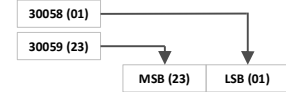


Modbus Parameters	Default
Mode: RTU (LSB first, apply address offset of +1 for Function 3 Holding Registers)	
Baudrate: 300 / 600 / 1200 / 2400 / 4800 / 9600 / 19200 bps	9600
Data Bit: 8	
Stop Bits: 1 or 2	1
Parity: None / Odd / Even	None
Functions: 3 / 4	
Scan Rate: ≤ 100mS	

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)



Readable parameters for 4 Channel Meter : [Length (Register) : 2 ; Data		
ADDRESS	HEX ADDRESS	PARAMETER
30000	0x00	1st Phase line to neutral voltage of CH 1
30002	0x02	2nd Phase line to neutral voltage of CH 1
30004	0x04	3rd Phase line to neutral voltage of CH 1
30006	0x06	Average line to neutral voltage of CH 1
30008	0x08	1st Phase line to line voltage of CH 1
30010	0x0A	2nd Phase line to line voltage of CH 1
30012	0x0C	3rd Phase line to line voltage of CH 1
30014	0x0E	Average line to line voltage of CH 1
30016	0x10	1st Phase current of CH 1
30018	0x12	2nd Phase current of CH 1
30020	0x14	3rd Phase current of CH 1
30022	0x16	Average current of CH 1
30024	0x18	Frequency
30026	0x1A	1st Phase Active Power of CH 1
30028	0x1C	2nd Phase Active Power of CH 1
30030	0x1E	3rd Phase Active Power of CH 1
30032	0x20	Total Active Power of CH 1
30034	0x22	1st Phase Reactive Power of CH 1
30036	0x24	2nd Phase Reactive Power of CH 1
30038	0x26	3rd Phase Reactive Power of CH 1
30040	0x28	Total Reactive Power of CH 1
30042	0x2A	1st Phase Apparent Power of CH 1
30044	0x2C	2nd Phase Apparent Power of CH 1
30046	0x2E	3rd Phase Apparent Power of CH 1
30048	0x30	Total Apparent Power of CH 1
30050	0x32	1st Phase Power Factor of CH 1
30052	0x34	2nd Phase Power Factor of CH 1
30054	0x36	3rd Phase Power Factor of CH 1
30056	0x38	Average Power Factor of CH 1
30058	0x3A	1st Phase Active Energy of CH 1
30060	0x3C	2nd Phase Active Energy of CH 1
30062	0x3E	3rd Phase Active Energy of CH 1
30064	0x40	Total Active Energy of CH 1
30066	0x42	1st Phase Reactive Energy of CH 1
30068	0x44	2nd Phase Reactive Energy of CH 1
30070	0x46	3rd Phase Reactive Energy of CH 1
30072	0x48	Total Reactive Energy of CH 1
30074	0x4A	1st Phase Apparent Energy of CH 1
30076	0x4C	2nd Phase Apparent Energy of CH 1
30078	0x4E	3rd Phase Apparent Energy of CH 1
30080	0x50	Total Apparent Energy of CH 1
30082	0x52	1st Phase line to neutral voltage of CH 2
30084	0x54	2nd Phase line to neutral voltage of CH 2
30086	0x56	3rd Phase line to neutral voltage of CH 2
30088	0x58	Average line to neutral voltage of CH 2
30090	0x5A	1st Phase line to line voltage of CH 2
30092	0x5C	2nd Phase line to line voltage of CH 2
30094	0x5E	3rd Phase line to line voltage of CH 2
30096	0x60	Average line to line voltage of CH 2
30098	0x62	1st Phase current of CH 2
30100	0x64	2nd Phase current of CH 2
30102	0x66	3rd Phase current of CH 2
30104	0x68	Average current of CH 2
30106	0x6A	Frequency
30108	0x6C	1st Phase Active Power of CH 2
30110	0x6E	2nd Phase Active Power of CH 2
30112	0x70	3rd Phase Active Power of CH 2
30114	0x72	Total Active Power of CH 2
30116	0x74	1st Phase Reactive Power of CH 2
30118	0x76	2nd Phase Reactive Power of CH 2
30120	0x78	3rd Phase Reactive Power of CH 2
30122	0x7A	Total Reactive Power of CH 2
30124	0x7C	1st Phase Apparent Power of CH 2
30126	0x7E	2nd Phase Apparent Power of CH 2
30128	0x80	3rd Phase Apparent Power of CH 2
30130	0x82	Total Apparent Power of CH 2
30132	0x84	1st Phase Power Factor of CH 2
30134	0x86	2nd Phase Power Factor of CH 2
30136	0x88	3rd Phase Power Factor of CH 2
30138	0x8A	Average Power Factor of CH 2
30140	0x8C	1st Phase Active Energy of CH 2
30142	0x8E	2nd Phase Active Energy of CH 2
30144	0x90	3rd Phase Active Energy of CH 2
30146	0x92	Total Active Energy of CH 2
30148	0x94	1st Phase Reactive Energy of CH 2
30150	0x96	2nd Phase Reactive Energy of CH 2
30152	0x98	3rd Phase Reactive Energy of CH 2
30154	0x9A	Total Reactive Energy of CH 2

