MPR 3X-4X Register table

✓	is used for avilable for this version
	is used for not available for this version
O	is used for optional with I/O module

		START ADDRESS	FINISH ADDRESS	REGISTER COUNTS
1	Measurements	0	161	162
2	Energy	200	377	178
3	Writeable Energy	1500	1659	160
4	Energy Per Tariff	500	541	42
5	Min-Max, Max Demand, Demand Measurement	800	1373	574
6	THD	2000	2035	36
7	THD I Harmonic Order	3000	3250	251
8	THD V Harmonic Order	4000	4200	201
9	THD VLL Harmonic Order	5000	5150	151
10	NETWORK SETTINGS	16384	16401	18
11	SETUP	17000	17179	180
12	ETHERNET SETUP	18000	18026	27
13	DATE/HOUR	6000	6017	18
14	TARIFF SETTINGS OF SATURDAY	22000	22015	16
15	TARIFF SETTINGS OF SUNDAY	9000	9015	16
16	TARIFF SETTINGS OF WEEKDAY	10000	10015	16
17	ALARM STATUS	20000	20035	36
18	EVENT LOG RECORD	8016	8034	19
19	RESET	14000	14000	1
20	Record Settings	21000	21014	15
21	Records Index Register	21200	21211	12
22	Profile Records	23000	23027	28
23	Current Records	24000	24035	36
24	Voltage Records	25000	25053	54
25	Power Records	26000	26061	62
26	THD Records	27000	27059	60
27	Analog Records	28000	28029	30
28	Device Identification	60416	60455	40
29	Entes Identification	65032	65047	16
30	MODBUS Description			

Measurements

✓	is used for avilable for this version
	is used for not available for this version
O	is used for optional with I/O module

Supported Functions	Start Address	Register Counts
Read holding registers	0	162

Address Dec	Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR34S-11	MPR32S	MPR34S-20	MPR45S	MPR46S	MPR47S	MPR42-OGT	MPR47-SE
0	0000	uint32	2	V	Voltage L1-N	0.1	✓	✓	✓	✓	✓	✓	✓	✓
2	0002	uint32	2	V	Voltage L2-N	0.1	✓	✓	✓	✓	✓	✓	✓	✓
4	0004	uint32	2	V	Voltage L3-N	0.1	✓	✓	✓	✓	✓	✓	✓	✓
6	0006	uint32	2	V	Voltage L4-N	0.1				✓	✓	✓	✓	✓
8	0008	uint32	2	V	Voltage L1-L2	0.1	✓	✓	✓	✓	✓	✓	✓	✓
10	000A	uint32	2	V	Voltage L2-L3	0.1	✓	✓	✓	✓	✓	✓	✓	✓
12	000C	uint32	2	V	Voltage L3-L1	0.1	✓	✓	✓	✓	✓	✓	✓	✓
14	000E	uint32	2	A	Current L1	0.001	✓	✓	✓	✓	✓	✓	✓	✓
16	0010	uint32	2	A	Current L2	0.001	✓	✓	✓	✓	✓	✓	✓	✓
18	0012	uint32	2	A	Current L3	0.001	✓	✓	✓	✓	✓	✓	✓	✓
20	0014	uint32	2	A	Current L4	0.001				✓	✓	✓		✓
22	0016	uint32	2	A	Neutral Current = IL1+IL2+IL3	0.001	✓	✓	✓	✓	✓	✓	✓	✓
24	0018	uint32	2	Hz	Measured frequency	0.01	✓	✓	✓	✓	✓	✓	✓	✓
26	001A	float	2	W	Active power L1-N	1	✓	✓	✓	✓	✓	✓	✓	✓
28	001C	float	2	W	Active power L2-N	1	✓	✓	✓	✓	✓	✓	✓	✓
30	001E	float	2	W	Active power L3-N	1	✓	✓	✓	✓	✓	✓	✓	✓
32	0020	float	2	W	Active power L4-N	1								
34	0022	float	2	W	Total import active power	1	✓	✓	✓	✓	✓	✓	✓	✓
36	0024	float	2	W	Total export active power	1	✓	✓	✓	✓	✓	✓	✓	✓
38	0026	float	2	W	∑Active Power +/- = ∑P =P1+P2+P3	1	✓	✓	✓	✓	✓	✓	✓	✓
40	0028	float	2	VAr	Reactive power L1	1	✓	✓	✓	✓	✓	✓	✓	✓
42	002A	float	2	VAr	Reactive power L2	1	✓	✓	✓	✓	✓	✓	✓	✓
44	002C	float	2	VAr	Reactive power L3	1	✓	✓	✓	✓	✓	✓	✓	✓
46	002E	float	2	VAr	Reactive power L4	1								
48	0030	float	2	VAr	Quadrant 1 total reactive power	1	✓	✓	✓	✓	✓	✓	✓	✓
50	0032	float	2	VAr	Quadrant 2 total reactive power	1	✓	✓	✓	✓	✓	✓	✓	✓
52	0034	float	2	VAr	Quadrant 3 total reactive power	1	✓	✓	✓	✓	✓	✓	✓	✓
54	0036	float	2	VAr	Quadrant 4 total reactive power	1	✓	✓	✓	✓	✓	✓	✓	✓
56	0038	float	2	VAr	∑Reactive Power +/- = ∑Q=Q1+Q2+Q3	1	✓	✓	✓	✓	✓	✓	✓	✓
58	003A	float	2	VA	Apperant power L1-N	1	✓	✓	✓	✓	✓	✓	✓	✓
60	003C	float	2	VA	Apparent power L2-N	1	✓	✓	✓	✓	✓	✓	✓	✓
62	003E	float	2	VA	Apparent power L3-N	1	✓	✓	✓	✓	✓	✓	✓	✓
64	0040	float	2	VA	Apparent power L4-N	1								
66	0042	float	2	VA	Total import apperant power	1	✓	✓	✓	✓	✓	✓	✓	✓
68	0044	float	2	VA	Total export apperant power	1	✓	✓	✓	✓	✓	✓	✓	✓
70	0046	float	2	VA	∑Apperant Power +/- = ∑S=S1+S2+S3	1	✓	✓	✓	✓	✓	✓	✓	✓
72	0048	int32	2	-	Power Factor L1	0.001	✓	✓	✓	✓	✓	✓	✓	✓
74	004A	int32	2	-	Power Factor L2	0.001	✓	✓	✓	✓	✓	✓	✓	✓
76	004C	int32	2	-	Power Factor L3	0.001	✓	✓	✓	✓	✓	✓	✓	✓
78	004E	int32	2	-	Power Factor L4	0.001								
80	0050	int32	2	-	∑POWER FACTOR +/- = ∑PF=PFL1+PFL2+PFL3	0.001	✓	✓	✓	✓	✓	✓	✓	✓
82	0052	int32	2	-	CosPhi L1	0.001	✓	✓	✓	✓	✓	✓	✓	✓
84	0054	int32	2	-	CosPhi L2	0.001	✓	✓	✓	✓	✓	✓	✓	✓
86	0056	int32	2	-	CosPhi L3	0.001	✓	✓	✓	✓	✓	✓	✓	✓
88	0058	int32	2	-	CosPhi L4	0.001								
90	005A	int32	2	-	∑Cos Phi = COS_L1 + COS_L2 + COS_L3	0.001	✓	✓	✓	✓	✓	✓	✓	✓
92	005C	int32	2	-	Rotation field; 1=right, 0=none, -1=left	1	✓	✓	✓	✓	✓	✓	✓	✓
94	005E	uint32	2	%	Voltage Unbalance	0.1						✓		✓
96	0060	uint32	2	%	Current Unbalance	0.1						✓		✓
98	0062	uint64	2	Angle	L1 Phase Voltage Angle	0.1	✓	✓	✓	✓	✓	✓	✓	✓
100	0064	uint64	2	Angle	L2 Phase Voltage Angle	0.1	✓	✓	✓	✓	✓	✓	✓	✓
102	0066	uint64	2	Angle	L3 Phase Voltage Angle	0.1	✓	✓	✓	✓	✓	✓	✓	✓
104	0068	uint64	2	Angle	L4 Phase Voltage Angle	0.1								
106	006A	uint64	2	Angle	L1 Phase Current Angle	0.1	✓	✓	✓	✓	✓	✓	✓	✓
108	006C	uint64	2	Angle	L2 Phase Current Angle	0.1	✓	✓	✓	✓	✓	✓	✓	✓
110	006E	uint64	2	Angle	L3 Phase Current Angle	0.1	✓	✓	✓	✓	✓	✓	✓	✓
112	0070	uint64	2	Angle	L4 Phase Current Angle	0.1								
114	0072	float	2		Analog Input 1	1								
116	0074	float	2		Analog Input 2	1								
118	0076	float	2		Analog Input 3	1								
120	0078	float	2		Analog Input 4	1								
122	007A	float	2		Analog Input 5	1								
124	007C	float	2		Analog Input 6	1								
126	007E	float	2		Analog Input 7	1								
128	0080	float	2		Analog Input 8	1								
130	0082	float	2	-	Analog Output 1	1				O	O	O	O	O
132	0084	float	2	-	Analog Output 2	1				O	O	O	O	O
134	0086	float	2	-	Analog Output 3	1				O	O	O	O	O
136	0088	float	2	-	Analog Output 4	1				O	O	O	O	O
138	008A	float	2	°C	Temperature Input 1	1				O	O	O	O	O
140	008C	float	2	°C	Temperature Input 2	1				O	O	O	O	O
142	008E	float	2	°C	Temperature Input 3	1				O	O	O	O	O
144	0090	float	2	°C	Temperature Input 4	1				O	O	O	O	O
146	0092	float	2	-	Temperature Input 5	1								
148	0094	float	2	-	Temperature Input 6	1								
150	0096	float	2	-	Temperature Input 7	1								
152	0098	float	2	-	Temperature Input 8	1								
154	009A	uint32	2	h	Hour Meter (Non Resetable)	0.001	✓	✓	✓	✓	✓	✓	✓	✓
156	009C	uint32	2	h	Working Hour Counter	0.001	✓	✓	✓	✓	✓	✓	✓	✓
158	009E	uint32	2	-	Input Status		✓		✓	✓	✓	✓	✓	✓
160	00A0	uint32	2	-	Otput Status		✓		✓	✓	✓	✓	✓	✓

Energy

Supported Functions	Start Address	Register Counts
Read holding registers	200	178

Address Dec	Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR34S-11	MPR32S	MPR34S-20	MPR45S	MPR46S	MPR47S	MPR42-OGT	MPR47-SE
200	00C8	uint64	4	Wh	Consumed Active Energy L1	1	✓	✓	✓	✓	✓	✓	✓	✓
204	00CC	uint64	4	Wh	Consumed Active Energy L2	1	✓	✓	✓	✓	✓	✓	✓	✓
208	00D0	uint64	4	Wh	Consumed Active Energy L3	1	✓	✓	✓	✓	✓	✓	✓	✓
212	00D4	uint64	4	Wh	Consumed Active Energy L4	1								
216	00D8	uint64	4	Wh	Total Consumed Energy L1..L3	1	✓	✓	✓	✓	✓	✓	✓	✓
220	00DC	uint64	4	Wh	Delivered Active Energy L1	1				✓	✓	✓	✓	✓
224	00E0	uint64	4	Wh	Delivered Active Energy L2	1				✓	✓	✓	✓	✓
228	00E4	uint64	4	Wh	Delivered Active Energy L3	1				✓	✓	✓	✓	✓
232	00E8	uint64	4	Wh	Delivered Active Energy L4	1								
236	00EC	uint64	4	Wh	Total Delivered Energy L1..L3	1	✓	✓	✓	✓	✓	✓	✓	✓
240	00F0	uint64	4	VAh	Consumed Apparent energy L1	1	✓	✓	✓	✓	✓	✓	✓	✓
244	00F4	uint64	4	VAh	Consumed Apparent energy L2	1	✓	✓	✓	✓	✓	✓	✓	✓
248	00F8	uint64	4	VAh	Consumed Apparent energy L3	1	✓	✓	✓	✓	✓	✓	✓	✓
252	00FC	uint64	4	VAh	Consumed Apparent energy L4	1								
256	0100	uint64	4	VAh	Total Consumed Apperant Energy L1..L3	1	✓	✓	✓	✓	✓	✓	✓	✓
260	0104	uint64	4	VAh	Delivered Apperant Energy L1	1				✓	✓	✓	✓	✓
264	0108	uint64	4	VAh	Delivered Apperant Energy L2	1				✓	✓	✓	✓	✓
268	010C	uint64	4	VAh	Delivered Apperant Energy L3	1				✓	✓	✓	✓	✓
272	0110	uint64	4	VAh	Delivered Apperant Energy L4	1								
276	0114	uint64	4	VAh	Total Delivered Apparent energy L1..L3	1	✓	✓	✓	✓	✓	✓	✓	✓
280	0118	uint64	4	VArh	Quadrant 1 Reactive Energy L1	1				✓	✓	✓	✓	✓
284	011C	uint64	4	VArh	Quadrant 1 Reactive Energy L2	1				✓	✓	✓	✓	✓
288	0120	uint64	4	VArh	Quadrant 1 Reactive Energy L3	1				✓	✓	✓	✓	✓
292	0124	uint64	4	VArh	Quadrant 1 Reactive Energy L4	1								
296	0128	uint64	4	VArh	Quadrant 1 total reactive Energy	1	✓	✓	✓	✓	✓	✓	✓	✓
300	012C	uint64	4	VArh	Quadrant 2 Reactive Energy L1	1				✓	✓	✓	✓	✓
304	0130	uint64	4	VArh	Quadrant 2 Reactive Energy L2	1				✓	✓	✓	✓	✓
308	0134	uint64	4	VArh	Quadrant 2 Reactive Energy L3	1				✓	✓	✓	✓	✓
312	0138	uint64	4	VArh	Quadrant 2 Reactive Energy L4	1								
316	013C	uint64	4	VArh	Quadrant 2 total reactive Energy	1	✓	✓	✓	✓	✓	✓	✓	✓
320	0140	uint64	4	VArh	Quadrant 3 Reactive Energy L1	1				✓	✓	✓	✓	✓
324	0144	uint64	4	VArh	Quadrant 3 Reactive Energy L2	1				✓	✓	✓	✓	✓
328	0148	uint64	4	VArh	Quadrant 3 Reactive Energy L3	1				✓	✓	✓	✓	✓

332	014C	uint64	4	VArh	Quadrant 3 Reactive Energy L4	1								
336	0150	uint64	4	VArh	Quadrant 3 total reactive Energy	1	✓	✓	✓	✓	✓	✓	✓	✓
340	0154	uint64	4	VArh	Quadrant 4 Reactive Energy L1	1				✓	✓	✓	✓	✓
344	0158	uint64	4	VArh	Quadrant 4 Reactive Energy L2	1				✓	✓	✓	✓	✓
348	015C	uint64	4	VArh	Quadrant 4 Reactive Energy L3	1				✓	✓	✓	✓	✓
352	0160	uint64	4	VArh	Quadrant 4 Reactive Energy L4	1								
356	0164	uint64	4	VArh	Quadrant 4 total reactive Energy	1	✓	✓	✓	✓	✓	✓	✓	✓
360	0168	uint32	2	-	Number Of pulse Meter (Max 8)	1				✓	✓	✓		✓
362	016A	uint32	2	-	Total pulse meter input 1	1					O	O	O	O
364	016C	uint32	2	-	Total pulse meter input 2	1					O	O	O	O
366	016E	uint32	2	-	Total pulse meter input 3	1					O	O	O	O
368	0170	uint32	2	-	Total pulse meter input 4	1					O	O	O	O
370	0172	uint32	2	-	Total pulse meter input 5	1							O	O
372	0174	uint32	2	-	Total pulse meter input 6	1							O	O
374	0176	uint32	2	-	Total pulse meter input 7	1							O	O
376	0178	uint32	2	-	Total pulse meter input 8	1							O	O

