7A	Neutral Current	A	3	R	2	FLOAT REVERSE WORD	-	-
30124	0x7C	THD of 1st Phase Voltage	%	3	R	2	FLOAT REVERSE WORD	-	-
30126	0x7E	THD of 2nd Phase Voltage	%	3	R	2	FLOAT REVERSE WORD	-	-
30128	0x80	THD of 3rd Phase Voltage	%	3	R	2	FLOAT REVERSE WORD	-	-
30130	0x82	THD of Voltage V1-2	%	3	R	2	FLOAT REVERSE WORD	-	-
30132	0x84	THD of Voltage V2-3	%	3	R	2	FLOAT REVERSE WORD	-	-
30134	0x86	THD of Voltage V3-1	%	3	R	2	FLOAT REVERSE WORD	-	-
30136	0x88	THD of Current I1	%	3	R	2	FLOAT REVERSE WORD	-	-
30138	0x8A	THD of Current I2	%	3	R	2	FLOAT REVERSE WORD	-	-
30140	0x8C	THD of Current I3	%	3	R	2	FLOAT REVERSE WORD	-	-
30684	0x2AC	Serial No.		3	R	2	HEX	-	-

Starting Address (Decimal)	Starting Register (Hex)	Parameter	Unit	Function	Read / Write	Length	Data structure	Range / Value	Default
30700	0x2BC	Phase Sequence Indicator		3	R	2	INT	0: Clockwise 1: Anticlockwise 2: Invalid	-
30702	0x2BE	Existing Max Active Power	kW	3	R	2	FLOAT REVERSE WORD	-	-
30704	0x2C0	Existing Min Active Power	kW	3	R	2	FLOAT REVERSE WORD	-	-
30706	0x2C2	Existing Max Reactive Power	kVAr	3	R	2	FLOAT REVERSE WORD	-	-
30708	0x2C4	Existing Min Reactive Power	kVAr	3	R	2	FLOAT REVERSE WORD	-	-
30710	0x2C6	Existing Max Apparent Power	kVA	3	R	2	FLOAT REVERSE WORD	-	-
30712	0x2C8	Existing Max I1 Demand	A	3	R	2	FLOAT REVERSE WORD	-	-
30714	0x2CA	Existing Max I2 Demand	A	3	R	2	FLOAT REVERSE WORD	-	-
30716	0x2CC	Existing Max I3 Demand	A	3	R	2	FLOAT REVERSE WORD	-	-
30718	0x2CE	Existing Max Avg. Current Demand	A	3	R	2	FLOAT REVERSE WORD	-	-
31000	0x3E8	Voltage V1-N	mV	3	R	2	HEX	-	-
31002	0x3EA	Voltage V2-N	mV	3	R	2	HEX	-	-
31004	0x3EC	Voltage V3-N	mV	3	R	2	HEX	-	-
31006	0x3EE	Average Voltage L-N	mV	3	R	2	HEX	-	-
31008	0x3F0	Voltage V1-2	mV	3	R	2	HEX	-	-
31010	0x3F2	Voltage V2-3	mV	3	R	2	HEX	-	-
31012	0x3F4	Voltage V3-1	mV	3	R	2	HEX	-	-
31014	0x3F6	Average Voltage L-L	mV	3	R	2	HEX	-	-
31016	0x3F8	Current I1	mA	3	R	2	HEX	-	-
31018	0x3FA	Current I2	mA	3	R	2	HEX	-	-
31020	0x3FC	Current I3	mA	3	R	2	HEX	-	-
31022	0x3FE	Average Current	mA	3	R	2	HEX	-	-
31024	0x400	kW1	W	3	R	2	HEX	-	-
31026	0x402	kW2	W	3	R	2	HEX	-	-
31028	0x404	kW3	W	3	R	2	HEX	-	-
31030	0x406	kVA1	VA	3	R	2	HEX	-	-
31032	0x408	lVA2	VA	3	R	2	HEX	-	-
31034	0x40A	kVA3	VA	3	R	2	HEX	-	-
31036	0x40C	kVAr1	VAr	3	R	2	HEX	-	-
31038	0x40E	kVAr2	VAr	3	R	2	HEX	-	-
31040	0x410	kVAr3	VAr	3	R	2	HEX	-	-