30156	0x9C	1st Phase Apparent Energy of CH 2
30158	0x9E	2nd Phase Apparent Energy of CH 2
30160	0xA0	3rd Phase Apparent Energy of CH 2
30162	0xA2	Total Apparent Energy of CH 2
30164	0xA4	1st Phase line to neutral voltage of CH 3
30166	0xA6	2nd Phase line to neutral voltage of CH 3
30168	0xA8	3rd Phase line to neutral voltage of CH 3
30170	0xAA	Average line to neutral voltage of CH 3
30172	0xAC	1st Phase line to line voltage of CH 3
30174	0xAE	2nd Phase line to line voltage of CH 3
30176	0xB0	3rd Phase line to line voltage of CH 3
30178	0xB2	Average line to line voltage of CH 3
30180	0xB4	1st Phase current of CH 3
30182	0xB6	2nd Phase current of CH 3
30184	0xB8	3rd Phase current of CH 3
30186	0xBA	Average current of CH 3
30188	0xBC	Frequency
30190	0xBE	1st Phase Active Power of CH 3
30192	0xC0	2nd Phase Active Power of CH 3
30194	0xC2	3rd Phase Active Power of CH 3
30196	0xC4	Total Active Power of CH 3
30198	0xC6	1st Phase Reactive Power of CH 3
30200	0xC8	2nd Phase Reactive Power of CH 3
30202	0xCA	3rd Phase Reactive Power of CH 3
30204	0xCC	Total Reactive Power of CH 3
30206	0xCE	1st Phase Apparent Power of CH 3
30208	0xD0	2nd Phase Apparent Power of CH 3
30210	0xD2	3rd Phase Apparent Power of CH 3
30212	0xD4	Total Apparent Power of CH 3
30214	0xD6	1st Phase Power Factor of CH 3
30216	0xD8	2nd Phase Power Factor of CH 3
30218	0xDA	3rd Phase Power Factor of CH 3
30220	0xDC	Average Power Factor of CH 3
30222	0xDE	1st Phase Active Energy of CH 3
30224	0xE0	2nd Phase Active Energy of CH 3
30226	0xE2	3rd Phase Active Energy of CH 3
30228	0xE4	Total Active Energy of CH 3
30230	0xE6	1st Phase Reactive Energy of CH 3
30232	0xE8	2nd Phase Reactive Energy of CH 3
30234	0xEA	3rd Phase Reactive Energy of CH 3
30236	0xEC	Total Reactive Energy of CH 3
30238	0xEE	1st Phase Apparent Energy of CH 3
30240	0xF0	2nd Phase Apparent Energy of CH 3
30242	0xF2	3rd Phase Apparent Energy of CH 3
30244	0xF4	Total Apparent Energy of CH 3
30246	0xF6	1st Phase line to neutral voltage of CH 4
30248	0xF8	2nd Phase line to neutral voltage of CH 4
30250	0xFA	3rd Phase line to neutral voltage of CH 4
30252	0xFC	Average line to neutral voltage of CH 4
30254	0xFE	1st Phase line to line voltage of CH 4
30256	0x100	2nd Phase line to line voltage of CH 4
30258	0x102	3rd Phase line to line voltage of CH 4
30260	0x104	Average line to line voltage of CH 4
30262	0x106	1st Phase current of CH 4
30264	0x108	2nd Phase current of CH 4
30266	0x10A	3rd Phase current of CH 4
30268	0x10C	Average current of CH 4
30270	0x10E	Frequency
30272	0x110	1st Phase Active Power of CH 4
30274	0x112	2nd Phase Active Power of CH 4
30276	0x114	3rd Phase Active Power of CH 4
30278	0x116	Total Active Power of CH 4
30280	0x118	1st Phase Reactive Power of CH 4
30282	0x11A	2nd Phase Reactive Power of CH 4
30284	0x11C	3rd Phase Reactive Power of CH 4
30286	0x11E	Total Reactive Power of CH 4
30288	0x120	1st Phase Apparent Power of CH 4
30290	0x122	2nd Phase Apparent Power of CH 4
30292	0x124	3rd Phase Apparent Power of CH 4
30294	0x126	Total Apparent Power of CH 4
30296	0x128	1st Phase Power Factor of CH 4
30298	0x12A	2nd Phase Power Factor of CH 4
30300	0x12C	3rd Phase Power Factor of CH 4
30302	0x12E	Average Power Factor of CH 4
30304	0x130	1st Phase Active Energy of CH 4
30306	0x132	2nd Phase Active Energy of CH 4
30308	0x134	3rd Phase Active Energy of CH 4
30310	0x136	Total Active Energy of CH 4
30312	0x138	1st Phase Reactive Energy of CH 4
30314	0x13A	2nd Phase Reactive Energy of CH 4
30316	0x13C	3rd Phase Reactive Energy of CH 4
30318	0x13E	Total Reactive Energy of CH 4
30320	0x140	1st Phase Apparent Energy of CH 4
30322	0x142	2nd Phase Apparent Energy of CH 4
30324	0x144	3rd Phase Apparent Energy of CH 4
30326	0x146	Total Apparent Energy of CH 4
30328	0x148	Serial No. (Data Structure : Hex)
30330	0x14A	Total Active Energy of all channel.
30332	0x14C	Total Reactive Energy of all channel.
30334	0x14E	Total Apparent Energy of all channel.
30336	0x150	KW MAX Active power of CH 1
30338	0x152	KW MAX Active power of CH 2
30340	0x154	KW MAX Active power of CH 3
30342	0x156	KW MAX Active power of CH 4