Energy

Supported Functions	Start Address	Register Counts
Write single register	1500	160

Address Dec	Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR34S-11	MPR32S	MPR34S-20	MPR45S	MPR46S	MPR47S	MPR42-OGT	MPR47-SE
1500	05DC	uint64	4	Wh	Consumed Active Energy L1	1								
1504	05E0	uint64	4	Wh	Consumed Active Energy L2	1								
1508	05E4	uint64	4	Wh	Consumed Active Energy L3	1								
1512	05E8	uint64	4	Wh	Consumed Active Energy L4	1								
1516	05EC	uint64	4	Wh	Total Consumed Energy L1..L3	1								
1520	05F0	uint64	4	Wh	Delivered Active Energy L1	1								
1524	05F4	uint64	4	Wh	Delivered Active Energy L2	1								
1528	05F8	uint64	4	Wh	Delivered Active Energy L3	1								
1532	05FC	uint64	4	Wh	Delivered Active Energy L4	1								
1536	0600	uint64	4	Wh	Total Delivered Energy L1..L3	1								
1540	0604	uint64	4	VAh	Consumed Apparent energy L1	1								
1544	0608	uint64	4	VAh	Consumed Apparent energy L2	1								
1548	060C	uint64	4	VAh	Consumed Apparent energy L3	1								
1552	0610	uint64	4	VAh	Consumed Apparent energy L4	1								
1556	0614	uint64	4	VAh	Total Consumed Apperant Energy L1..L3	1								
1560	0618	uint64	4	VAh	Delivered Apperant Energy L1	1								
1564	061C	uint64	4	VAh	Delivered Apperant Energy L2	1								
1568	0620	uint64	4	VAh	Delivered Apperant Energy L3	1								
1572	0624	uint64	4	VAh	Delivered Apperant Energy L4	1								
1576	0628	uint64	4	VAh	Total Delivered Apparent energy L1..L3	1								
1580	062C	uint64	4	VArh	Quadrant 1 Reactive Energy L1	1								
1584	0630	uint64	4	VArh	Quadrant 1 Reactive Energy L2	1								
1588	0634	uint64	4	VArh	Quadrant 1 Reactive Energy L3	1								
1592	0638	uint64	4	VArh	Quadrant 1 Reactive Energy L4	1								
1596	063C	uint64	4	VArh	Quadrant 1 total reactive Energy	1								
1600	0640	uint64	4	VArh	Quadrant 2 Reactive Energy L1	1								
1604	0644	uint64	4	VArh	Quadrant 2 Reactive Energy L2	1								
1608	0648	uint64	4	VArh	Quadrant 2 Reactive Energy L3	1								
1612	064C	uint64	4	VArh	Quadrant 2 Reactive Energy L4	1								
1616	0650	uint64	4	VArh	Quadrant 2 total reactive Energy	1								
1620	0654	uint64	4	VArh	Quadrant 3 Reactive Energy L1	1								
1624	0658	uint64	4	VArh	Quadrant 3 Reactive Energy L2	1								
1628	065C	uint64	4	VArh	Quadrant 3 Reactive Energy L3	1								
1632	0660	uint64	4	VArh	Quadrant 3 Reactive Energy L4	1								
1636	0664	uint64	4	VArh	Quadrant 3 total reactive Energy	1								
1640	0668	uint64	4	VArh	Quadrant 4 Reactive Energy L1	1								
1644	066C	uint64	4	VArh	Quadrant 4 Reactive Energy L2	1								
1648	0670	uint64	4	VArh	Quadrant 4 Reactive Energy L3	1								
1652	0674	uint64	4	VArh	Quadrant 4 Reactive Energy L4	1								
1656	0678	uint64	4	VArh	Quadrant 4 total reactive Energy	1								

Energy per tarif

Supported Functions	Start Address	Register Counts
Read holding registers	500	42

Address Dec	Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR34S-11	MPR32S	MPR34S-20	MPR45S	MPR46S	MPR47S	MPR42-OGT	MPR47-SE
500	01F4	uint16	1	-	Number Of Tarriff	1					✓	✓	✓	✓
501	01F5	uint16	1	-	Tarrif Number In Progress	1					✓	✓	✓	✓
502	01F6	uint64	4	kWh	Positive Active Energies Tarriff1	1					✓	✓	✓	✓
506	01FA	uint64	4	kWh	Positive Active Energies Tarriff2	1					✓	✓	✓	✓
510	01FE	uint64	4	kWh	Positive Active Energies Tarriff3	1					✓	✓	✓	✓
514	0202	uint64	4	kWh	Positive Active Energies Tarriff4	1					✓	✓	✓	✓
518	0206	uint64	4	kWh	Positive Active Energies Tarriff5	1					✓	✓	✓	✓
522	020A	uint64	4	kWh	Positive Active Energies Tarriff6	1					✓	✓	✓	✓
526	020E	uint64	4	kWh	Positive Active Energies Tarriff7	1					✓	✓	✓	✓
530	0212	uint64	4	kWh	Positive Active Energies Tarriff8	1					✓	✓	✓	✓
534	0216	uint64	4	kWh	Generator Energies	1	✓		✓	✓	✓	✓	✓	✓
538	021A	uint64	4	kWh	Total tarriff energies	1	✓		✓	✓	✓	✓	✓	✓

Min-Max, Max Demand, Demand Measurement

Supported Functions	Start Address	Register Counts
Read holding registers	800	574

Address Dec	Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR34S-11	MPR32S	MPR34S-20	MPR45S	MPR46S	MPR47S	MPR42-OGT	MPR47-SE
800	0320	uint32	2	V	L1 Phase Max Voltage	0.1	✓	✓	✓	✓	✓	✓	✓	✓
802	0322	uint32	2	Time	L1 Phase Max Voltage Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
804	0324	uint32	2	V	L2 Phase Max Voltage	0.1	✓	✓	✓	✓	✓	✓	✓	✓
806	0326	uint32	2	Time	L2 Phase Max Voltage Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
808	0328	uint32	2	V	L3 Phase Max Voltage	0.1	✓	✓	✓	✓	✓	✓	✓	✓
810	032A	uint32	2	Time	L3 Phase Max Voltage Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
812	032C	uint32	2	V	L4 Phase Max Voltage	0.1				✓	✓	✓	✓	✓
814	032E	uint32	2	Time	L4 Phase Max Voltage Time	Unix Time Stamp				✓	✓	✓	✓	✓
816	0330	uint32	2	V	L1-L2 Max Voltage	0.1	✓	✓	✓	✓	✓	✓	✓	✓
818	0332	uint32	2	Time	L1-L2 Max Voltage Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
820	0334	uint32	2	V	L2-L3 Max Voltage	0.1	✓	✓	✓	✓	✓	✓	✓	✓
822	0336	uint32	2	Time	L2-L3 Max Voltage Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
824	0338	uint32	2	V	L3-L1 Max Voltage	0.1	✓	✓	✓	✓	✓	✓	✓	✓
826	033A	uint32	2	Time	L3-L1 Max Voltage Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
828	033C	uint32	2	A	L1 Phase Max Current	0.001	✓	✓	✓	✓	✓	✓	✓	✓
830	033E	uint32	2	Time	L1 Phase Max Current Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
832	0340	uint32	2	A	L2 Phase Max Current	0.001	✓	✓	✓	✓	✓	✓	✓	✓
834	0342	uint32	2	Time	L2 Phase Max Current Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
836	0344	uint32	2	A	L3 Phase Max Current	0.001	✓	✓	✓	✓	✓	✓	✓	✓
838	0346	uint32	2	Time	L3 Phase Max Current Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
840	0348	uint32	2	A	L4 Phase Max Current	0.001				✓	✓	✓		
842	034A	uint32	2	Time	L4 Phase Max Current Time	Unix Time Stamp				✓	✓	✓		
844	034C	uint32	2	A	IN Max Current	0.001	✓	✓	✓	✓	✓	✓	✓	✓
846	034E	uint32	2	Time	IN Max Current Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
848	0350	float	2	W	L1 Phase Max Active Power	1	✓	✓	✓	✓	✓	✓	✓	✓
850	0352	uint32	2	Time	L1 Phase Max Active Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
852	0354	float	2	W	L2 Phase Max Active Power	1	✓	✓	✓	✓	✓	✓	✓	✓
854	0356	uint32	2	Time	L2 Phase Max Active Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
856	0358	float	2	W	L3 Phase Max Active Power	1	✓	✓	✓	✓	✓	✓	✓	✓
858	035A	uint32	2	Time	L3 Phase Max Active Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
860	035C	float	2	W	L4 Phase Max Active Power	1								
862	035E	uint32	2	Time	L4 Phase Max Active Power Time	Unix Time Stamp								
864	0360	float	2	W	Max Total Import Active Power	1	✓	✓	✓	✓	✓	✓	✓	✓
866	0362	uint32	2	Time	Max Total Import Active Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
868	0364	float	2	W	Max Total Export Active Power	1	✓	✓	✓	✓	✓	✓	✓	✓
870	0366	uint32	2	Time	Max Total Export Active Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
872	0368	float	2	W	Max Total Active Power	1	✓	✓	✓	✓	✓	✓	✓	✓
874	036A	uint32	2	Time	Max Total Active Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
876	036C	float	2	VAr	L1 Phase Max Reactive Power	1	✓	✓	✓	✓	✓	✓	✓	✓
878	036E	uint32	2	Time	L1 Phase Max Reactive Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
880	0370	float	2	VAr	L2 Phase Max Reactive Power	1	✓	✓	✓	✓	✓	✓	✓	✓
882	0372	uint32	2	Time	L2 Phase Max Reactive Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
884	0374	float	2	VAr	L3 Phase Max Reactive Power	1	✓	✓	✓	✓	✓	✓	✓	✓
886	0376	uint32	2	Time	L3 Phase Max Reactive Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
888	0378	float	2	VAr	L4 Phase Max Reactive Power	1								
890	037A	uint32	2	Time	L4 Phase Max Reactive Power Time	Unix Time Stamp								
892	037C	float	2	VAr	Quadrant 1 Max Reactive Power	1	✓	✓	✓	✓	✓	✓	✓	✓
894	037E	uint32	2	Time	Quadrant 1 Max Reactive Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
896	0380	float	2	VAr	Quadrant 2 Max Reactive Power	1	✓	✓	✓	✓	✓	✓	✓	✓
898	0382	uint32	2	Time	Quadrant 2 Max Reactive Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
900	0384	float	2	VAr	Quadrant 3 Max Reactive Power	1	✓	✓	✓	✓	✓	✓	✓	✓
902	0386	uint32	2	Time	Quadrant 3 Max Reactive Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
904	0388	float	2	VAr	Quadrant 4 Max Reactive Power	1	✓	✓	✓	✓	✓	✓	✓	✓
906	038A	uint32	2	Time	Quadrant 4 Max Reactive Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
908	038C	float	2	VAr	Quadrant Total Max Reactive Power	1	✓	✓	✓	✓	✓	✓	✓	✓
910	038E	uint32	2	Time	Quadrant Total Max Reactive Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
912	0390	float	2	VA	L1 Phase Max Apperant Power	1	✓	✓	✓	✓	✓	✓	✓	✓
914	0392	uint32	2	Time	L1 Phase Max Apperant Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
916	0394	float	2	VA	L2 Phase Max Apperant Power	1	✓	✓	✓	✓	✓	✓	✓	✓
918	0396	uint32	2	Time	L2 Phase Max Apperant Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
920	0398	float	2	VA	L3 Phase Max Apperant Power	1	✓	✓	✓	✓	✓	✓	✓	✓
922	039A	uint32	2	Time	L3 Phase Max Apperant Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
924	039C	float	2	VA	L4 Phase Max Apperant Power	1								
926	039E	uint32	2	Time	L4 Phase Max Apperant Power Time	Unix Time Stamp								
928	03A0	float	2	VA	Max Total Import Apperant Power	1	✓	✓	✓	✓	✓	✓	✓	✓
930	03A2	uint32	2	Time	Max Total Import Apperant Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
932	03A4	float	2	VA	Max Total Export Apperant Power	1	✓	✓	✓	✓	✓	✓	✓	✓
934	03A6	uint32	2	Time	Max Total Export Apperant Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
936	03A8	float	2	VA	Max Total Apperant Power	1	✓	✓	✓	✓	✓	✓	✓	✓
938	03AA	uint32	2	Time	Max Total Apperant Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
940	03AC	uint32	2	Hz	Max System Frequency	0.1	✓	✓	✓	✓	✓	✓	✓	✓
942	03AE	uint32	2	Time	Max System Frequency Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
944	03B0	uint32	2	%	L1 Phase Max. Voltage THD	0.1	✓	✓	✓	✓	✓	✓	✓	✓
946	03B2	uint32	2	Time	L1 Phase Max. Voltage THD Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
948	03B4	uint32	2	%	L2 Phase Max Voltage THD	0.1	✓	✓	✓	✓	✓	✓	✓	✓
950	03B6	uint32	2	Time	L2 Phase Max. Voltage THD Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
952	03B8	uint32	2	%	L3 Phase Max. Voltage THD	0.1	✓	✓	✓	✓	✓	✓	✓	✓

