Input Registers，Function code 04

Address (Register)	Input Register Parameter				Modbus Protocol Start Address Hex		3 Ø	3 Ø	1 Ø
	Description	Length (bytes)	Data Format	Units	Hi Byte	Lo Byte	4 W	3 W	2 W
30001	Phase 1 line to neutral volts.	4	Float	V	00	00	√	X	√
30003	Phase 2 line to neutral volts.	4	Float	V	00	02	√	X	X
30005	Phase 3 line to neutral volts.	4	Float	V	00	04	√	X	X
30007	Phase 1 current.	4	Float	A	00	06	√	√	√
30009	Phase 2 current.	4	Float	A	00	08	√	√	X
30011	Phase 3 current.	4	Float	A	00	0A	√	√	X
30013	Phase 1 active power.	4	Float	W	00	0C	√	X	√
30015	Phase 2 active power.	4	Float	W	00	0E	√	X	X
30017	Phase 3 active power.	4	Float	W	00	10	√	X	X
30019	Phase 1 apparent power.	4	Float	VA	00	12	√	X	√
30021	Phase 2 apparent power.	4	Float	VA	00	14	√	X	X
30023	Phase 3 apparent power.	4	Float	VA	00	16	√	X	X
30025	Phase 1 reactive power.	4	Float	VAr	00	18	√	X	√
30027	Phase 2 reactive power.	4	Float	VAr	00	1A	√	X	X
30029	Phase 3 reactive power.	4	Float	VAr	00	1C	√	X	X
30031	Phase 1 power factor (1).	4	Float	None	00	1E	√	X	√
30033	Phase 2 power factor (1).	4	Float	None	00	20	√	X	X
30035	Phase 3 power factor (1).	4	Float	None	00	22	√	X	X
30037	Phase 1 phase angle.	4	Float	Degrees	00	24	√	X	√
30039	Phase 2 phase angle.	4	Float	Degrees	00	26	√	X	X
30041	Phase 3 phase angle.	4	Float	Degrees	00	28	√	X	X
30043	Average line to neutral volts.	4	Float	V	00	2A	√	X	X
30047	Average line current.	4	Float	A	00	2E	√	√	√
30049	Sum of line currents.	4	Float	A	00	30	√	√	√
30053	Total system power.	4	Float	W	00	34	√	√	√
30057	Total system volt amps.	4	Float	VA	00	38	√	√	√
30061	Total system VAr.	4	Float	VAr	00	3C	√	√	√
30063	Total system power factor (1).	4	Float	None	00	3E	√	√	√

30067	Total system phase angle.	4	Float	Degrees	00	42	√	√	√
30071	Frequency of supply voltages.	4	Float	Hz	00	46	√	√	√
30073	Total Import kWh	4	Float	kWh	00	48	√	√	√
30075	Total Export kWh.	4	Float	kWh	00	4A	√	√	√
30077	Total Import kVArh .	4	Float	kVArh	00	4C	√	√	√
30079	Total Export kVArh .	4	Float	kVArh	00	4E	√	√	√
30081	Total VAh	4	Float	kVAh	00	50	√	√	√
30083	Ah.	4	Float	Ah	00	52	√	√	√
30085	Total system power demand (2) .	4	Float	W	00	54	√	√	√
30087	Maximum total system power demand (2).	4	Float	W	00	56	√	√	√
30101	Total system VA demand.	4	Float	VA	00	64	√	√	√
30103	Maximum total system VA demand.	4	Float	VA	00	66	√	√	√
30105	Neutral current demand.	4	Float	Amps	00	68	√	X	X
30107	Maximum neutral current demand.	4	Float	Amps	00	6A	√	X	X
30109	Total system reactive power demand. (2)	4	Float	VAr	00	6C	√	X	√
30111	Maximum total system reactive power demand(2)	4	Float	VAr	00	6E	√	X	√
30201	Line 1 to Line 2 volts.	4	Float	V	00	C8	√	√	X
30203	Line 2 to Line 3 volts.	4	Float	V	00	CA	√	√	X
30205	Line 3 to Line 1 volts.	4	Float	V	00	CC	√	√	X
30207	Average line to line volts.	4	Float	V	00	CE	√	√	X
30225	Neutral current.	4	Float	A	00	E0	√	X	X
30235	Phase 1 L/N volts THD	4	Float	%	00	EA	√	X	√
30237	Phase 2 L/N volts THD	4	Float	%	00	EC	√	X	X
30239	Phase 3 L/N volts THD	4	Float	%	00	EE	√	X	X
30241	Phase 1 Current THD	4	Float	%	00	F0	√	√	√
30243	Phase 2 Current THD	4	Float	%	00	F2	√	√	X
30245	Phase 3 Current THD	4	Float	%	00	F4	√	√	X
30249	Average line to neutral volts THD.	4	Float	%	00	F8	√	X	√
30251	Average line current THD.	4	Float	%	00	FA	√	√	√
30255	Total system power factor (1).	4	Float	Degrees	00	FE	√	√	√
30259	Phase 1 current demand.	4	Float	A	01	02	√	√	√
30261	Phase 2 current demand.	4	Float	A	01	04	√	√	X
30263	Phase 3 current demand.	4	Float	A	01	06	√	√	X
30265	Maximum phase 1 current demand.	4	Float	A	01	08	√	√	√