30344	0x158	KVA MAX Apparent power of CH 1
30346	0x15A	KVA MAX Apparent power of CH 2
30348	0x15C	KVA MAX Apparent power of CH 3
30350	0x15E	KVA MAX Apparent power of CH 4

MODBUS REGISTER ADDRESSES LIST		
Readable parameters for 12 Channel Meter : [Length (Register) : 2 ;		
ADDRESS	HEX ADDRESS	PARAMETER
30368	0x170	KW MAX Active power of CH 9
30370	0x172	KW MAX Active power of CH 10
30372	0x174	KW MAX Active power of CH 11
30374	0x176	KW MAX Active power of CH 12
30376	0x178	KVA MAX Apparent power of CH 1
30378	0x17A	KVA MAX Apparent power of CH 2
30380	0x17C	KVA MAX Apparent power of CH 3
30382	0x17E	KVA MAX Apparent power of CH 4
30384	0x180	KVA MAX Apparent power of CH 5
30386	0x182	KVA MAX Apparent power of CH 6
30388	0x184	KVA MAX Apparent power of CH 7
30390	0x186	KVA MAX Apparent power of CH 8
30392	0x188	KVA MAX Apparent power of CH 9
30394	0x18A	KVA MAX Apparent power of CH 10
30396	0x18C	KVA MAX Apparent power of CH 11
30398	0x18E	KVA MAX Apparent power of CH 12