954	03BA	uint32	2	Time	L3 Phase Max. Voltage THD Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
956	03BC	uint32	2	%	L4 Phase Max. Voltage THD	0.1								
958	03BE	uint32	2	Time	L4 Phase Max. Voltage THD Time	Unix Time Stamp								
960	03C0	uint32	2	%	L1-L2 Max Voltage THD	0.1	✓	✓	✓	✓	✓	✓	✓	✓
962	03C2	uint32	2	Time	L1-L2 Max Voltage THD Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
964	03C4	uint32	2	%	L2-L3 Max Voltage THD	0.1	✓	✓	✓	✓	✓	✓	✓	✓
966	03C6	uint32	2	Time	L2-L3 Max Voltage THD Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
968	03C8	uint32	2	%	L3-L1 Max Voltage THD	0.1	✓	✓	✓	✓	✓	✓	✓	✓
970	03CA	uint32	2	Time	L3-L1 Max Voltage THD Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
972	03CC	uint32	2	%	L1 Phase Max Current THD	0.1	✓	✓	✓	✓	✓	✓	✓	✓
974	03CE	uint32	2	Time	L1 Phase Max Current THD Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
976	03D0	uint32	2	%	L2 Phase Max Current THD	0.1	✓	✓	✓	✓	✓	✓	✓	✓
978	03D2	uint32	2	Time	L2 Phase Max Current THD Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
980	03D4	uint32	2	%	L3 Phase Max Current THD	0.1	✓	✓	✓	✓	✓	✓	✓	✓
982	03D6	uint32	2	Time	L3 Phase Max Current THD Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
984	03D8	uint32	2	%	L4 Phase Max Current THD	0.1				✓	✓	✓		
986	03DA	uint32	2	Time	L4 Phase Max Current THD Time	Unix Time Stamp				✓	✓	✓		
988	03DC	uint32	2	V	L1 Phase Min Voltage	0.1	✓	✓	✓	✓	✓	✓	✓	✓
990	03DE	uint32	2	Time	L1 Phase Min Voltage Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
992	03E0	uint32	2	V	L2 Phase Min Voltage	0.1	✓	✓	✓	✓	✓	✓	✓	✓
994	03E2	uint32	2	Time	L2 Phase Min Voltage Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
996	03E4	uint32	2	V	L3 Phase Min Voltage	0.1	✓	✓	✓	✓	✓	✓	✓	✓
998	03E6	uint32	2	Time	L3 Phase Min Voltage Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1000	03E8	uint32	2	V	L4 Phase Min Voltage	0.1				✓	✓	✓	✓	✓
1002	03EA	uint32	2	Time	L4 Phase Min Voltage Time	Unix Time Stamp				✓	✓	✓	✓	✓
1004	03EC	uint32	2	V	L1-L2 Min Voltage	0.1	✓	✓	✓	✓	✓	✓	✓	✓
1006	03EE	uint32	2	Time	L1-L2 Min Voltage Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1008	03F0	uint32	2	V	L2-L3 Min Voltage	0.1	✓	✓	✓	✓	✓	✓	✓	✓
1010	03F2	uint32	2	Time	L2-L3 Min Voltage Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1012	03F4	uint32	2	V	L3-L1 Min Voltage	0.1	✓	✓	✓	✓	✓	✓	✓	✓
1014	03F6	uint32	2	Time	L3-L1 Min Voltage Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1016	03F8	uint32	2	A	L1 Phase Min Current	0.001	✓	✓	✓	✓	✓	✓	✓	✓
1018	03FA	uint32	2	Time	L1 Phase Min Current Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1020	03FC	uint32	2	A	L2 Phase Min Current	0.001	✓	✓	✓	✓	✓	✓	✓	✓
1022	03FE	uint32	2	Time	L2 Phase Min Current Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1024	0400	uint32	2	A	L3 Phase Min Current	0.001	✓	✓	✓	✓	✓	✓	✓	✓
1026	0402	uint32	2	Time	L3 Phase Min Current Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1028	0404	uint32	2	A	L4 Phase Min Current	0.001				✓	✓	✓		
1030	0406	uint32	2	Time	L4 Phase Min Current Time	Unix Time Stamp				✓	✓	✓		
1032	0408	uint32	2	A	IN Min Current	0.001	✓	✓	✓	✓	✓	✓	✓	✓
1034	040A	uint32	2	Time	IN Min Current Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1036	040C	float	2	W	L1 Phase Min Active Power	1	✓	✓	✓	✓	✓	✓	✓	✓
1038	040E	uint32	2	Time	L1 Phase Min Active Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1040	0410	float	2	W	L2 Phase Min Active Power	1	✓	✓	✓	✓	✓	✓	✓	✓
1042	0412	uint32	2	Time	L2 Phase Min Active Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1044	0414	float	2	W	L3 Phase Min Active Power	1	✓	✓	✓	✓	✓	✓	✓	✓
1046	0416	uint32	2	Time	L3 Phase Min Active Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1048	0418	float	2	W	L4 Phase Min Active Power	1								
1050	041A	uint32	2	Time	L4 Phase Min Active Power Time	Unix Time Stamp								
1052	041C	float	2	W	Min Total Import Active Power	1	✓	✓	✓	✓	✓	✓	✓	✓
1054	041E	uint32	2	Time	Min Total Import Active Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1056	0420	float	2	W	Min Total Export Active Power	1	✓	✓	✓	✓	✓	✓	✓	✓
1058	0422	uint32	2	Time	Min Total Export Active Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1060	0424	float	2	W	Min Total Active Power	1	✓	✓	✓	✓	✓	✓	✓	✓
1062	0426	uint32	2	Time	Min Total Active Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1064	0428	float	2	VAr	L1 Phase Min Reactive Power	1	✓	✓	✓	✓	✓	✓	✓	✓
1066	042A	uint32	2	Time	L1 Phase Min Reactive Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1068	042C	float	2	VAr	L2 Phase Min Reactive Power	1	✓	✓	✓	✓	✓	✓	✓	✓
1070	042E	uint32	2	Time	L2 Phase Min Reactive Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1072	0430	float	2	VAr	L3 Phase Min Reactive Power	1	✓	✓	✓	✓	✓	✓	✓	✓
1074	0432	uint32	2	Time	L3 Phase Min Reactive Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1076	0434	float	2	VAr	L4 Phase Min Reactive Power	1								
1078	0436	uint32	2	Time	L4 Phase Min Reactive Power Time	Unix Time Stamp								
1080	0438	float	2	VAr	Quadrant 1 Min Reactive Power	1	✓	✓	✓	✓	✓	✓	✓	✓
1082	043A	uint32	2	Time	Quadrant 1 Min Reactive Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1084	043C	float	2	VAr	Quadrant 2 Min Reactive Power	1	✓	✓	✓	✓	✓	✓	✓	✓
1086	043E	uint32	2	Time	Quadrant 2 Min Reactive Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1088	0440	float	2	VAr	Quadrant 3 Min Reactive Power	1	✓	✓	✓	✓	✓	✓	✓	✓
1090	0442	uint32	2	Time	Quadrant 3 Min Reactive Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1092	0444	float	2	VAr	Quadrant 4 Min Reactive Power	1	✓	✓	✓	✓	✓	✓	✓	✓
1094	0446	uint32	2	Time	Quadrant 4 Min Reactive Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1096	0448	float	2	VAr	Quadrant Total Min Reactive Power	1	✓	✓	✓	✓	✓	✓	✓	✓
1098	044A	uint32	2	Time	Quadrant Total Min Reactive Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1100	044C	float	2	VA	L1 Phase Min Apperant Power	1	✓	✓	✓	✓	✓	✓	✓	✓
1102	044E	uint32	2	Time	L1 Phase Min Apperant Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1104	0450	float	2	VA	L2 Phase Min Apperant Power	1	✓	✓	✓	✓	✓	✓	✓	✓
1106	0452	uint32	2	Time	L2 Phase Min Apperant Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1108	0454	float	2	VA	L3 Phase Min Apperant Power	1	✓	✓	✓	✓	✓	✓	✓	✓
1110	0456	uint32	2	Time	L3 Phase Min Apperant Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1112	0458	float	2	VA	L4 Phase Min Apperant Power	1								
1114	045A	uint32	2	Time	L4 Phase Min Apperant Power Time	Unix Time Stamp								
1116	045C	float	2	VA	Min Total Import Apperant Power	1	✓	✓	✓	✓	✓	✓	✓	✓
1118	045E	uint32	2	Time	Min Total Import Apperant Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1120	0460	float	2	VA	Min Total Export Apperant Power	1	✓	✓	✓	✓	✓	✓	✓	✓
1122	0462	uint32	2	Time	Min Total Export Apperant Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1124	0464	float	2	VA	Min Total Apperant Power	1	✓	✓	✓	✓	✓	✓	✓	✓
1126	0466	uint32	2	Time	Min Total Apperant Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1128	0468	uint32	2	Hz	Min System Frequency	0.1	✓	✓	✓	✓	✓	✓	✓	✓
1130	046A	uint32	2	Time	Min System Frequency Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1132	046C	uint32	2	%	L1 Phase Min. Voltage THD	0.1	✓	✓	✓	✓	✓	✓	✓	✓
1134	046E	uint32	2	Time	L1 Phase Min. Voltage THD Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1136	0470	uint32	2	%	L2 Phase Min Voltage THD	0.1	✓	✓	✓	✓	✓	✓	✓	✓
1138	0472	uint32	2	Time	L2 Phase Min. Voltage THD Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1140	0474	uint32	2	%	L3 Phase Min. Voltage THD	0.1	✓	✓	✓	✓	✓	✓	✓	✓
1142	0476	uint32	2	Time	L3 Phase Min. Voltage THD Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1144	0478	uint32	2	%	L4 Phase Min. Voltage THD	0.1								
1146	047A	uint32	2	Time	L4 Phase Min. Voltage THD Time	Unix Time Stamp								
1148	047C	uint32	2	%	L1-L2 Min Voltage THD	0.1	✓	✓	✓	✓	✓	✓	✓	✓
1150	047E	uint32	2	Time	L1-L2 Min Voltage THD Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1152	0480	uint32	2	%	L2-L3 Min Voltage THD	0.1	✓	✓	✓	✓	✓	✓	✓	✓
1154	0482	uint32	2	Time	L2-L3 Min Voltage THD Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1156	0484	uint32	2	%	L3-L1 Min Voltage THD	0.1	✓	✓	✓	✓	✓	✓	✓	✓
1158	0486	uint32	2	Time	L3-L1 Min Voltage THD Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1160	0488	uint32	2	%	L1 Phase Min Current THD	0.1	✓	✓	✓	✓	✓	✓	✓	✓
1162	048A	uint32	2	Time	L1 Phase Min Current THD Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1164	048C	uint32	2	%	L2 Phase Min Current THD	0.1	✓	✓	✓	✓	✓	✓	✓	✓
1166	048E	uint32	2	Time	L2 Phase Min Current THD Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1168	0490	uint32	2	%	L3 Phase Min Current THD	0.1	✓	✓	✓	✓	✓	✓	✓	✓
1170	0492	uint32	2	Time	L3 Phase Min Current THD Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1172	0494	uint32	2	%	L4 Phase Min Current THD	0.1				✓	✓	✓	✓	✓
1174	0496	uint32	2	Time	L4 Phase Min Current THD Time	Unix Time Stamp				✓	✓	✓	✓	✓
1176	0498	uint32	2	A	L1 Phase Current Demand	0.001	✓	✓	✓	✓	✓	✓	✓	✓
1178	049A	uint32	2	A	L2 Phase Current Demand	0.001	✓	✓	✓	✓	✓	✓	✓	✓
1180	049C	uint32	2	A	L3 Phase Current Demand	0.001	✓	✓	✓	✓	✓	✓	✓	✓
1182	049E	uint32	2	A	L4 Phase Current Demand	0.001				✓	✓	✓	✓	✓
1184	04A0	uint32	2	A	IN Current Demand	0.001	✓	✓	✓	✓	✓	✓	✓	✓
1186	04A2	float	2	W	L1 Phase Active Power Demand	1	✓	✓	✓	✓	✓	✓	✓	✓
1188	04A4	float	2	W	L2 Phase Active Power Demand	1	✓	✓	✓	✓	✓	✓	✓	✓
1190	04A6	float	2	W	L3 Phase Active Power Demand	1	✓	✓	✓	✓	✓	✓	✓	✓
1192	04A8	float	2	W	L4 Phase Active Power Demand	1								
1194	04AA	float	2	W	Total Import Active Power Demand	1	✓	✓	✓	✓	✓	✓	✓	✓
1196	04AC	float	2	W	Total Export Active Power Demand	1	✓	✓	✓	✓	✓	✓	✓	✓
1198	04AE	float	2	W	Total Active Power Demand	1								
1200	04B0	float	2	VAr	L1 Phase Reactive Power Demand	1								
1202	04B2	float	2	VAr	L2 Phase Reactive Power Demand	1								
1204	04B4	float	2	VAr	L3 Phase Reactive Power Demand	1								
1206	04B6	float	2	VAr	L4 Phase Reactive Power Demand	1								
1208	04B8	float	2	VAr	Quadrant 1 Total Reactive Powe Demand	1								
1210	04BA	float	2	VAr	Quadrant 2 Total Reactive Powe Demand	1								
1212	04BC	float	2	VAr	Quadrant 3 Total Reactive Powe Demand	1								
1214	04BE	float	2	VAr	Quadrant 4 Total Reactive Powe Demand	1								
1216	04C0	float	2	VAr	Total Reactive Power Demand	1								
1218	04C2	float	2	VA	L1 Phase Apperant Power Demand	1	✓	✓	✓	✓	✓	✓	✓	✓
1220	04C4	float	2	VA	L2 Phase Apperant Power Demand	1	✓	✓	✓	✓	✓	✓	✓	✓
1222	04C6	float	2	VA	L3 Phase Apperant Power Demand	1	✓	✓	✓	✓	✓	✓	✓	✓
1224	04C8	float	2	VA	L4 Phase Apperant Power Demand	1								
1226	04CA	float	2	VA	Total Import Apperant Power Demand	1	✓	✓	✓	✓	✓	✓	✓	✓
1228	04CC	float	2	VA	Total Export Apperant Power Demand	1	✓	✓	✓	✓	✓	✓	✓	✓
1230	04CE	float	2	VA	Total Apperant Power Demand	1								
1232	04D0	uint32	2	A	L1 Phase Max. Current Demand	0.001	✓	✓	✓	✓	✓	✓	✓	✓
1234	04D2	uint32	2	Time	L1 Phase Max. Current Demand Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1236	04D4	uint32	2	A	L2 Phase Max. Current Demand	0.001	✓	✓	✓	✓	✓	✓	✓	✓
1238	04D6	uint32	2	Time	L2 Phase Max. Current Demand Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1240	04D8	uint32	2	A	L3 Phase Max. Current Demand	0.001	✓	✓	✓	✓	✓	✓	✓	✓
1242	04DA	uint32	2	Time	L3 Phase Max. Current Demand Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1244	04DC	uint32	2	A	L4 Phase Max. Current Demand	0.001				✓	✓	✓		
1246	04DE	uint32	2	Time	L4 Phase Max. Current Demand Time	Unix Time Stamp				✓	✓	✓		
1248	04E0	uint32	2	A	IN Max. Current Demand	0.001	✓	✓	✓	✓	✓	✓	✓	✓
1250	04E2	uint32	2	Time	IN Phase Max. Current Demand Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1252	04E4	float	2	W	PL1 Max Active Import Power	1	✓	✓	✓	✓	✓	✓	✓	✓
1254	04E6	uint32	2	Time	PL1 Max Active Import Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1256	04E8	float	2	W	PL1 Max Active Export Power	1	✓	✓	✓	✓	✓	✓	✓	✓
1258	04EA	uint32	2	Time	PL1 Max Active Export Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1260	04EC	float	2	W	PL2 Max Active Import Power	1	✓	✓	✓	✓	✓	✓	✓	✓
1262	04EE	uint32	2	Time	PL2 Max Active Import Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1264	04F0	float	2	W	PL2 Max Active Export Power	1	✓	✓	✓	✓	✓	✓	✓	✓
1266	04F2	uint32	2	Time	PL2 Max Active Export Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1268	04F4	float	2	W	PL3 Max Active Import Power	1	✓	✓	✓	✓	✓	✓	✓	✓
1270	04F6	uint32	2	Time	PL3 Max Active Import Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1272	04F8	float	2	W	PL3 Max Active Export Power	1	✓	✓	✓	✓	✓	✓	✓	✓
1274	04FA	uint32	2	Time	PL3 Max Active Export Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1276	04FC	float	2	W	PL4 Max Active Import Power	1								
1278	04FE	uint32	2	Time	PL4 Max Active Import Power Time	Unix Time Stamp								
1280	0500	float	2	W	PL4 Max Active Export Power	1								
1282	0502	uint32	2	Time	PL4 Max Active Export Power Time	Unix Time Stamp								

1284	0504	float	2	W	Total Active Power Import Max Demand	1	✓	✓	✓	✓	✓	✓	✓	✓
1286	0506	uint32	2	Time	Total Active Power Import Max Demand Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1288	0508	float	2	W	Total Active Power Export Max Demand	1	✓	✓	✓	✓	✓	✓	✓	✓
1290	050A	uint32	2	Time	Total Active Power Export Max Demand Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1292	050C	float	2	VAr	L1 Phase Max Demand Reactive Power	1								
1294	050E	uint32	2	Time	L1 Phase Max Demand Reactive Power Time	Unix Time Stamp								
1296	0510	float	2	VAr	L2 Phase Max Demand Reactive Power	1								
1298	0512	uint32	2	Time	L2 Phase Max Demand Reactive Power Time	Unix Time Stamp								
1300	0514	float	2	VAr	L3 Phase Max Demand Reactive Power	1								
1302	0516	uint32	2	Time	L3 Phase Max Demand Reactive Power Time	Unix Time Stamp								
1304	0518	float	2	VAr	L4 Phase Max Demand Reactive Power	1								
1306	051A	uint32	2	Time	L4 Phase Max Demand Reactive Power Time	Unix Time Stamp								
1308	051C	float	2	VAr	Quadrant 1 Max Demand Reactive Power	1								
1310	051E	uint32	2	Time	Quadrant 1 Max Demand Reactive Power Time	Unix Time Stamp								
1312	0520	float	2	VAr	Quadrant 2 Max Demand Reactive Power	1								
1314	0522	uint32	2	Time	Quadrant 2 Max Demand Reactive Power Time	Unix Time Stamp								
1316	0524	float	2	VAr	Quadrant 3 Max Demand Reactive Power	1								
1318	0526	uint32	2	Time	Quadrant 3 Max Demand Reactive Power Time	Unix Time Stamp								
1320	0528	float	2	VAr	Quadrant 4 Max Demand Reactive Power	1								
1322	052A	uint32	2	Time	Quadrant 4 Max Demand Reactive Power Time	Unix Time Stamp								
1324	052C	float	2	VAr	Quadrant Total Max Demand Reactive Power	1								
1326	052E	uint32	2	Time	Quadrant Total Max Demand Reactive Power Time	Unix Time Stamp								
1328	0530	float	2	W	SL1 Max Demand Import Power	1	✓	✓	✓	✓	✓	✓	✓	✓
1330	0532	float	2	Time	SL1 Max Demand Import Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1332	0534	float	2	W	SL1 Max Demand Export Power	1	✓	✓	✓	✓	✓	✓	✓	✓
1334	0536	uint32	2	Time	SL1 Max Demand Export Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1336	0538	float	2	W	SL2 Max Demand Import Power	1	✓	✓	✓	✓	✓	✓	✓	✓
1338	053A	uint32	2	Time	SL2 Max Demand Import Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1340	053C	float	2	W	SL2 Max Demand Export Power	1	✓	✓	✓	✓	✓	✓	✓	✓
1342	053E	uint32	2	Time	SL2 Max Demand Export Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1344	0540	float	2	W	SL3 Max Demand Import Power	1	✓	✓	✓	✓	✓	✓	✓	✓
1346	0542	uint32	2	Time	SL3 Max Demand Import Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1348	0544	float	2	W	SL3 Max Demand Export Power	1	✓	✓	✓	✓	✓	✓	✓	✓
1350	0546	uint32	2	Time	SL3 Max Demand Export Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1352	0548	float	2	W	SL4 Max Demand Import Power	1								
1354	054A	uint32	2	Time	SL4 Max Demand Import Power Time	Unix Time Stamp								
1356	054C	float	2	W	SL4 Max Demand Export Power	1								
1358	054E	uint32	2	Time	SL4 Max Demand Export Power Time	Unix Time Stamp								
1360	0550	float	2	VA	Total Apperant Power Import Max Demand	1	✓	✓	✓	✓	✓	✓	✓	✓
1362	0552	uint32	2	Time	Total Apperant Power Import Max Demand Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1364	0554	float	2	VA	Total Apperant Power Export Max Demand	1	✓	✓	✓	✓	✓	✓	✓	✓
1366	0556	uint32	2	Time	Total Apperant Power Export Max Demand Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1368	0558	uint32	2	A	L1 Fundemantel Current Max Demand	0.001				✓	✓	✓	✓	✓
1370	055A	uint32	2	A	L2 Fundemantel Current Max Demand	0.001				✓	✓	✓	✓	✓
1372	055C	uint32	2	A	L3 Fundemantel Current Max Demand	0.001				✓	✓	✓	✓	✓