30267	Maximum phase 2 current demand.	4	Float	A	01	0A	√	√	X
30269	Maximum phase 3 current demand.	4	Float	A	01	0C	√	√	X
30335	Line 1 to line 2 volts THD.	4	Float	%	01	4E	√	√	X
30337	Line 2 to line 3 volts THD.	4	Float	%	01	50	√	√	X
30339	Line 3 to line 1 volts THD.	4	Float	%	01	52	√	√	X
30341	Average line to line volts THD.	4	Float	%	01	54	√	√	X
30343	Total kwh (3)	4	Float	kWh	01	56	√	√	√
30345	Total kvarh (3)	4	Float	kVArh	01	58	√	√	√
30347	L1 import kwh	4	Float	kWh	01	5A	√	√	√
30349	L2 import kwh	4	Float	kWh	01	5C	√	√	X
30351	L3 import kWh	4	Float	kWh	01	5E	√	√	X
30353	L1 export kWh	4	Float	kWh	01	60	√	√	√
30355	L2 export kwh	4	Float	kWh	01	62	√	√	X
30357	L3 export kWh	4	Float	kWh	01	64	√	√	X
30359	L1 total kwh	4	Float	kWh	01	66	√	√	√
30361	L2 total kWh	4	Float	kWh	01	68	√	√	X
30363	L3 total kwh	4	Float	kWh	01	6A	√	√	X
30365	L1 import kvarh	4	Float	kVArh	01	6C	√	√	√
30367	L2 import kvarh	4	Float	kVArh	01	6E	√	√	X
30369	L3 import kvarh	4	Float	kVArh	01	70	√	√	X
30371	L1 export kvarh	4	Float	kVArh	01	72	√	√	√
30373	L2 export kvarh	4	Float	kVArh	01	74	√	√	X
30375	L3 export kvarh	4	Float	kVArh	01	76	√	√	X
30377	L1 total kvarh	4	Float	kVArh	01	78	√	√	√
30379	L2 total kvarh	4	Float	kVArh	01	7A	√	√	X
30381	L3 total kvarh	4	Float	kVArh	01	7C	√	√	X
34877	Total active Energy Rate 1	4	Float	kWh	13	0C	√	√	√
34879	Total active Energy Rate 2	4	Float	kWh	13	0E	√	√	√
34885	Import active Energy Rate 1	4	Float	kWh	13	14	√	√	√
34887	Import active Energy Rate 2	4	Float	kWh	13	16	√	√	√
34893	Export active Energy Rate 1	4	Float	kWh	13	1C	√	√	√
34895	Export active Energy Rate 2	4	Float	kWh	13	1E	√	√	√
34901	Total reactive Energy Rate 1	4	Float	kVArh	13	24	√	√	√
34903	Total reactive Energy Rate 2	4	Float	kVArh	13	26	√	√	√