MODBUS REGISTER ADDRESSES LIST		
Readable parameters for 12 Channel Meter : [Length (Register) : 2 ;		
30368	0x170	KW MAX Active power of CH 9
30370	0x172	KW MAX Active power of CH 10
30372	0x174	KW MAX Active power of CH 11
30374	0x176	KW MAX Active power of CH 12
30376	0x178	KVA MAX Apparent power of CH 1
30378	0x17A	KVA MAX Apparent power of CH 2
30380	0x17C	KVA MAX Apparent power of CH 3
30382	0x17E	KVA MAX Apparent power of CH 4
30384	0x180	KVA MAX Apparent power of CH 5
30386	0x182	KVA MAX Apparent power of CH 6
30388	0x184	KVA MAX Apparent power of CH 7
30390	0x186	KVA MAX Apparent power of CH 8
30392	0x188	KVA MAX Apparent power of CH 9
30394	0x18A	KVA MAX Apparent power of CH 10
30396	0x18C	KVA MAX Apparent power of CH 11
30398	0x18E	KVA MAX Apparent power of CH 12

MODBUS REGISTER ADDRESSES LIST						
Readable / Writable parameters from RI-D480						
Address	Hex Address	Parameter	Range		Length (Register)	Data Structure
			Min value	Max value		
40000	0x00	Password	0	9998	1	Integer
			Value	Meaning		
40001	0x01	N/W selection	0x0000	3P-4W	1	Integer
			0x0001		1	Integer
			0x0002	1P2W-P1	1	Integer
			0x0003	1P2W-P2	1	Integer
			0x0004	1P2W-P3	1	Integer
		(Valid only for 12 Channel meter)	0x0005	1P2W	1	Integer
			Min value	Max value		
40002	0x02	CT Secondary	1	1	1	Integer
40003	0x03	CT Primary CH1 (Gr 1 for 12 CH Meter)	1	10000	1	Integer
40004	0x04	CT Primary CH2 (Gr 2 for 12 CH Meter)	1	10000	1	Integer
40005	0x05	CT Primary CH3 (Gr 3 for 12 CH Meter)	1	10000	1	Integer
40006	0x06	CT Primary CH4 (Gr 4 for 12 CH Meter)	1	10000	1	Integer
40007	0x07	PT Secondary	100	500	1	Integer
40008	0x08	PT Primary	100	10000	2	Integer
40010	0x0A	Slave ID	1	255		
			Value	Meaning		
40011	0x0B	Baud Rate	0x0000	300	1	Integer
			0x0001	600	1	Integer
			0x0002	1200	1	Integer
			0x0003	2400	1	Integer
			0x0004	4800	1	Integer
			0x0005	9600	1	Integer
			0x0006	19200	1	Integer
40012	0x0C	Parity	0x0000	None	1	Integer
			0x0001	Odd	1	Integer
			0x0002	Even	1	Integer
40013	0x0D	Stop Bit	0x0000	1	1	Integer
			0x0001	2	1	Integer
			Min value	Max value		
40014	0x0E	Backlight	0000	7200	1	Integer
			Value	Meaning		
40015	0x0F	No of channel	0x0000	4 channel	1	Integer
			0x0001	12 channel	1	Integer
40016	0x10	Factory Default	1	To set factory setting range	1	Integer
40017	0x11	Reset Active Energy	1	CH 1	1	Integer