Harmonics

THD

Supported Functions	Start Address	Register Counts
Read holding registers	2000	36

Address Dec	Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR34S-11	MPR32S	MPR34S-20	MPR45S	MPR46S	MPR47S	MPR42-OGT	MPR47-SE
2000	07D0	uint32	2	%	Total Harmoic Distorsion VLL12	0.1	✓		✓		✓	✓	✓	✓
2002	07D2	uint32	2	%	Total Harmoic Distorsion VLL23	0.1	✓		✓		✓	✓	✓	✓
2004	07D4	uint32	2	%	Total Harmoic Distorsion VLL31	0.1	✓		✓		✓	✓	✓	✓
2006	07D6	uint32	2	%	Total Harmonic Distorsion VL1	0.1	✓		✓		✓	✓	✓	✓
2008	07D8	uint32	2	%	Total Harmonic Distorsion VL2	0.1	✓		✓		✓	✓	✓	✓
2010	07DA	uint32	2	%	Total Harmonic Distorsion VL3	0.1	✓		✓		✓	✓	✓	✓
2012	07DC	uint32	2	%	Total Harmonic Distorsion VL4	0.1								
2014	07DE	uint32	2	%	Total Harmonic Distorsion IL1	0.1	✓		✓		✓	✓	✓	✓
2016	07E0	uint32	2	%	Total Harmonic Distorsion IL2	0.1	✓		✓		✓	✓	✓	✓
2018	07E2	uint32	2	%	Total Harmonic Distorsion IL3	0.1	✓		✓		✓	✓	✓	✓
2020	07E4	uint32	2	%	Total Harmonic Distorsion IL4	0.1					✓	✓		
2022	07E6	uint32	2	%	Total Harmonic Distorsion IN	0.1	✓		✓		✓	✓	✓	✓
2024	07E8	uint32	2	%	Total Demand Distorsion Very Short IL1	0.1					✓	✓	✓	✓
2026	07EA	uint32	2	%	Total Demand Distorsion Very Short IL2	0.1					✓	✓	✓	✓
2028	07EC	uint32	2	%	Total Demand Distorsion Very Short IL3	0.1					✓	✓	✓	✓
2030	07EE	uint32	2	%	Total Demand Distorsion Short IL1	0.1					✓	✓	✓	✓
2032	07F0	uint32	2	%	Total Demand Distorsion Short IL2	0.1					✓	✓	✓	✓
2034	07F2	uint32	2	%	Total Demand Distorsion Short IL3	0.1					✓	✓	✓	✓

THD I Harmonic Order

Supported Functions	Start Address	Register Counts
Read holding registers	3000	251

Address Dec	Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR34S-11	MPR32S	MPR34S-20	MPR45S	MPR46S	MPR47S	MPR42-OGT	MPR47-SE
3000	0BB8	uint16	1	%	Number Of Harmonics	0.1						✓	✓	✓
3001	0BB9	uint16	1	%	H_IL1_2	0.1						✓	✓	✓
3002	0BBA	uint16	1	%	H_IL2_2	0.1						✓	✓	✓
3003	0BBB	uint16	1	%	H_IL3_2	0.1						✓	✓	✓
3004	0BBC	uint16	1	%	H_IL4_2	0.1								
3005	0BBD	uint16	1	%	H_ILN_2	0.1						✓	✓	✓
3006	0BBE	uint16	1	%	H_IL1_3	0.1						✓	✓	✓
3007	0BBF	uint16	1	%	H_IL2_3	0.1						✓	✓	✓
3008	0BC0	uint16	1	%	H_IL3_3	0.1						✓	✓	✓
3009	0BC1	uint16	1	%	H_IL4_3	0.1								
3010	0BC2	uint16	1	%	H_ILN_3	0.1						✓	✓	✓
.....	.....	.....	.....	.....	.....	.....						✓	✓	✓
.....	.....	.....	.....	.....	.....	.....						✓	✓	✓
.....	.....	.....	.....	.....	.....	.....						✓	✓	✓
3241	0CA9	uint16	1	%	H_IL1_50	0.1						✓	✓	✓
3242	0CAA	uint16	1	%	H_IL2_50	0.1						✓	✓	✓
3243	0CAB	uint16	1	%	H_IL3_50	0.1						✓	✓	✓
3244	0CAC	uint16	1	%	H_IL4_50	0.1								
3245	0CAD	uint16	1	%	H_ILN_50	0.1						✓	✓	✓
3246	0CAE	uint16	1	%	H_IL1_51	0.1						✓	✓	✓
3247	0CAF	uint16	1	%	H_IL2_51	0.1						✓	✓	✓
3248	0CB0	uint16	1	%	H_IL3_51	0.1						✓	✓	✓
3249	0CB1	uint16	1	%	H_IL4_51	0.1								
3250	0CB2	uint16	1	%	H_ILN_51	0.1						✓	✓	✓

THD V Harmonic Order

Supported Functions	Start Address	Register Counts
Read holding registers	4000	201

Address Dec	Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR34S-11	MPR32S	MPR34S-20	MPR45S	MPR46S	MPR47S	MPR42-OGT	MPR47-SE
4000	0FA0	uint16	1	%	Number Of Harmonics	0.1						✓	✓	✓
4001	0FA1	uint16	1	%	H_V1_2	0.1						✓	✓	✓
4002	0FA2	uint16	1	%	H_V2_2	0.1						✓	✓	✓
4003	0FA3	uint16	1	%	H_V3_2	0.1						✓	✓	✓
4004	0FA4	uint16	1	%	H_V4_2	0.1								
4005	0FA5	uint16	1	%	H_V1_3	0.1						✓	✓	✓
4006	0FA6	uint16	1	%	H_V2_3	0.1						✓	✓	✓
4007	0FA7	uint16	1	%	H_V3_3	0.1						✓	✓	✓
4008	0FA8	uint16	1	%	H_V4_3	0.1								
.....	.....	.....	.....	.....	.....	.....						✓	✓	✓
.....	.....	.....	.....	.....	.....	.....						✓	✓	✓
.....	.....	.....	.....	.....	.....	.....						✓	✓	✓
4193	1061	uint16	1	%	H_V1_50	0.1						✓	✓	✓
4194	1062	uint16	1	%	H_V2_50	0.1						✓	✓	✓
4195	1063	uint16	1	%	H_V3_50	0.1						✓	✓	✓
4196	1064	uint16	1	%	H_V4_50	0.1								
4197	1065	uint16	1	%	H_V1_51	0.1						✓	✓	✓
4198	1066	uint16	1	%	H_V2_51	0.1						✓	✓	✓
4199	1067	uint16	1	%	H_V3_51	0.1						✓	✓	✓
4200	1068	uint16	1	%	H_V4_51	0.1								

THD VLL Harmonic Order

Supported Functions	Start Address	Register Counts
Read holding registers	5000	151

Address Dec	Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR34S-11	MPR32S	MPR34S-20	MPR45S	MPR46S	MPR47S	MPR42-OGT	MPR47-SE
5000	1388	uint16	1	%	NUM_OF_HARMONICS	0.1						✓	✓	✓
5001	1389	uint16	1	%	H_VLL1_2_2	0.1						✓	✓	✓
5002	138A	uint16	1	%	H_VLL2_3_2	0.1						✓	✓	✓
5003	138B	uint16	1	%	H_VLL3_1_2	0.1						✓	✓	✓
5004	138C	uint16	1	%	H_VLL1_2_3	0.1						✓	✓	✓
5005	138D	uint16	1	%	H_VLL2_3_3	0.1						✓	✓	✓
5006	138E	uint16	1	%	H_VLL3_1_3	0.1						✓	✓	✓
5007	138F	uint16	1	%	H_VLL1_2_4	0.1						✓	✓	✓
5008	1390	uint16	1	%	H_VLL2_3_4	0.1						✓	✓	✓
5009	1391	uint16	1	%	H_VLL3_1_4	0.1						✓	✓	✓
.....	.....	.....	.....	.....	.....	.....						✓	✓	✓
.....	.....	.....	.....	.....	.....	.....						✓	✓	✓
.....	.....	.....	.....	.....	.....	.....						✓	✓	✓
5145	1419	uint16	1	%	H_VLL1_2_50	0.1						✓	✓	✓
5146	141A	uint16	1	%	H_VLL2_3_50	0.1						✓	✓	✓
5147	141B	uint16	1	%	H_VLL3_1_50	0.1						✓	✓	✓
5148	141C	uint16	1	%	H_VLL1_2_51	0.1						✓	✓	✓
5149	141D	uint16	1	%	H_VLL2_3_51	0.1						✓	✓	✓
5150	141E	uint16	1	%	H_VLL3_1_51	0.1						✓	✓	✓

NETWORK SETTINGS

Supported Functions	Start Address	Register Counts
Read holding registers	16384	18
Write single register		
Write multiple registers		

Address Dec	Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR34S-11	MPR32S	MPR34S-20	MPR45S	MPR46S	MPR47S	MPR42-OGT	MPR47-SE
16384	4000	uint16	1	-	Network Type: 0: 3P4W 1: 3P3W 2: ARON 3: 3P4W Balanced 4: 3P3W Balanced	1	✓	✓	✓	✓	✓	✓	✓	✓
16385	4001	uint16	1	A	Current Transformer Secondary: 0: 1A 1: 5A	1	✓	✓	✓	✓	✓	✓	✓	✓
16386	4002	uint16	1	A	Current Transformer Primary: 5 -- 9999	1	✓	✓	✓	✓	✓	✓	✓	✓
16387	4003	uint16	1	-	Voltage Transformer Present: 0-None 1-Present	1	✓	✓	✓	✓	✓	✓	✓	✓
16388	4004	uint16	1	V	Voltage Transformer Secondary: 50 -- 300	1	✓	✓	✓	✓	✓	✓	✓	✓
16389	4005	uint32	2	V	Voltage Transformer Primary: 50 -- 999999	1	✓	✓	✓	✓	✓	✓	✓	✓
16391	4007	uint16	1	Minutes	P Demand Time: 1: 1 Minute 5: 5 Minutes 10: 10 Minutes 15: 15 Minutes 20: 20 Minutes 30: 30 Minutes 60: 60 Minutes	1								
16392	4008	uint16	1	Minutes	I Demand Time: 1: 1 Minute 5: 5 Minutes 10: 10 Minutes 15: 15 Minutes 20: 20 Minutes 30: 30 Minutes 60: 60 Minutes	1	✓	✓	✓	✓	✓	✓	✓	✓
16393	4009	uint16	1	Minutes	V Average Time 1: 1 Minute 5: 5 Minutes 10: 10 Minutes 15: 15 Minutes 20: 20 Minutes 30: 30 Minutes 60: 60 Minutes	1								
16394	400A	uint16	1	Hz	System Frequency: 0: 50 Hz 1: 60 Hz	1	✓	✓	✓	✓	✓	✓	✓	✓
16395	400B	uint32	2	V	System Voltage: VT_Primary --- 25V* primary/secondary	1	✓	✓	✓	✓	✓	✓	✓	✓
16397	400D	uint16	1	A	Systen Current: CT_Primary --- 1A	1	✓	✓	✓	✓	✓	✓	✓	✓
16398	400E	uint16	1	%	Sag Level: 70% -- 98%	0.1						✓		✓
16399	400F	uint16	1	%	Sag Hysteresis: 0.5% -- 5%	0.1						✓		✓
16400	4010	uint16	1	%	Swell Level: 102% -- 130%	0.1						✓		✓
16401	4011	uint16	1	%	Swell Hysteresis: 0.5% -- 5%	0.1						✓		✓

SETUP

Supported Functions	Start Address	Register Counts
Read holding registers	17000	180
Write single register		
Write multiple registers		

Address Dec	Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR34S-11	MPR32S	MPR34S-20	MPR45S	MPR46S	MPR47S	MPR42-OGT	MPR47-SE
17000	4268	uint16	1	-	Network Type: 0: 3P4W 1: 3P3W 2: ARON 3: 3P4W Balanced 4: 3P3W Balanced	1	✓	✓	✓	✓	✓	✓	✓	✓
17001	4269	uint16	1	A	Current Transformer Secondary: 0: 1A 1: 5A	1	✓	✓	✓	✓	✓	✓	✓	✓
17002	426A	uint16	1	A	Current Transformer Primary: 5 -- 9999	1	✓	✓	✓	✓	✓	✓	✓	✓
17003	426B	uint16	1	-	Voltage Transformer Present: 0-None 1-Present	1	✓	✓	✓	✓	✓	✓	✓	✓
17004	426C	uint16	1	V	Voltage Transformer Secondary: 50 -- 300	1	✓	✓	✓	✓	✓	✓	✓	✓
17005	426D	uint32	2	V	Voltage Seconder Primary: 50 -- 999999	1	✓	✓	✓	✓	✓	✓	✓	✓
17007	426F	uint16	1	Minutes	P Demand Time: 1: 1 Minute 5: 5 Minutes 10: 10 Minutes 15: 15 Minutes 20: 20 Minutes 30: 30 Minutes 60: 60 Minutes	1								
17008	4270	uint16	1	Minutes	I Demand Time: 1: 1 Minute 5: 5 Minutes 10: 10 Minutes 15: 15 Minutes 20: 20 Minutes 30: 30 Minutes 60: 60 Minutes	1	✓	✓	✓	✓	✓	✓	✓	✓
17009	4271	uint16	1	Minutes	V Average Time 1: 1 Minute 5: 5 Minutes 10: 10 Minutes 15: 15 Minutes 20: 20 Minutes 30: 30 Minutes 60: 60 Minutes	1								
17010	4272	uint16	1	Hz	System Frequency: 0: 50 Hz 1: 60 Hz	1	✓	✓	✓	✓	✓	✓	✓	✓
17011	4273	uint32	2	V	System Voltage: VT_Primary ---25V* primary/secondary	1	✓	✓	✓	✓	✓	✓	✓	✓
17013	4275	uint16	1	A	Systen Current: CT_Primary --- 1A	1	✓	✓	✓	✓	✓	✓	✓	✓
17014	4276	uint16	1	%	Sag Level: 70% -- 98%	0.1						✓		✓
17015	4277	uint16	1	%	Sag Hysteresis: 0.5% -- 5%	0.1						✓		✓
17016	4278	uint16	1	%	Swell Level: 102% -- 130%	0.1						✓		✓
17017	4279	uint16	1	%	Swell Hysteresis: 0.5% -- 5%	0.1						✓		✓
17018	427A	uint16	1	-	OUT1 Type: 0: REMOTE 1: PULSE 2: ALARM	1	✓			O	O	O	O	O
17019	427B	uint16	1	-	OUT2 Type: 0: REMOTE 1: PULSE 2: ALARM	1				O	O	O	O	O
17020	427C	uint16	1	-	OUT3 Type: 0: REMOTE 1: PULSE 2: ALARM	1				O	O	O	O	O
17021	427D	uint16	1	-	OUT4 Type: 0: REMOTE 1: PULSE 2: ALARM	1				O	O	O	O	O
17022	427E	uint16	1		OUT5 Type: 0: REMOTE 1: PULSE 2: ALARM									
17023	427F	uint16	1		OUT6 Type: 0: REMOTE 1: PULSE 2: ALARM									
17024	4280	uint16	1		OUT7 Type: 0: REMOTE 1: PULSE 2: ALARM									
17025	4281	uint16	1		OUT8 Type: 0: REMOTE 1: PULSE 2: ALARM									
17026	4282	uint16	1	-	INPUT1 Type: 0: digital 1: PULSE 2: Generator	1	✓		✓	O	O	O	O	O
17027	4283	uint16	1	-	INPUT2 Type: 0: digital 1: PULSE 2: Generator	1			✓	O	O	O	O	O
17028	4284	uint16	1	-	INPUT3 Type: 0: digital 1: PULSE 2: Generator	1				O	O	O	O	O