34909	Import reactive Energy Rate 1	4	Float	kVArh	13	2C	√	√	√
34911	Import reactive Energy Rate 2	4	Float	kVArh	13	2E	√	√	√
34917	Export reactive Energy Rate 1	4	Float	kVArh	13	34	√	√	√
34919	Export reactive Energy Rate 2	4	Float	kVArh	13	36	√	√	√
34925	L1 import kwh of Tarrif 1	4	Float	kWh	13	3C	√	√	√
34927	L2 import kwh of Tarrif 1	4	Float	kWh	13	3E	√	√	X
34929	L3 import kWh of Tarrif 1	4	Float	kWh	13	40	√	√	X
34931	L1 export kWh of Tarrif 1	4	Float	kWh	13	42	√	√	√
34933	L2 export kwh of Tarrif 1	4	Float	kWh	13	44	√	√	X
34935	L3 export kWh of Tarrif 1	4	Float	kWh	13	46	√	√	X
34937	L1 total kwh of Tarrif 1	4	Float	kWh	13	48	√	√	√
34939	L2 total kWh of Tarrif 1	4	Float	kWh	13	4A	√	√	X
34941	L3 total kwh of Tarrif 1	4	Float	kWh	13	4C	√	√	X
34943	L1 import kvarh of Tarrif 1	4	Float	kVArh	13	4E	√	√	√
34945	L2 import kvarh of Tarrif 1	4	Float	kVArh	13	50	√	√	X
34947	L3 import kvarh of Tarrif 1	4	Float	kVArh	13	52	√	√	X
34949	L1 export kvarh of Tarrif 1	4	Float	kVArh	13	54	√	√	√
34951	L2 export kvarh of Tarrif 1	4	Float	kVArh	13	56	√	√	X
34953	L3 export kvarh of Tarrif 1	4	Float	kVArh	13	58	√	√	X
34955	L1 total kvarh of Tarrif 1	4	Float	kVArh	13	5A	√	√	√
34957	L2 total kvarh of Tarrif 1	4	Float	kVArh	13	5C	√	√	X
34959	L3 total kvarh of Tarrif 1	4	Float	kVArh	13	5E	√	√	X
34961	L1 import kwh of Tarrif 2	4	Float	kWh	13	60	√	√	√
34963	L2 import kwh of Tarrif 2	4	Float	kWh	13	62	√	√	X
34965	L3 import kWh of Tarrif 2	4	Float	kWh	13	64	√	√	X
34967	L1 export kWh of Tarrif 2	4	Float	kWh	13	66	√	√	√
34969	L2 export kwh of Tarrif 2	4	Float	kWh	13	68	√	√	X
34971	L3 export kWh of Tarrif 2	4	Float	kWh	13	6A	√	√	X
34973	L1 total kwh of Tarrif 2	4	Float	kWh	13	6C	√	√	√
34975	L2 total kWh of Tarrif 2	4	Float	kWh	13	6E	√	√	X
34977	L3 total kwh of Tarrif 2	4	Float	kWh	13	70	√	√	X
34979	L1 import kvarh of Tarrif 2	4	Float	kVArh	13	72	√	√	√
34981	L2 import kvarh of Tarrif 2	4	Float	kVArh	13	74	√	√	X
34983	L3 import kvarh of Tarrif 2	4	Float	kVArh	13	76	√	√	X
34985	L1 export kvarh of Tarrif 2	4	Float	kVArh	13	78	√	√	√

34987	L2 export kvarh of Tarrif 2	4	Float	kVArh	13	7A	√	√	X
34989	L3 export kvarh of Tarrif 2	4	Float	kVArh	13	7C	√	√	X
34991	L1 total kvarh of Tarrif 2	4	Float	kVArh	13	7E	√	√	√
34993	L2 total kvarh of Tarrif 2	4	Float	kVArh	13	80	√	√	X
34995	L3 total kvarh of Tarrif 2	4	Float	kVArh	13	82	√	√	X
35473	Maximum total active power demand of Tariff-1 (2)	4	Float	W	15	60	√	√	√
35475	Maximum total reactive power demand of Tariff-1 (2)	4	Float	VAr	15	62	√	√	√
35477	Maximum total apparent power demand of Tariff-1 (2)	4	Float	VA	15	64	√	√	√
35479	Maximum L1 Current demand of Tariff-1	4	Float	A	15	66	√	√	√
35481	Maximum L2 Current demand of Tariff-1	4	Float	A	15	68	√	√	X
35483	Maximum L3 Current demand of Tariff-1	4	Float	A	15	6A	√	√	X
35485	Maximum Neutral Current demand of Tariff-1	4	Float	A	15	6C	√	X	X
35487	Maximum total active power demand of Tariff-2 (2)	4	Float	W	15	6E	√	√	√
35489	Maximum total reactive power demand of Tariff-2 (2)	4	Float	VAr	15	70	√	√	√
35491	Maximum total apparent power demand of Tariff-2 (2)	4	Float	VA	15	72	√	√	√
35493	Maximum L1 Current demand of Tariff-2	4	Float	A	15	74	√	√	√
35495	Maximum L2 Current demand of Tariff-2	4	Float	A	15	76	√	√	X
35497	Maximum L3 Current demand of Tariff-2	4	Float	A	15	78	√	√	X
35499	Maximum Neutral Current demand of Tariff-2	4	Float	A	15	7A	√	X	X