31042	0x412	Total kW	W	3	R	2	HEX	-	-
31044	0x414	Total kVA	VA	3	R	2	HEX	-	-
31046	0x416	Total kVAr	VAr	3	R	2	HEX	-	-
31048	0x418	Neutral Current	mA	3	R	2	HEX	-	-
31050	0x41A	PF1		3	R	1	HEX	-	-
31051	0x41B	PF2		3	R	1	HEX	-	-
31052	0x41C	PF3		3	R	1	HEX	-	-
31053	0x41D	Average PF		3	R	1	HEX	-	-
31054	0x41E	Total net kWh	Wh	3	R	3	HEX	-	-
31057	0x421	Total net kVAh	VAh	3	R	3	HEX	-	-
31060	0x424	Total net kVArh	VArh	3	R	3	HEX	-	-
31063	0x427	Frequency	Hz	3	R	1	HEX	-	-
31064	0x428	kW Max Active Power	W	3	R	2	HEX	-	-
31066	0x42A	kW Min Active Power	W	3	R	2	HEX	-	-
31068	0x42C	kVAr Max Reactive Power	VAr	3	R	2	HEX	-	-
31070	0x42E	kVAr Min Reactive Power	VAr	3	R	2	HEX	-	-
31072	0x430	kVA Max Apparent Power	VA	3	R	2	HEX	-	-
31074	0x432	Max I1 Current Demand	mA	3	R	2	HEX	-	-
31076	0x434	Max I2 Current Demand	mA	3	R	2	HEX	-	-
31078	0x436	Max I3 Current Demand	mA	3	R	2	HEX	-	-
31080	0x438	Max Average Current Demand	mA	3	R	2	HEX	-	-
31082	0x43A	Run hour	hr	3	R	2	HEX	-	-
31084	0x43C	kWh1 (Imp)	Wh	3	R	3	HEX	-	-
31087	0x43F	kWh2 (Imp)	Wh	3	R	3	HEX	-	-
31090	0x442	kWh3 (Imp)	Wh	3	R	3	HEX	-	-
31093	0x445	kWh1 (Exp)	kW	3	R	3	HEX	-	-
31096	0x448	kWh2 (Exp)	kW	3	R	3	HEX	-	-
31099	0x44B	kWh3 (Exp)	kW	3	R	3	HEX	-	-
31102	0x44E	Total kWh (Imp)	kW	3	R	3	HEX	-	-
31105	0x451	Total kWh (Exp)	kW	3	R	3	HEX	-	-
31108	0x454	kVArh1 (Imp)	Varh	3	R	3	HEX	-	-
31111	0x457	kVArh2 (Imp)	Varh	3	R	3	HEX	-	-
31114	0x45A	kVArh3 (Imp)	Varh	3	R	3	HEX	-	-
31117	0x45D	kVArh1 (Exp)	Varh	3	R	3	HEX	-	-
31120	0x460	kVArh2 (Exp)	Varh	3	R	3	HEX	-	-
31123	0x463	kVArh3 (Exp)	Varh	3	R	3	HEX	-	-
31126	0x466	Total kVArh (Imp)	Varh	3	R	3	HEX	-	-
31129	0x469	Total kVArh (Exp)	Varh	3	R	3	HEX	-	-
31132	0x46C	kVAh1	VAh	3	R	3	HEX	-	-
31135	0x46F	kVAh2	VAh	3	R	3	HEX	-	-
31138	0x472	kVAh3	VAh	3	R	3	HEX	-	-
31200	4B0	kWh1 (Imp) RC	-	3	R	1	INT	Rollover Counter (RC) Increment when energy rollover from 99999999 to 0	0
31201	4B1	kWh2 (Imp) RC	-	3	R	1	INT		0
31202	4B2	kWh3 (Imp) RC	-	3	R	1	INT		0
31203	4B3	kW1 (Exp) RC	-	3	R	1	INT		0
31204	4B4	kW2 (Exp) RC	-	3	R	1	INT		0
31205	4B5	kW3 (Exp) RC	-	3	R	1	INT		0
31206	4B6	Total kWh (Imp) RC	-	3	R	1	INT		0
31207	4B7	Total kWh (Exp) RC	-	3	R	1	INT		0
31208	4B8	Total Net kWh RC	-	3	R	1	INT		0
31209	4B9	kVAh1 RC	-	3	R	1	INT		0
31210	4BA	kVAh2 RC	-	3	R	1	INT		0
31211	4BB	kVAh3 RC	-	3	R	1	INT		0