17029	428S	uint16	1	-	INPUT4 Type: 0: digital 1: PULSE 2: Generator	1				O	O	O	O	O
17030	4286	uint16	1		INPUT5 Type: 0: digital 1: PULSE 2: Generator									
17031	4287	uint16	1		INPUT6 Type: 0: digital 1: PULSE 2: Generator									
17032	4288	uint16	1		INPUT7 Type: 0: digital 1: PULSE 2: Generator									
17033	4289	uint16	1		INPUT8 Type: 0: digital 1: PULSE 2: Generator									
17034	428A	uint16	1	-	Analog Output 1 Type: 0: 0 -- 5 V 1: 0 -- 10 V 2: -5 -- 5 V 3: -10 -- 10 V 4: null 5: 4 -- 20 mA 6: 0 -- 20 mA 7: 0 -- 24 mA	1				O	O	O	O	O
17035	428B	uint16	1	-	Analog Output 1 Parameter: 0: VLN1, 1: VLN2, 2: VLN3, 3: VLN4 4: VLL1, 5: VLL2, 6: VLL3, 7: IL1, 8: IL2, 9: IL3, 10: IL4, 11: ILN 12: IL1 Demand, 13: IL2 Demand, 14: IL3 Demand 15: IL4 Demand, 16: ILN Demand, 17: P1, 18: P2, 19: P3, 20: Q1, 21: Q2, 22: Q3, 23: S1, 24: S2, 25: S3, 26: SUMP, 27: SUMP IMP, 28: SUMP EXP, 29: SUMQ, 30: SUM QUAD1, 31: SUM QUAD2, 32: SUM QUAD3, 33: SUM QUAD4, 34: SUM S, 35: SUM S IMP, 36: SUM S EXP, 37: SUM P IMP Deman, 38: SUM P EXP Demand, 39: SUM S IMP Demand, 40: SUM S EXP Demand, 41: Cos Phi 1, 42: Cos Phi 2, 43: Cos Phi 3, 44: SUM Cos Phi, 45: Hz 46: Remote	1				O	O	O	O	O
17036	428C	uint32	2	Depends on parameter	Analog Output1 High	Depends on parameter				O	O	O	O	O
17038	428E	uint32	2	Depends on parameter	Analog Output1 Low	Depends on parameter				O	O	O	O	O
17040	4290	uint16	1	-	Analog Output 2 Type:	1				O	O	O	O	O
17041	4291	uint16	1	-	Analog Output 2 Parameter:	1				O	O	O	O	O
17042	4292	uint32	2	Depends on parameter	Analog Output2 High	Depends on parameter				O	O	O	O	O
17044	4294	uint32	2	Depends on parameter	Analog Output2 Low	Depends on parameter				O	O	O	O	O
17046	4296	uint16	1	-	Analog Output 3 Type:	1				O	O	O	O	O
17047	4297	uint16	1	-	Analog Output 3 Parameter:	1				O	O	O	O	O
17048	4298	uint32	2	Depends on parameter	Analog Output3 High	Depends on parameter				O	O	O	O	O
17050	429A	uint32	2	Depends on parameter	Analog Output3 Low	Depends on parameter				O	O	O	O	O
17052	429C	uint16	1	-	Analog Output 4 Type:	1				O	O	O	O	O
17053	429D	uint16	1	-	Analog Output 4 Parameter:	1				O	O	O	O	O
17054	429E	uint32	2	Depends on parameter	Analog Output4 High	Depends on parameter				O	O	O	O	O
17056	42A0	uint32	2	Depends on parameter	Analog Output4 Low	Depends on parameter				O	O	O	O	O
17058	42A2	uint16	1	-	Pulse Input 1: 0: Pasive 1: Active	1					O	O	O	O
17059	42A3	uint16	1	-	Pulse Input 1 Ratio: 1 -- 20000	1					O	O	O	O
17060	42A4	uint16	1	-	Pulse Input 2: 0: Pasive 1: Active	1					O	O	O	O
17061	42A5	uint16	1	-	Pulse Input 2 Ratio: 1 -- 20000	1					O	O	O	O
17062	42A6	uint16	1	-	Pulse Input 3: 0: Pasive 1: Active	1					O	O	O	O
17063	42A7	uint16	1	-	Pulse Input 3 Ratio: 1 -- 20000	1					O	O	O	O
17064	42A8	uint16	1	-	Pulse Input 4: 0: Pasive 1: Active	1					O	O	O	O
17065	42A9	uint16	1	-	Pulse Input 4 Ratio: 1 -- 20000	1					O	O	O	O
17066	42AA	uint16	1	-	Pulse Input 5: 0: Pasive 1: Active									
17067	42AB	uint16	1	-	Pulse Input 5 Ratio: 1 -- 20000									
17068	42AC	uint16	1	-	Pulse Input 6: 0: Pasive 1: Active									
17069	42AD	uint16	1	-	Pulse Input 6 Ratio: 1 -- 20000									
17070	42AE	uint16	1	-	Pulse Input 7: 0: Pasive 1: Active									
17071	42AF	uint16	1	-	Pulse Input 7 Ratio: 1 -- 20000									
17072	42B0	uint16	1	-	Pulse Input 8: 0: Pasive 1: Active									
17073	42B1	uint16	1	-	Pulse Input 8 Ratio: 1 -- 20000									
17074	42B2	uint16	1	ms	Pulse Width: 0: 20 ms 1: 40 ms 2: 60 ms 3: 80 ms 4: 100 ms 5: 150 ms 6: 200 ms 7: 300 ms 8: 400 ms 9: 500 ms	1					O	O	O	O
17075	42B3	uint16	1	-	Pulse Output1 Parameter: 0: Disable 1: Total Import Active Energy (Q14) 2: Total Export Active Energy (Q23) 3: Total import reactive energy (Q1) 4: Total Export Reactive Energy (Q4) 5: Total Import Reactive Energy (Q2) 6: Total Export Reactive Energy (Q3) 7:Total Import Apperant Energy(Q14) 8: Total Export Apperant Energy(Q23) 9: Total Import Active Energy (L1) 10: Total Import Active Energy (L2) 11:Total Import Active Energy (L3)	1	✓		✓	O	O	O	O	O
17076	42B4	uint16	1	Wh	Pulse Output 1 Ratio: 0: 1 1: 10 2: 100 3: 1000 4: 10000 5: 100000 6: 1000000	1	✓		✓	O	O	O	O	O
17077	42B5	uint16	1	ms	Pulse Output 1 Pulse Width: between 20 - 1000 ms	1	✓		✓	O	O	O	O	O
17078	42B6	uint16	1	ms	Pulse Output 1 Pulse Duty: between 20 - 1000 ms	1	✓		✓	O	O	O	O	O
17079	42B7	uint16	1	-	Pulse Output 2 Parameter:	1				O	O	O	O	O
17080	42B8	uint16	1	-	Pulse Output 2 Ratio:	1				O	O	O	O	O
17081	42B9	uint16	1	ms	Pulse Output 2 Pulse Width:	1				O	O	O	O	O
17082	42BA	uint16	1	ms	Pulse Output 2 Pulse Duty:	1				O	O	O	O	O
17083	42BB	uint16	1	-	Pulse Output3 Parameter:	1				O	O	O	O	O
17084	42BC	uint16	1	-	Pulse Output 3 Ratio:	1				O	O	O	O	O
17085	42BD	uint16	1	ms	Pulse Output 3 Pulse Width:	1				O	O	O	O	O
17086	42BE	uint16	1	ms	Pulse Output 3 Pulse Duty:	1				O	O	O	O	O
17087	42BF	uint16	1	-	Pulse Output4 Parameter:	1				O	O	O	O	O
17088	42C0	uint16	1	-	Pulse Output 4 Ratio:	1				O	O	O	O	O
17089	42C1	uint16	1	ms	Pulse Output 4 Pulse Width:	1				O	O	O	O	O

17090	42C2	uint16	1	ms	Pulse Output 4 Pulse Duty:	1				O	O	O	O	O
17091	42C3	uint16	1	-	Pulse Output 5 Parameter:									
17092	42C4	uint16	1	Wh	Pulse Output 5 Ratio:									
17093	42C5	uint16	1	ms	Pulse Output 5 Pulse Width:									
17094	42C6	uint16	1	ms	Pulse Output 5 Pulse Duty:									
17095	42C7	uint16	1	-	Pulse Output 6 Parameter:									
17096	42C8	uint16	1	Wh	Pulse Output 6 Ratio:									
17097	42C9	uint16	1	ms	Pulse Output 6 Pulse Width:									
17098	42CA	uint16	1	ms	Pulse Output 6 Pulse Duty:									
17099	42CB	uint16	1	-	Pulse Output 7 Parameter:									
17100	42CC	uint16	1	Wh	Pulse Output 7 Ratio:									
17101	42CD	uint16	1	ms	Pulse Output 7 Pulse Width:									
17102	42CE	uint16	1	ms	Pulse Output 7 Pulse Duty:									
17103	42CF	uint16	1	-	Pulse Output 8 Parameter:									
17104	42D0	uint16	1	Wh	Pulse Output 8 Ratio:									
17105	42D1	uint16	1	ms	Pulse Output 8 Pulse Width:									
17106	42D2	uint16	1	ms	Pulse Output 8 Pulse Duty:									
17107	42D3	uint16	1	-	Alarm1 Status: 0: Passive 1: Active	1	✓	✓	✓	✓	✓	✓	✓	✓
17108	42D4	uint16	1	-	Alarm1 Parameter: 0: VLN 1: VLL 2: IL 3: InC 4: I Demand 5:In Demand 6: P 7: Q 8: S 9: SUM P 10: SUM Q 11: SUM S 12: P Demand 13: S Demand 14: SUM P Demand 15: SUM S Demand 16: COS Phi 17: Sum COS Phi 18: frequency 19: VLN4 20: IL4 21: THD V 22: THD U 23: THD I 24:Working Hour 25: Input 1 26: Input 2 27: Input 3 28: Input 4	1	19,20,26,27,28: N/A	19,20,26,27,28: N/A	19,20,26,27,28: N/A	✓	✓	✓	✓	✓
17109	42D5	uint16	1	-	0: Greater 1: Less 2: In window 3: Out window	1	✓	✓	✓	✓	✓	✓	✓	✓
17110	42D6	uint16	1	s	Alarm 1 On Time: 0-- 9999	0.1	✓	✓	✓	✓	✓	✓	✓	✓
17111	42D7	uint16	1	s	Alarm 1 Off Time: 0-- 9999	0.1	✓	✓	✓	✓	✓	✓	✓	✓
17112	42D8	uint16	1	-	0: Output 1 1: Output 2 2: Output 3 3: Output 4	1	1,2,3:N/A	1,2,3:N/A	1,2,3:N/A	✓	✓	✓	✓	✓
17113	42D9	int32	2	Depends on parameter	Alarm 1 High Threshold Value	Depends on parameter	✓	✓	✓	✓	✓	✓	✓	✓
17115	42DB	int32	2	Depends on parameter	Alarm 1 Low Threshold Value	Depends on parameter	✓	✓	✓	✓	✓	✓	✓	✓
17117	42DD	uint16	1	%	Alarm 1 Hysteresis	0.1	✓	✓	✓	✓	✓	✓	✓	✓
17118	42DE	uint16	1	-	Alarm2 Status:	1	✓	✓	✓	✓	✓	✓	✓	✓
17119	42DF	uint16	1	-	Alarm2 Parameter:	1	✓	✓	✓	✓	✓	✓	✓	✓
17120	42E0	uint16	1	-	....	1	✓	✓	✓	✓	✓	✓	✓	✓
17121	42E1	uint16	1	s	....	0.1	✓	✓	✓	✓	✓	✓	✓	✓
17122	42E2	uint16	1	s	....	0.1	✓	✓	✓	✓	✓	✓	✓	✓
17123	42E3	uint16	1	-	....	1	✓	✓	✓	✓	✓	✓	✓	✓
17124	42E4	int32	2	Depends on parameter	....	Depends on parameter	✓	✓	✓	✓	✓	✓	✓	✓
17126	42E6	int32	2	Depends on parameter	....	Depends on parameter	✓	✓	✓	✓	✓	✓	✓	✓
17128	42E8	uint16	1	%	....	0.1	✓	✓	✓	✓	✓	✓	✓	✓
17129	42E9	uint16	1	-	Alarm3 Status:	1	✓	✓	✓	✓	✓	✓	✓	✓
17130	42EA	uint16	1	-	Alarm3 Parameter:	1	✓	✓	✓	✓	✓	✓	✓	✓
17131	42EB	uint16	1	-	....	1	✓	✓	✓	✓	✓	✓	✓	✓
17132	42EC	uint16	1	s	....	0.1	✓	✓	✓	✓	✓	✓	✓	✓
17133	42ED	uint16	1	s	....	0.1	✓	✓	✓	✓	✓	✓	✓	✓
17134	42EE	uint16	1	-	....	1	✓	✓	✓	✓	✓	✓	✓	✓
17135	42EF	int32	2	Depends on parameter	....	Depends on parameter	✓	✓	✓	O	O	O	O	O
17137	42F1	int32	2	Depends on parameter	....	Depends on parameter	✓	✓	✓	✓	✓	✓	✓	✓
17139	42F3	uint16	1	%	....	0.1	✓	✓	✓	✓	✓	✓	✓	✓
17140	42F4	uint16	1	-	Alarm4 Status:	1	✓	✓	✓	✓	✓	✓	✓	✓
17141	42F5	uint16	1	-	Alarm4 Parameter:	1	✓	✓	✓	✓	✓	✓	✓	✓
17142	42F6	uint16	1	-	....	1	✓	✓	✓	✓	✓	✓	✓	✓
17143	42F7	uint16	1	s	....	0.1	✓	✓	✓	✓	✓	✓	✓	✓
17144	42F8	uint16	1	s	....	0.1	✓	✓	✓	✓	✓	✓	✓	✓
17145	42F9	uint16	1	-	....	1	✓	✓	✓	✓	✓	✓	✓	✓
17146	42FA	int32	2	Depends on parameter	....	Depends on parameter	✓	✓	✓	O	O	O	O	O
17148	42FC	int32	2	Depends on parameter	....	Depends on parameter	✓	✓	✓	✓	✓	✓	✓	✓
17150	42FE	uint16	1	%	....	0.1	✓	✓	✓	✓	✓	✓	✓	✓
17151	42FF	uint16	1	-	Reserved	1								
17152	4300	uint16	1	-	WORKING HOUR COUNTER PARAMETER: 0: VLN 1: VLL 2: IL 3: In 4: I Demand 5:In Demand 6: P 7: Q 8: S 9: SUM P 10: SUM Q 11: SUM S 12: P Demand 13: S Demand 14: SUM P Demand 15: SUM S Demand 16: COS Phi 17: Sum COS Phi 18: frequency 19: VLN4 20: IL4 21: THD V 22: THD U 23: THD I 24: N/A 25: Input 1 26: Input 2 27: Input 3	1	19,20,26,27,28: N/A	✓	✓	✓	✓	✓	✓	✓
17153	4301	uint32	2	ends on param	WORKING HOUR COUNTER PARAMETER LEVEL	Depends on parameter	✓	✓	✓	✓	✓	✓	✓	✓
17155	4303	uint16	1	-	Modbus Protocol: 0: MODBUS RS485 1: MODBUS TCP	1								
17156	4304	uint16	1	-	Modbus Slave Address: 1 -- 247	1	✓	✓	✓	✓	✓	✓	✓	✓
17157	4305	uint16	1	bps	Modbus Baud Rate: 0: 2400 1: 4800 2: 9600 3: 19200 4: 38400 5: 57600 6: 115200	1	✓	✓	✓	✓	✓	✓	✓	✓
17158	4306	uint16	1	bit	Modbus Parity: 0 : None 1: Odd 2: Even	1	✓	✓	✓	✓	✓	✓	✓	✓
17159	4307	uint16	1	-	Password Activate: 0: Passive 1: Active	1	✓	✓	✓	✓	✓	✓	✓	✓
17160	4308	uint16	1	-	Password	1	✓	✓	✓	✓	✓	✓	✓	✓
17161	4309	uint16	1	-	LCD Contrast Setting: 0 -- 15	1	✓	✓	✓	✓	✓	✓	✓	✓