Notes:

1. The power factor has its sign adjusted to indicate the direction of the current. Positive refers to forward current, negative refers to reverse current.
2. The power sum demand calculation is for import – export.
3. Total kWh / kVarh equals to Import + export.

Holding Register，Function code 03 / 10

Address Register	Parameter Number	Parameter	Modbus Protocol Start Address Hex		Valid range	Mode
			High Byte	Low Byte		
40001	1	Demand Time	00	00	Read minutes into first demand calculation. When the demand time reaches the demand Period then the demand values are valid. **Length : 4 byte** **Data Format : Float**	ro

40003	2	Demand Period	00	02	Write demand period: 0, 5,8, 10, 15, 20, 30 or 60 minutes, default 60. Setting the period to 0 will cause the demand to show the current parameter value, and demand max to show the maximum parameter value since last demand reset. **Length : 4 byte** **Data Format : Float**	r/w
40011	6	System Type	00	0A	Write system type: 3p4w = 3, 3p3w = 2 & 1p2w= 1 Requires password, see parameter 13 **Length : 4 byte** **Data Format : Float**	r/w
40013	7	Pulse output 1 Width	00	OC	Write relay on period in milliseconds: 60, 100 or 200, default 100. **Length : 4 byte** **Data Format : Float**	r/w
40015	8	Password Lock	00	OE	Read password lock status: 0 = locked. 1 = unlocked. **Length : 4 byte** **Data Format : Float**	ro
40019	10	Parity Stop	00	12	Write the parity/stop bits for MODBUS Protocol, where: 0 = One stop bit and no parity, default. 1 = One stop bit and even parity. 2 = One stop bit and odd parity.3 = Two stop bits and no parity. **Length : 4 byte** **Data Format : Float**	r/w
40021	11	Modbus Address	00	14	Write the Modbus Address address: 1 to 247 for MODBUS Protocol, default 1. Note, both the MODBUS node addresses can be changed via the display setup menus. **Length : 4 byte** **Data Format : Float**	r/w
40023	12	Pulse 1 Divisor	00	16	Write pulse divisor index: n = 0 to 5 0--0.0025 kWh(kVArh)/imp 1--0.01 kWh(kVArh)/imp 2--0.1 kWh(kVArh)/imp 3--1 kWh(kVArh)/imp 4--10 kWh(kVArh)/imp 5--100 kWh(kVArh)/imp **Length : 4 byte** **Data Format : Float**	r/w
40025	13	Password	00	18	Write password for access to protected registers. Default password is 1000. **Length : 4 byte** **Data Format : Float**	r/w
40029	15	Baud Rate	00	1C	Write the baud rate for MODBUS Protocol, where: 0 = 2400 baud. 1 = 4800 baud. 2 = 9600 baud, default. 3 = 19200 baud. 4 = 38400 baud. **Length : 4 byte** **Data Format : Float**	r/w
40087	44	Pulse 1 Energy Type	00	56	Write MODBUS Protocol input parameter for pulse out 1: 1: import active energy 2: total active energy 4: export active energy, default 5: import reactive energy 6: total reactive energy 8: export reactive energy	r/w

					Length : 4 byte **Data Format : Float**	
461457	30729	Reset	F0	10	00 00： reset the Maximum demand **Length : 2 byte** **Data Format:Hex**	wo
461955	30976	Serial ID	F2	00	serial number **Length : 4 byte** **Data Format:Hex**	ro