Starting Address (Decimal)	Starting Register (Hex)	Parameter	Unit	Function	Read / Write	Length	Data structure	Range / Value	Default
31212	4BC	Total Net kVAh RC	-	3	R	1	INT		0
31213	4BD	kVArh1 (Imp) RC	-	3	R	1	INT		0
31214	4BE	kVArh2 (Imp) RC	-	3	R	1	INT		0
31215	4BF	kVArh3 (Imp) RC	-	3	R	1	INT		0
31216	4C0	kVArh1 (Exp) RC	-	3	R	1	INT		0
31217	4C1	kVArh2 (Exp) RC	-	3	R	1	INT		0
31218	4C2	kVArh3 (Exp) RC	-	3	R	1	INT		0
31219	4C3	Total kVArh (Imp) RC	-	3	R	1	INT		0
31220	4C4	Total kVArh (Exp) RC	-	3	R	1	INT		0
31221	4C5	Total Net kVArh RC	-	3	R	1	INT		0
40000	0x00	Password		4	R/W	1	INT	0000 - 9998	1000
40001	0x01	Network Selection		4	R	1	INT	0: 3P4W 2: 1P2W-P1	0
40002	0x02	CT Secondary	A	4	R	1	INT	1	1
40003	0x03	CT Primary	A	4	R	1	INT	1 - 6000	1
40004	0x04	PT Secondary	V	4	R	1	INT	173 - 415	350
40005	0x05	PT Primary	V	4	R	2	INT	100 - 600	350
40007	0x07	Slave ID		4	R/W	1	INT	1 - 255	1
40008	0x08	Baud Rate	bps	4	R/W	1	INT	0: 300 1: 600 2: 1200 3: 2400 4: 4800 5: 9600 6: 19200	5
40009	0x09	Parity		4	R/W	1	INT	0: None 1: Odd 2: Even	0
40010	0x0A	Stop Bit		4	R/W	1	INT	0: 1 1: 2	0
40011	0x0B	Backlight OFF	sec	4	R/W	1	INT	0 - 7200	0
40016	0x10	Auto Mode Pages		4	R/W	1	INT	1 - 21	21
40017	0x11	Page Address Sequence		4	R/W	1	INT	1-21 / 1-First Page; 21-Last Page	1
40018	0x12	Page Address Sequence		4	R/W	1	INT	1-21 / 1-First Page; 21-Last Page	2
40019	0x13	Page Address Sequence		4	R/W	1	INT	1-21 / 1-First Page; 21-Last Page	3
40020	0x14	Page Address Sequence		4	R/W	1	INT	1-21 / 1-First Page; 21-Last Page	4
40021	0x15	Page Address Sequence		4	R/W	1	INT	1-21 / 1-First Page; 21-Last Page	5
40022	0x16	Page Address Sequence		4	R/W	1	INT	1-21 / 1-First Page; 21-Last Page	6
40023	0x17	Page Address Sequence		4	R/W	1	INT	1-21 / 1-First Page; 21-Last Page	7
40024	0x18	Page Address Sequence		4	R/W	1	INT	1-21 / 1-First Page; 21-Last Page	8
40025	0x19	Page Address Sequence		4	R/W	1	INT	1-21 / 1-First Page; 21-Last Page	9
40026	0x1A	Page Address Sequence		4	R/W	1	INT	1-21 / 1-First Page; 21-Last Page	10
40027	0x1B	Page Address Sequence		4	R/W	1	INT	1-21 / 1-First Page; 21-Last Page	11
40028	0x1C	Page Address Sequence		4	R/W	1	INT	1-21 / 1-First Page; 21-Last Page	12
40029	0x1D	Page Address Sequence		4	R/W	1	INT	1-21 / 1-First Page; 21-Last Page	13
40030	0x1E	Page Address Sequence		4	R/W	1	INT	1-21 / 1-First Page; 21-Last Page	14
40031	0x1F	Page Address Sequence		4	R/W	1	INT	1-21 / 1-First Page; 21-Last Page	15
40032	0x20	Page Address Sequence		4	R/W	1	INT	1-21 / 1-First Page; 21-Last Page	16
40033	0x21	Page Address Sequence		4	R/W	1	INT	1-21 / 1-First Page; 21-Last Page	17
40034	0x22	Demand Interval Method		4	R/W	1	INT	0: Sliding 1: Fixed	0
40035	0x23	Demand Interval Duration		4	R/W	1	INT	1 - 30	15
40036	0x24	Demand Interval Length	min	4	R/W	1	INT	1 - 30	1
40043	0x2B	Reset Max		4	W	1	INT	1: Reset all max power & current	-
40045	0x2D	Reset Run Hour		4	W	1	INT	1: Reset run hour	-
40054	0x36	Page Address Sequence		4	R/W	1	INT	1-21 / 1-First Page; 21-Last Page	18
40055	0x37	Page Address Sequence		4	R/W	1	INT	1-21 / 1-First Page; 21-Last Page	19
40057	0x39	Pulse Duration	sec	4	R	1	INT	0.1 - 2.0	0.1
40058	0x3A	Pulse Weight	kWh	4	R	1	INT	0.01 - 99.99	0.1
40059	0x3B	Page Address Sequence		4	R/W	1	INT	1-21 / 1-First Page; 21-Last Page	20
40060	0x3C	Page Address Sequence		4	R/W	1	INT	1-21 / 1-First Page; 21-Last Page	21

Registers of Individual Harmonics Distortion

30xxx	0x	Individual Harmonic # (2nd to 31st)	%	3	R	2	FLOAT REVERSE WORD	-	-
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To determine starting address 30xxx

$$XXX = 143 + ((\text{Harmonic \#} - 2) \times 2) + (60 \times \text{Constant}) \text{ [see table >>>]}$$

Example for 14th Harmonics of Voltage V3-1:

$$XXX = 143 + ((14 - 2) \times 2) + (60 \times 5)$$

$$XXX = 143 + 24 + 300$$

$$XXX = 467$$

Constant	Parameter
0	Voltage V1-N
1	Voltage V2-N
2	Voltage V3-N
3	Voltage V1-2
4	Voltage V2-3
5	Voltage V3-1
6	Current I1
7	Current I2
8	Current I3