17162	430A	uint16	1	-	LCD Backlight Setting: 0: closed 1: open 2: automatic	1	✓	✓	✓	✓	✓	✓	✓	✓
17163	430B	uint16	1	-	Language Setting: 0: english 1: turkish 2: german 3: french	1	✓	✓	✓	✓	✓	✓	✓	✓
17164	430C	uint16	1	-	-	1	✓	✓	✓	✓	✓	✓	✓	✓
17165	430D	uint16	1	month	DST Start Month: 1-12	1	✓	✓	✓	✓	✓	✓	✓	✓
17166	430E	uint16	1	?	DST Start Week: 0: First 1: Second 2: Third 3: Fourth 4: Last	1	✓	✓	✓	✓	✓	✓	✓	✓
17167	430F	uint16	1	DAY	DST Start Day: 0 : SUNDAY 1: MONDAY 2: TUESDAY 3: WEDNESDAY 4: THURDAY 5: FRIDAY 6: SATURDAY	1	✓	✓	✓	✓	✓	✓	✓	✓
17168	4310	uint16	1	hour	DST Start Hour: 0-23	1	✓	✓	✓	✓	✓	✓	✓	✓
17169	4311	uint16	1	month	DST End Month: 1-12	1	✓	✓	✓	✓	✓	✓	✓	✓
17170	4312	uint16	1	?	DST END Week: 0: First 1: Second 2: Third 3: Fourth 4: Last	1	✓	✓	✓	✓	✓	✓	✓	✓
17171	4313	uint16	1	DAY	DST END DAY: 0 : SUNDAY 1: MONDAY 2: TUESDAY 3: WEDNESDAY 4: THURDAY 5: FRIDAY 6: SATURDAY	1	✓	✓	✓	✓	✓	✓	✓	✓
17172	4314	uint16	1	?	DST End Hour: 0-23	1	✓	✓	✓	✓	✓	✓	✓	✓
17173	4315	uint16	1	-	Tariff Activate: 0: Disable 1: Enable	1					✓	✓	✓	✓
17174	4316	uint16	1	-	Temperature Input Ch1 Type 0:Disable 1:B Type TC 2:T Type TC 3:K Type TC 4:J Type TC 5:N Type TC 6:R Type TC 7:S Type TC 8:PT100 9:PT200 10:PT500 11:PT1000 12:Ni100 13:Ni120	1				O	O	O	O	O
17175	4317	uint16	1	-	Temperature Input Ch2 Type 0:Disable 1:B Type TC 2:T Type TC 3:K Type TC 4:J Type TC 5:N Type TC 6:R Type TC 7:S Type TC 8:PT100 9:PT200 10:PT500 11:PT1000 12:Ni100 13:Ni120	1				O	O	O	O	O
17176	4318	uint16	1	-	Temperature Input Ch3 Type 0:Disable 1:B Type TC 2:T Type TC 3:K Type TC 4:J Type TC 5:N Type TC 6:R Type TC 7:S Type TC 8:PT100 9:PT200 10:PT500 11:PT1000 12:Ni100 13:Ni120	1				O	O	O	O	O
17177	4319	uint16	1	-	Temperature Input Ch4 Type 0:Disable 1:B Type TC 2:T Type TC 3:K Type TC 4:J Type TC 5:N Type TC 6:R Type TC 7:S Type TC 8:PT100 9:PT200 10:PT500 11:PT1000 12:Ni100 13:Ni120	1				O	O	O	O	O
17178	431A	uint16	1	-	Temperature Input Ch1Connection 0:4 Wire RTD 1:3 Wire RTD 2:2 Wire RTD	1				O	O	O	O	O
17179	431B	uint16	1	-	Temperature Input Ch3 Connection 0:4 Wire RTD 1:3 Wire RTD 2:2 Wire RTD	1				O	O	O	O	O
17180	431C	uint16	1	-	TDD Current Base 0: Maximum Current Demand 1: Nominal Current	1				✓	✓	✓	✓	✓
17181	431D	uint16	1	Minutes	TDD Average Period 15: 15 Minutes 20: 20 Minutes 30: 30 Minutes 60: 60 Minutes	1				✓	✓	✓	✓	✓

ETHERNET SETUP

Supported Functions	Start Address	Register Counts
Read holding registers	18000	27
Write single register		
Write multiple registers		

Address Dec	Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR34S-11	MPR32S	MPR34S-20	MPR45S	MPR46S	MPR47S	MPR42-OGT	MPR47-SE
18000	4650	uint32	2	-	Ethernet IP Address	1								✓
18002	4652	uint32	2	-	IP MASK Address	1								✓
18004	4654	uint32	2	-	IP Gateway Address	1								✓
18006	4656	uint32	2	-	DNS Address	1								✓
18008	4658	uint32	2	-	DNS Alter Address	1								✓
18010	465A	uint16	1	-	DHCP Mode: 0: Passive 1: Active	1								✓
18011	465B		1		Working Mode 0: Modbus TCP Server 1: Modbus TCP Client (ENTBUS)	1								✓
18012	465C	uint16	1	-	Port Number	1								✓
18013	465D	string	12	-	Server Name	1								✓
18025	4669	uint16	1	-	Server Port Number	1								✓
18026	466A	uint16	1	-	Time Out	1								✓

DATE/HOUR

Supported Functions	Start Address	Register Counts
Read holding registers	6000	18
Write single register		
Write multiple registers		

Address Dec	Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR34S-11	MPR32S	MPR34S-20	MPR45S	MPR46S	MPR47S	MPR42-OGT	MPR47-SE
6000	1770	uint16	1	DAY	DAY 1-31	1	✓	✓	✓	✓	✓	✓	✓	✓
6001	1771	uint16	1	month	MONTH 1-12	1	✓	✓	✓	✓	✓	✓	✓	✓
6002	1772	uint16	1	Yıl	YEAR 2000-2199	1	✓	✓	✓	✓	✓	✓	✓	✓
6003	1773	uint16	1	hour	HOUR 0-23	1	✓	✓	✓	✓	✓	✓	✓	✓
6004	1774	uint16	1	MINUTE	MINUTES 0-59	1	✓	✓	✓	✓	✓	✓	✓	✓
6005	1775	uint16	1	Second	SECONDS 0-59	1	✓	✓	✓	✓	✓	✓	✓	✓

6006	1776	uint16	1	DAY	0: SUNDAY 1: MONDAY 2: TUESDAY 3: WEDNESDAY 4: THURDAY 5: FRIDAY 6: SATURDAY	1	✓	✓	✓	✓	✓	✓	✓	✓
6007	1777	int16	1	-	-24 -- +24 (1 unit equal to 0.5 hour. For example 6: +3:00 hour time zone)		✓	✓	✓	✓	✓	✓	✓	✓
6008	1778	uint16	1	-	0: DISABLE 1: EUROPE 2: AMERICA 3: MANUAL	1	✓	✓	✓	✓	✓	✓	✓	✓
6009	1779	uint16	1	month	DST Start Month: 1-12	1	✓	✓	✓	✓	✓	✓	✓	✓
6010	177A	uint16	1	week	DST Start Week: 0: First 1: Second 2: Third 3: Fourth 4: Last	1	✓	✓	✓	✓	✓	✓	✓	✓
6011	177B	uint16	1	DAY	DST Start DAY: 0 : SUNDAY 1: MONDAY 2: TUESDAY 3: WEDNESDAY 4: THURDAY 5: FRIDAY 6: SATURDAY	1	✓	✓	✓	✓	✓	✓	✓	✓
6012	177C	uint16	1	hour	DST Start Hour: 0-23	1	✓	✓	✓	✓	✓	✓	✓	✓
6013	177D	uint16	1	month	DST End Month: 1-12	1	✓	✓	✓	✓	✓	✓	✓	✓
6014	177E	uint16	1	week	DST END Week: 0: First 1: Second 2: Third 3: Fourth 4: Last	1	✓	✓	✓	✓	✓	✓	✓	✓
6015	177F	uint16	1	DAY	DST END DAY: 0 : SUNDAY 1: MONDAY 2: TUESDAY 3: WEDNESDAY 4: THURDAY 5: FRIDAY 6: SATURDAY	1	✓	✓	✓	✓	✓	✓	✓	✓
6016	1780	uint16	1	hour	DST End Hour: 0-23	1	✓	✓	✓	✓	✓	✓	✓	✓
6017	1781	uint16	1	-	DST_STATUS	1	✓	✓	✓	✓	✓	✓	✓	✓

	TARIFF SETTINGS OF SATURDAY	
Supported Functions	Start Address	Register Counts
Read holding registers	22000	16
Write single register		
Write multiple registers		

Address Dec	Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR34S-11	MPR32S	MPR34S-20	MPR45S	MPR46S	MPR47S	MPR42-OGT	MPR47-SE
22000	55F0	uint16	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256					✓	✓	✓	✓
22001	55F1	uint16	1	-	Tariff Number Settings : 0-8	1					✓	✓	✓	✓
22002	55F2	uint16	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256					✓	✓	✓	✓
22003	55F3	uint16	1	-	Tariff Number Settings : 0-8	1					✓	✓	✓	✓
22004	55F4	uint16	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256					✓	✓	✓	✓
22005	55F5	uint16	1	-	Tariff Number Settings : 0-8	1					✓	✓	✓	✓
22006	55F6	uint16	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256					✓	✓	✓	✓
22007	55F7	uint16	1	-	Tariff Number Settings : 0-8	1					✓	✓	✓	✓
22008	55F8	uint16	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256					✓	✓	✓	✓
22009	55F9	uint16	1	-	Tariff Number Settings : 0-8	1					✓	✓	✓	✓
22010	55FA	uint16	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256					✓	✓	✓	✓
22011	55FB	uint16	1	-	Tariff Number Settings : 0-8	1					✓	✓	✓	✓
22012	55FC	uint16	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256					✓	✓	✓	✓
22013	55FD	uint16	1	-	Tariff Number Settings : 0-8	1					✓	✓	✓	✓
22014	55FE	uint16	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256					✓	✓	✓	✓
22015	55FF	uint16	1	-	Tariff Number Settings : 0-8	1					✓	✓	✓	✓

	TARIFF SETTINGS OF SUNDAY	
Supported Functions	Start Address	Register Counts
Read holding registers	9000	16
Write single register		
Write multiple registers		

Address Dec	Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR34S-11	MPR32S	MPR34S-20	MPR45S	MPR46S	MPR47S	MPR42-OGT	MPR47-SE
9000	2328	uint16	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256					✓	✓	✓	✓
9001	2329	uint16	1	-	Tariff Number Settings : 0-8	1					✓	✓	✓	✓
9002	232A	uint16	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256					✓	✓	✓	✓
9003	232B	uint16	1	-	Tariff Number Settings : 0-8	1					✓	✓	✓	✓
9004	232C	uint16	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256					✓	✓	✓	✓
9005	232D	uint16	1	-	Tariff Number Settings : 0-8	1					✓	✓	✓	✓
9006	232E	uint16	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256					✓	✓	✓	✓
9007	232F	uint16	1	-	Tariff Number Settings : 0-8	1					✓	✓	✓	✓
9008	2330	uint16	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256					✓	✓	✓	✓
9009	2331	uint16	1	-	Tariff Number Settings : 0-8	1					✓	✓	✓	✓
9010	2332	uint16	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256					✓	✓	✓	✓
9011	2333	uint16	1	-	Tariff Number Settings : 0-8	1					✓	✓	✓	✓
9012	2334	uint16	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256					✓	✓	✓	✓
9013	2335	uint16	1	-	0-8	1					✓	✓	✓	✓
9014	2336	uint16	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256					✓	✓	✓	✓
9015	2337	uint16	1	-	Tariff Number Settings : 0-8	1					✓	✓	✓	✓

	TARIFF SETTINGS OF WEEKDAY	
Supported Functions	Start Address	Register Counts
Read holding registers	10000	16

Write single register
Write multiple registers

Address Dec	Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR34S-11	MPR32S	MPR34S-20	MPR45S	MPR46S	MPR47S	MPR42-OGT	MPR47-SE
10000	2710	uint16	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256					✓	✓	✓	✓
10001	2711	uint16	1	-	Tariff Number Settings : 0-8	1					✓	✓	✓	✓
10002	2712	uint16	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256					✓	✓	✓	✓
10003	2713	uint16	1	-	Tariff Number Settings : 0-8	1					✓	✓	✓	✓
10004	2714	uint16	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256					✓	✓	✓	✓
10005	2715	uint16	1	-	Tariff Number Settings : 0-8	1					✓	✓	✓	✓
10006	2716	uint16	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256					✓	✓	✓	✓
10007	2717	uint16	1	-	Tariff Number Settings : 0-8	1					✓	✓	✓	✓
10008	2718	uint16	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256					✓	✓	✓	✓
10009	2719	uint16	1	-	Tariff Number Settings : 0-8	1					✓	✓	✓	✓
10010	271A	uint16	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256					✓	✓	✓	✓
10011	271B	uint16	1	-	Tariff Number Settings : 0-8	1					✓	✓	✓	✓
10012	271C	uint16	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256					✓	✓	✓	✓
10013	271D	uint16	1	-	0-8	1					✓	✓	✓	✓
10014	271E	uint16	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256					✓	✓	✓	✓
10015	271F	uint16	1	-	Tariff Number Settings : 0-8	1					✓	✓	✓	✓

ALARM STATUS

Supported Functions	Start Address	Register Counts
Read holding registers	20000	36

Address Dec	Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR34S-11	MPR32S	MPR34S-20	MPR45S	MPR46S	MPR47S	MPR42-OGT	MPR47-SE
20000	4E20	uint16	1	-	Alarm Output Number : 0 - 3	1	✓	✓	✓	✓	✓	✓	✓	✓
20001	4E21	uint16	1	-	Alarm1 on lower threshold cause: 0x0000: Alarm Yok 0x0011: VLN1, 0x0012: VLN2, 0x0013: VLN1 + VLN2 0x0014: VLN3, 0x0015: VLN1 + VLN3, 0x0016: VLN2 + VLN3 0x0017: VLN1 + VLN2 + VLN3, 0x0018: VLN4 0x0021: VLL1, 0x0022: VLL2, 0x0023: VLL1 + VLL2, 0x0024: VLL3 0x0025: VLL1 + VLL3, 0x0026: VLL2 + VLL3, 0x0027: VLL1 + VLL2 + VLL3 0x0031: IL1, 0x0032: IL2, 0x0033: IL1 + IL2, 0x0034: IL3, 0x0035: IL1 + IL3 0x0036: IL2 + IL3, 0x0037: IL1 + IL2 + IL3 0x0038: IL4 0x0040: IN 0x0051: P1, 0x0052: P2, 0x0053: P1 + P2 , 0x0054: P3, 0x0055: P1 + P3 0x0056: P2 + P3, 0x0057: P1 + P2 + P3, 0x0058: P4 0x0060: PSUM IMP 0x0070: PSUM EXP, 0x0080: PSUM 0x0091: Q1, 0x0092: Q2, 0x0093: Q1 + Q2, 0x0094: Q3, 0x0095: Q1 + Q3 0x0096: Q2 + Q3, 0x0097: Q1 + Q2 + Q3, 0x0098: Q4 0x00A0: QSUM IMP, 0x0080: QSUM EXP, 0x00C0: QSUM 0x0001: S1, 0x0002: S2, 0x0003: S1 + S2, 0x0004: S3, 0x0005: S1 + S3 0x00D6: S2 + S3, 0x00D7: S1 + S2 + S3, 0x00D8: S4 0x00E0: SSUM IMP, 0x00F0: SSUM EXP, 0x0100: SSUM, 0x0111:IL1 Demand, 0x0112: IL2 Demand, 0x0113: IL1 + IL2 Demand, 0x0114: IL3 Demand, 0x0115: IL1 + IL3 Demand, 0x0116: IL2 + IL3 Demand, 0x0117: IL1 + IL2 + IL3 Demand, 0x0118: IL4 Demand 0x0120: IN Demand, 0x0131: P1 Demand, 0x0132: P2 Demand, 0x0133: P1 + P2 Demand, 0x0134: P3 Demand, 0x0135: P1 + P3, 0x013G: P2 + P3 Demand, 0x0137: P1 + P2 + P3 Demand, 0x0138: P4 Demand 0x0140: PSUM Demand Imp, 0x0150: PSUM Demand Exp, 0x0160: PSUM Demand, 0x0171: S1 Demand, 0x0172: S2 Demand, 0x0173: S1 + S2 Demand, 0x0174: S3 Demand, 0x0175: S1 + S3 Demand, 0x0176: S2 + S3 Demand, 0x0177: S1 + S2 + S3 Demand, 0x0178: S4 Demand 0x0180: SSUM Demand Imp, 0x0190: SSUM Demand Exp, 0x01A0: SSUM Demand, 0x0181: COS1, 0x0182: COS2, 0x0183: COS1 + COS2, 0x0184: COS3, 0x0185: COS1 + COS3, 0x0186: COS2 + COS3, 0x0187: COS1 + COS2 + COS3, 0x0188: COS4, 0x01C0 COS SUM IMP, 0x01D0: COS SUM EXP, 0x01E0: COS SUM, 0x01F0: Hertz Alarm, 0x0201: THD VLN1, 0x0202: THD VLN2, 0x0203: THD VLN1 + VLN2, 0x0204: THD VLN3, 0x0205: THD VLN1 + VLN3, 0x0206: THD VLN2 + VLN3, 0x0207: THD VLN1 + VLN2 + VLN3, 0x0208: THD VLN4, 0x0211: THD VLL1, 0x0212: THD VLL2, 0x213: THD VLL1 + VLL2, 0x0214: THD VLL3, 0x0215: THD VLL1 + VLL3, 0x0216: THD VLL2 + VLL3, 0x0217 THD VLL1 + VLL2 + VLL3, 0x0218: THD VLL4, 0x0221: THD IL1, 0x0222: THD IL2, 0x0223: THD IL1 + IL2, 0x0224: THD IL3, 0x0225: THD IL1 + IL3, 0x0226: THD IL2 + IL3, 0x0227: THD IL1 + IL2 + IL3, 0x0228: THD IL4, 0x0230: Hour Alarm,	1	✓	✓	✓	✓	✓	✓	✓	✓
20002	4E22	int32	2	Depends on parameter.	Alarm 1 on lower threshold min value	Depends on parameter	✓	✓	✓	✓	✓	✓	✓	✓
20004	4E24	uint16	1	-	Alarm1 on upper threshold cause: 0x0000: Alarm Yok 0x0011: VLN1, 0x0012: VLN2, 0x0013: VLN1 + VLN2 0x0014: VLN3, 0x0015: VLN1 + VLN3, 0x0016: VLN2 + VLN3 0x0017: VLN1 + VLN2 + VLN3, 0x0018: VLN4 0x0021: VLL1, 0x0022: VLL2, 0x0023: VLL1 + VLL2, 0x0024: VLL3 0x0025: VLL1 + VLL3, 0x0026: VLL2 + VLL3, 0x0027: VLL1 + VLL2 + VLL3 0x0031: IL1, 0x0032: IL2, 0x0033: IL1 + IL2, 0x0034: IL3, 0x0035: IL1 + IL3 0x0036: IL2 + IL3, 0x0037: IL1 + IL2 + IL3 0x0038: IL4 0x0040: IN 0x0051: P1, 0x0052: P2, 0x0053: P1 + P2 , 0x0054: P3, 0x0055: P1 + P3 0x0056: P2 + P3, 0x0057: P1 + P2 + P3, 0x0058: P4 0x0060: PSUM IMP 0x0070: PSUM EXP, 0x0080: PSUM 0x0091: Q1, 0x0092: Q2, 0x0093: Q1 + Q2, 0x0094: Q3, 0x0095: Q1 + Q3 0x0096: Q2 + Q3, 0x0097: Q1 + Q2 + Q3, 0x0098: Q4 0x00A0: QSUM IMP, 0x0080: QSUM EXP, 0x00C0: QSUM 0x0001: S1, 0x0002: S2, 0x0003: S1 + S2, 0x0004: S3, 0x0005: S1 + S3 0x00D6: S2 + S3, 0x0007: S1 + S2 + S3, 0x00D8: S4 0x00E0: SSUM IMP, 0x00F0: SSUM EXP, 0x0100: SSUM, 0x0111:IL1 Demand, 0x0112: IL2 Demand, 0x0113: IL1 + IL2 Demand, 0x0114: IL3 Demand, 0x0115: IL1 + IL3 Demand, 0x0116: IL2 + IL3 Demand, 0x0117: IL1 + IL2 + IL3 Demand, 0x0118: IL4 Demand 0x0120: IN Demand, 0x0131: P1 Demand, 0x0132: P2 Demand, 0x0133: P1 + P2 Demand, 0x0134: P3 Demand, 0x0135: P1 + P3, 0x013G: P2 + P3 Demand, 0x0137: P1 + P2 + P3 Demand, 0x0138: P4 Demand	1	✓	✓	✓	✓	✓	✓	✓	✓
20005	4E25	int32	2	Depends on parameter	Alarm 1 on upper threshold max. value	Depends on parameter	✓	✓	✓	✓	✓	✓	✓	✓
20007	4E27	uint32	2	s	Alarm 1 Duration	1	✓	✓	✓	✓	✓	✓	✓	✓
.....	.....	.....	.....	.....	.....	.....	✓	✓	✓	✓	✓	✓	✓	✓
.....	.....	.....	.....	.....	.....	.....	✓	✓	✓	✓	✓	✓	✓	✓
.....	.....	.....	.....	.....	.....	.....	✓	✓	✓	✓	✓	✓	✓	✓
20027	4E3B	uint16	1	-	Alarm Output Number : 0 - 3	1	✓	✓	✓	✓	✓	✓	✓	✓

Same parameters continue for

20028	4E3C	uint16	1	-	Alarm4 on lower threshold cause: 0x0000: Alarm Yok 0x0011: VLN1, 0x0012: VLN2, 0x0013: VLN1 + VLN2 0x0014: VLN3, 0x0015: VLN1 + VLN3, 0x0016: VLN2 + VLN3 0x0017: VLN1 + VLN2 + VLN3, 0x0018: VLN4 0x0021: VLL1, 0x0022: VLL2, 0x0023: VLL1 + VLL2, 0x0024: VLL3 0x0025: VLL1 + VLL3, 0x0026: VLL2 + VLL3, 0x0027: VLL1 + VLL2 + VLL3 0x0031: IL1, 0x0032: IL2, 0x0033: IL1 + IL2, 0x0034: IL3, 0x0035: IL1 + IL3 0x0036: IL2 + IL3, 0x0037: IL1 + IL2 + IL3 0x0038: IL4 0x0040: IN 0x0051: P1, 0x0052: P2, 0x0053: P1 + P2 , 0x0054: P3, 0x0055: P1 + P3 0x0056: P2 + P3, 0x0057: P1 + P2 + P3, 0x0058: P4 0x0060: PSUM IMP 0x0070: PSUM EXP, 0x0080: PSUM 0x0091: Q1, 0x0092: Q2, 0x0093: Q1 + Q2, 0x0094: Q3, 0x0095: Q1 + Q3 0x0096: Q2 + Q3, 0x0097: Q1 + Q2 + Q3, 0x0098: Q4 0x00A0: QSUM IMP, 0x0080: QSUM EXP, 0x00C0: QSUM 0x00D1: S1, 0x00D2: S2, 0x00D3: S1 + S2, 0x00D4: S3, 0x00D5: S1 + S3 0x00D6: S2 + S3, 0x00D7: S1 + S2 + S3, 0x00D8: S4 0x00E0: SSUM IMP, 0x00F0: SSUM EXP, 0x0100: SSUM, 0x0111:IL1 Demand, 0x0112: IL2 Demand, 0x0113: IL1 + IL2 Demand, 0x0114: IL3 Demand, 0x0115: IL1 + IL3 Demand, 0x0116: IL2 + IL3 Demand, 0x0117: IL1 + IL2 + IL3 Demand, 0x0118: IL4 Demand 0x0120: IN Demand, 0x0131: P1 Demand, 0x0132: P2 Demand, 0x0133: P1 + P2 Demand, 0x0134: P3 Demand, 0x0135: P1 + P3, 0x013E: P2 + P3 Demand, 0x0137: P1 + P2 + P3 Demand, 0x0138: P4 Demand 0x0140: PSUM Demand Imp, 0x0150: PSUM Demand Exp, 0x0160: PSUM Demand, 0x0171: S1 Demand, 0x0172: S2 Demand, 0x0173: S1 + S2 Demand, 0x0174: S3 Demand, 0x0175: S1 + S3 Demand, 0x0176: S2 + S3 Demand, 0x0177: S1 + S2 + S3 Demand, 0x0178: S4 Demand 0x0180: SSUM Demand Imp, 0x0190: SSUM Demand Exp, 0x01A0: SSUM Demand, 0x0181: COS1, 0x0182: COS2, 0x0183: COS1 + COS2, 0x0184: COS3, 0x0185: COS1 + COS3, 0x0186: COS2 + COS3, 0x0187: COS1 + COS2 + COS3, 0x0188: COS4, 0x01C0 COS SUM IMP, 0x01D0: COS SUM EXP, 0x01E0: COS SUM, 0x01F0: Hertz Alarm, 0x0201: THD VLN1, 0x0202: THD VLN2, 0x0203: THD VLN1 + VLN2, 0x0204: THD VLN3, 0x0205: THD VLN1 + VLN3, 0x0206: THD VLN2 + VLN3, 0x0207: THD VLN1 + VLN2 + VLN3, 0x0208: THD VLN4, 0x0211: THD VLL1, 0x0212: THD VLL2, 0x213: THD VLL1 + VLL2, 0x0214: THD VLL3, 0x0215: THD VLL1 + VLL3, 0x0216: THD VLL2 + VLL3, 0x0217 THD VLL1 + VLL2 + VLL3, 0x0218: THD VLL4, 0x0221: THD IL1, 0x0222: THD IL2, 0x0223: THD IL1 + IL2, 0x0224: THD IL3, 0x0225: THD IL1 + IL3, 0x0226: THD IL2 + IL3, 0x0227: THD IL1 + IL2 + IL3, 0x0228: THD IL4, 0x0230: Hour Alarm,	1	✓	✓	✓	✓	✓	✓	✓	✓
20029	4E3D	int32	2	Depends on parameter	Alarm 4 on lower threshold min value	Depends on parameter	✓	✓	✓	✓	✓	✓	✓	✓
20031	4E3F	uint16	1	-	Alarm4 on upper threshold cause: 0x0000: Alarm Yok 0x0011: VLN1, 0x0012: VLN2, 0x0013: VLN1 + VLN2 0x0014: VLN3, 0x0015: VLN1 + VLN3, 0x0016: VLN2 + VLN3 0x0017: VLN1 + VLN2 + VLN3, 0x0018: VLN4 0x0021: VLL1, 0x0022: VLL2, 0x0023: VLL1 + VLL2, 0x0024: VLL3 0x0025: VLL1 + VLL3, 0x0026: VLL2 + VLL3, 0x0027: VLL1 + VLL2 + VLL3 0x0031: IL1, 0x0032: IL2, 0x0033: IL1 + IL2, 0x0034: IL3, 0x0035: IL1 + IL3 0x0036: IL2 + IL3, 0x0037: IL1 + IL2 + IL3 0x0038: IL4 0x0040: IN 0x0051: P1, 0x0052: P2, 0x0053: P1 + P2 , 0x0054: P3, 0x0055: P1 + P3 0x0056: P2 + P3, 0x0057: P1 + P2 + P3, 0x0058: P4 0x0060: PSUM IMP 0x0070: PSUM EXP, 0x0080: PSUM 0x0091: Q1, 0x0092: Q2, 0x0093: Q1 + Q2, 0x0094: Q3, 0x0095: Q1 + Q3 0x0096: Q2 + Q3, 0x0097: Q1 + Q2 + Q3, 0x0098: Q4 0x00A0: QSUM IMP, 0x0080: QSUM EXP, 0x00C0: QSUM 0x00D1: S1, 0x00D2: S2, 0x00D3: S1 + S2, 0x00D4: S3, 0x00D5: S1 + S3 0x00D6: S2 + S3, 0x00D7: S1 + S2 + S3, 0x00D8: S4 0x00E0: SSUM IMP, 0x00F0: SSUM EXP, 0x0100: SSUM, 0x0111:IL1 Demand, 0x0112: IL2 Demand, 0x0113: IL1 + IL2 Demand, 0x0114: IL3 Demand, 0x0115: IL1 + IL3 Demand, 0x0116: IL2 + IL3 Demand, 0x0117: IL1 + IL2 + IL3 Demand, 0x0118: IL4 Demand 0x0120: IN Demand, 0x0131: P1 Demand, 0x0132: P2 Demand, 0x0133: P1 + P2 Demand, 0x0134: P3 Demand, 0x0135: P1 + P3, 0x013E: P2 + P3 Demand, 0x0137: P1 + P2 + P3 Demand, 0x0138: P4 Demand 0x0140: PSUM Demand Imp, 0x0150: PSUM Demand Exp, 0x0160: PSUM Demand, 0x0171: S1 Demand, 0x0172: S2 Demand, 0x0173: S1 + S2 Demand, 0x0174: S3 Demand, 0x0175: S1 + S3 Demand, 0x0176: S2 + S3 Demand, 0x0177: S1 + S2 + S3 Demand, 0x0178: S4 Demand 0x0180: SSUM Demand Imp, 0x0190: SSUM Demand Exp, 0x01A0: SSUM Demand, 0x0181: COS1, 0x0182: COS2, 0x0183: COS1 + COS2, 0x0184: COS3, 0x0185: COS1 + COS3, 0x0186: COS2 + COS3, 0x0187: COS1 + COS2 + COS3, 0x0188: COS4, 0x01C0 COS SUM IMP, 0x01D0: COS SUM EXP, 0x01E0: COS SUM, 0x01F0: Hertz Alarm, 0x0201: THD VLN1, 0x0202: THD VLN2, 0x0203: THD VLN1 + VLN2, 0x0204: THD VLN3, 0x0205: THD VLN1 + VLN3, 0x0206: THD VLN2 + VLN3, 0x0207: THD VLN1 + VLN2 + VLN3, 0x0208: THD VLN4, 0x0211: THD VLL1, 0x0212: THD VLL2, 0x213: THD VLL1 + VLL2, 0x0214: THD VLL3, 0x0215: THD VLL1 + VLL3, 0x0216: THD VLL2 + VLL3, 0x0217 THD VLL1 + VLL2 + VLL3, 0x0218: THD VLL4, 0x0221: THD IL1, 0x0222: THD IL2, 0x0223: THD IL1 + IL2, 0x0224: THD IL3, 0x0225: THD IL1 + IL3, 0x0226: THD IL2 + IL3, 0x0227: THD IL1 + IL2 + IL3, 0x0228: THD IL4, 0x0230: Hour Alarm,	1	✓	✓	✓	✓	✓	✓	✓	✓
20032	4E40	int32	2	Depends on parameter.	Alarm 4 on upper threshold max. value	Depends on parameter	✓	✓	✓	✓	✓	✓	✓	✓
20034	4E42	uint32	2	s	Alarm 4 Duration	1	✓	✓	✓	✓	✓	✓	✓	✓

EVENT LOG RECORD

Supported Functions	Start Address	Register Counts
Read holding registers	8016	19

Address Dec	Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR34S-11	MPR32S	MPR34S-20	MPR45S	MPR46S	MPR47S	MPR42-OGT	MPR47-SE
8016	1F50	uint32	2	Unix Time	Start Time	1	✓	✓	✓	✓	✓	✓	✓	✓
8018	1F52	uint32	2	Unix Time	End Time	1	✓	✓	✓	✓	✓	✓	✓	✓
8020	1F54	uint32	2	Second	Duration	1	✓	✓	✓	✓	✓	✓	✓	✓
8022	1F56	uint16	1	?	Cycle	?	✓	✓	✓	✓	✓	✓	✓	✓
8023	1F57	uint16	1	-	Type	1	✓	✓	✓	✓	✓	✓	✓	✓
8024	1F58	uint16	1	-	Source	1	✓	✓	✓	✓	✓	✓	✓	✓
8025	1F59	uint16	1	-	Param	1	✓	✓	✓	✓	✓	✓	✓	✓
8026	1F5A	int32	2	Depends on parameter	High	Depends on parameter	✓	✓	✓	✓	✓	✓	✓	✓
8028	1F5C	int32	2	Depends on parameter	Low	Depends on parameter	✓	✓	✓	✓	✓	✓	✓	✓
8030	1F5E	int32	2	Depends on parameter	High Value	Depends on parameter	✓	✓	✓	✓	✓	✓	✓	✓
8032	1F60	int32	2	Depends on parameter	Low Value	Depends on parameter	✓	✓	✓	✓	✓	✓	✓	✓
8034	1F62	uint16	1	-	Index	1	✓	✓	✓	✓	✓	✓	✓	✓

Supported Functions	Start Address	Register Counts
Write single register	8000	1
Write multiple registers		

Address Dec	Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR34S-11	MPR32S	MPR34S-20	MPR45S	MPR46S	MPR47S	MPR42-OGT	MPR47-SE
8000	1F40	int16	1	-	Record Index: -1 : Next Record 1-500: Record Index	-	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓

RESET

Supported Functions	Start Address	Register Counts
Write single register	14000	1
Write multiple registers		

Address Dec	Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR34S-11	MPR32S	MPR34S-20	MPR45S	MPR46S	MPR47S	MPR42-OGT	MPR47-SE
14000	36B0	uint16	1	-	Reset Action Code: 0x01: MAX 0x02: MIN 0x04: DEMAND 0x08: MAX DEMAND 0x10: ENERGY 0x20: TARIFF ENERGY 0x40: JENERATOR ENERGY 0x80: PULSE COUNTER 0x100: WORKING HOUR 0x600 All	-	✓	✓	✓	✓	✓	✓	✓	✓

Record Settings

Supported Functions	Start Address	Register Counts
Read holding registers	21000	15
Write single register		
Write multiple registers		

Address Dec	Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR34S-11	MPR32S	MPR34S-20	MPR45S	MPR46S	MPR47S	MPR42-OGT	MPR47-SE
21000	5208	uint16	1	-	Profile Records Enable: 0: Disable 1: Enable	1				✓	✓	✓	✓	✓
21001	5209	uint16	1	-	Profile Synchronizing: 0: Disable 1: Enable	1				✓	✓	✓	✓	✓

21002	520A	uint16	1	Minutes	Profile Records Record Time: 0: 1 Minute 1: 5 Minutes 2: 10 Minutes 3: 15 Minutes 4: 20 Minutes 5: 30 Minutes 6: 60 Minutes	1				☒	☒	☒	☒	☒
21003	520B	uint16	1	-	Current Records Enable:	1				☒	☒	☒	☒	☒
21004	520C	uint16	1	-	Current Synchronizing: 0: Disable 1: Enable	1				☒	☒	☒	☒	☒
21005	520D	uint16	1	Minutes	Current Records Record Time: 0: 1 Minute 1: 5 Minutes 2: 10 Minutes 3: 15 Minutes 4: 20 Minutes 5: 30 Minutes 6: 60 Minutes	1				☒	☒	☒	☒	☒
21006	520E	uint16	1	-	Voltage Records Enable: 0: Disable 1: Enable	1				☒	☒	☒	☒	☒
21007	520F	uint16	1	-	Voltage Synchronizing: 0: Disable 1: Enable	1				☒	☒	☒	☒	☒
21008	5210	uint16	1	Minutes	Voltage Records Record Time: 0: 1 Minute 1: 5 Minutes 2: 10 Minutes 3: 15 Minutes 4: 20 Minutes 5: 30 Minutes 6: 60 Minutes	1				☒	☒	☒	☒	☒
21009	5211	uint16	1	-	Power Records Enable: 0: Disable 1: Enable	1				☒	☒	☒	☒	☒
21010	5212	uint16	1	-	Power Synchronizing: 0: Disable 1: Enable	1				☒	☒	☒	☒	☒
21011	5213	uint16	1	Minutes	Power Records Record Time: 0: 1 Minute 1: 5 Minutes 2: 10 Minutes 3: 15 Minutes 4: 20 Minutes 5: 30 Minutes 6: 60 Minutes	1				☒	☒	☒	☒	☒
21012	5214	uint16	1	-	THD Records Enable: 0: Disable 1: Enable	1					☒	☒	☒	☒
21013	5215	uint16	1	-	THD Synchronizing: 0: Disable 1: Enable	1					☒	☒	☒	☒
21014	5216	uint16	1	Minutes	THD Records Record Time: 0: 1 Minute 1: 5 Minutes 2: 10 Minutes 3: 15 Minutes 4: 20 Minutes 5: 30 Minutes 6: 60 Minutes	1					☒	☒	☒	☒

Records Index Register

Supported Functions	Start Address	Register Counts
Read holding registers	21200	12
Write multiple registers		

The index values which is closest in the date written in time stamp register will be read in this register.

Address Dec	Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR34S-11	MPR32S	MPR34S-20	MPR45S	MPR46S	MPR47S	MPR42-OGT	MPR47-SE
21200	52D0	uint32	2	-	Voltage Records Index Regiter	1				☒	☒	☒	☒	☒
21202	52D2	uint32	2	-	Power Records Index Register	1				☒	☒	☒	☒	☒
21204	52D4	uint32	2	-	Current Records Index Regiter	1				☒	☒	☒	☒	☒
21206	52D6	uint32	2	-	THD Records Index Regsiter	1					☒	☒	☒	☒
21208	52D8	uint32	2	-	Profile Records Index Regiter	1				☒	☒	☒	☒	☒
21210	52DA	uint32	2	-	Temperature Records Index Register	1				☒	☒	☒	☒	☒

Profile Records

Supported Functions	Start Address	Register Counts
Read holding registers	23000	28

Address Dec	Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR34S-11	MPR32S	MPR34S-20	MPR45S	MPR46S	MPR47S	MPR42-OGT	MPR47-SE
23000	59D8	uint32	2	Unix Time	Record Start Time	1				☒	☒	☒	☒	☒
23002	59DA	uint32	2	Unix Time	Record End Time	1				☒	☒	☒	☒	☒
23004	59DC	uint32	2	W	Consumed Ac_ve Energy	1				☒	☒	☒	☒	☒
23006	59DE	uint32	2	VAR	Q1 Reac_ve Energy	1				☒	☒	☒	☒	☒
23008	59E0	uint32	2	VAR	Q4 Reac_ve Energy	1				☒	☒	☒	☒	☒
23010	59E2	uint32	2	VA	Consumed Apperant Energy	1				☒	☒	☒	☒	☒
23012	59E4	uint32	2	W	Delivered Ac_ve Energy	1				☒	☒	☒	☒	☒
23014	59E6	uint32	2	VAR	Q2 Reac_ve Energy	1				☒	☒	☒	☒	☒
23016	59E8	uint32	2	VAR	Q3 Reac_ve Energy	1				☒	☒	☒	☒	☒
23018	59EA	uint32	2	VA	Delivered Apperant Energy	1				☒	☒	☒	☒	☒
23020	59EC	uint32	2	W	Consumed Ac_ve Energy Tariff Generator	1				☒	☒	☒	☒	☒
23022	59EE	uint16	1	-	Pulse Counter 1	1					☒	☒	☒	☒
23023	59EF	uint16	1	-	Pulse Counter 2	1					☒	☒	☒	☒
23024	59F0	uint16	1	-	Pulse Counter 3	1					☒	☒	☒	☒
23025	59F1	uint16	1	-	Pulse Counter 4	1					☒	☒	☒	☒
23026	59F2	uint32	2	-	Record Index	1				☒	☒	☒	☒	☒

Current Records

Supported Functions	Start Address	Register Counts
Read holding registers	24000	36

Address Dec	Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR34S-11	MPR32S	MPR34S-20	MPR45S	MPR46S	MPR47S	MPR42-OGT	MPR47-SE
24000	5DC0	uint32	2	Unix Time	Record End Time	1				☒	☒	☒	☒	☒
24002	5DC2	uint32	2	Unix Time	Record Start Time	1				☒	☒	☒	☒	☒
24004	5DC4	uint32	2	A	Average Current IL1	0.001				☒	☒	☒	☒	☒
24006	5DC6	uint32	2	A	Average Current IL2	0.001				☒	☒	☒	☒	☒
24008	5DC8	uint32	2	A	Average Current IL3	0.001				☒	☒	☒	☒	☒
24010	5DCA	uint32	2	A	Average Current ILN	0.001				☒	☒	☒	☒	☒
24012	5DCC	uint32	2	A	Average Harmonic Current IL1	0.001				☒	☒	☒	☒	☒
24014	5DCE	uint32	2	A	Average Harmonic Current IL2	0.001				☒	☒	☒	☒	☒
24016	5DD0	uint32	2	A	Average Harmonic Current IL3	0.001				☒	☒	☒	☒	☒
24018	5DD2	uint32	2	A	Max Current IL1	0.001				☒	☒	☒	☒	☒
24020	5DD4	uint32	2	A	Max Current IL2	0.001				☒	☒	☒	☒	☒
24022	5DD6	uint32	2	A	Max Current IL3	0.001				☒	☒	☒	☒	☒
24024	5DD8	uint32	2	A	Max Current ILN	0.001				☒	☒	☒	☒	☒
24026	5DDA	uint32	2	A	Min Current IL1	0.001				☒	☒	☒	☒	☒
24028	5DDC	uint32	2	A	Min Current IL2	0.001				☒	☒	☒	☒	☒
24030	5DDE	uint32	2	A	Min Current IL3	0.001				☒	☒	☒	☒	☒
24032	5DE0	uint32	2	A	Min Current ILN	0.001				☒	☒	☒	☒	☒
24034	5DE2	uint32	2	-	Record Index	1				☒	☒	☒	☒	☒

Voltage Records

Supported Functions	Start Address	Register Counts
Read holding registers	25000	54

Address Dec	Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR34S-11	MPR32S	MPR34S-20	MPR45S	MPR46S	MPR47S	MPR42-OGT	MPR47-SE
25000	61A8	uint32	2	-	Record End Time	1				☒	☒	☒	☒	☒
25002	61AA	uint32	2	Unix Time	Record Start Time	1				☒	☒	☒	☒	☒
25004	61AC	uint32	2	V	Average Voltage L1-N	0.1				☒	☒	☒	☒	☒
25006	61AE	uint32	2	V	Average Voltage L2-N	0.1				☒	☒	☒	☒	☒
25008	61B0	uint32	2	V	Average Voltage L3-N	0.1				☒	☒	☒	☒	☒
25010	61B2	uint32	2	V	Average Voltage L4-N	0.1				☒	☒	☒	☒	☒
25012	61B4	uint32	2	V	Average Voltage L1-L2	0.1				☒	☒	☒	☒	☒
25014	61B6	uint32	2	V	Average Voltage L2-L3	0.1				☒	☒	☒	☒	☒
25016	61B8	uint32	2	V	Average Voltage L3-L1	0.1				☒	☒	☒	☒	☒
25018	61BA	uint32	2	Hz	Average Frequency	0.01				☒	☒	☒	☒	☒
25020	61BC	uint32	2	V	Max Voltage L1-N	0.1				☒	☒	☒	☒	☒
25022	61BE	uint32	2	V	Max Voltage L2-N	0.1				☒	☒	☒	☒	☒
25024	61C0	uint32	2	V	Max Voltage L3-N	0.1				☒	☒	☒	☒	☒
25026	61C2	uint32	2	V	Max Voltage L4-N	0.1				☒	☒	☒	☒	☒
25028	61C4	uint32	2	V	Max Voltage L1-L2	0.1				☒	☒	☒	☒	☒
25030	61C6	uint32	2	V	Max Voltage L2-L3	0.1				☒	☒	☒	☒	☒
25032	61C8	uint32	2	V	Max Voltage L3-L1	0.1				☒	☒	☒	☒	☒
25034	61CA	uint32	2	Hz	Max Frequency	0.01				☒	☒	☒	☒	☒
25036	61CC	uint32	2	V	Min Voltage L1-N	0.1				☒	☒	☒	☒	☒
25038	61CE	uint32	2	V	Min Voltage L2-N	0.1				☒	☒	☒	☒	☒
25040	61D0	uint32	2	V	Min Voltage L3-N	0.1				☒	☒	☒	☒	☒
25042	61D2	uint32	2	V	Min Voltage L4-N	0.1				☒	☒	☒	☒	☒
25044	61D4	uint32	2	V	Min Voltage L1-L2	0.1				☒	☒	☒	☒	☒
25046	61D6	uint32	2	V	Min Voltage L2-L3	0.1				☒	☒	☒	☒	☒
25048	61D8	uint32	2	V	Min Voltage L3-L1	0.1				☒	☒	☒	☒	☒
25050	61DA	uint32	2	Hz	Min Frequency	0.01				☒	☒	☒	☒	☒
25052	61DC	uint32	2	-	Record Index	1				☒	☒	☒	☒	☒

Power Records

Supported Functions	Start Address	Register Counts
Read holding registers	26000	62

Address Dec	Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR34S-11	MPR32S	MPR34S-20	MPR45S	MPR46S	MPR47S	MPR42-OGT	MPR47-SE
26000	6590	uint32	2	Unix Time	Record End Time	1				☒	☒	☒	☒	☒

26002	6592	uint32	2	Unix Time	Record Start Time	1				✓	✓	✓	✓	✓
26004	6594	float	2	W	Total Import Active Power	1				✓	✓	✓	✓	✓
26006	6596	float	2		Total Export Active Power	1				✓	✓	✓	✓	✓
26008	6598	float	2	VAR	Quadrant 1 average total reactive power	1				✓	✓	✓	✓	✓
26010	659A	float	2	VAR	Quadrant 2 average total reactive power	1				✓	✓	✓	✓	✓
26012	659C	float	2		Quadrant 3 average total ractive power	1				✓	✓	✓	✓	✓
26014	659E	float	2		Quadrant 4 average total reactive power	1				✓	✓	✓	✓	✓
26016	65A0	float	2	VA	Average total import apparent power	1				✓	✓	✓	✓	✓
26018	65A2	float	2	W	Average total export apparent power	1				✓	✓	✓	✓	✓
26020	65A4	uint32	2	-	Average total inductive import cosphi value	0.001				✓	✓	✓	✓	✓
26022	65A6	uint32	2	-	Average total capacitive import cosphi value	0.001				✓	✓	✓	✓	✓
26024	65A8	uint32	2	-	Average total inductive export cosphi value	0.001				✓	✓	✓	✓	✓
26026	65AA	uint32	2	-	Average total capacitive export cosphi value	0.001				✓	✓	✓	✓	✓
26028	65AC	float	2	W	Max. Total import active power	1				✓	✓	✓	✓	✓
26030	65AE	float	2	W	Max. Total export active power	1				✓	✓	✓	✓	✓
26032	65B0	float	2	VAR	Max. Total Q1 Reactive Power	1				✓	✓	✓	✓	✓
26034	65B2	float	2	VAR	Max. Total Q2 Reactive Power	1				✓	✓	✓	✓	✓
26036	65B4	float	2	VAR	Max. Total Q3 Reactive Power	1				✓	✓	✓	✓	✓
26038	65B6	float	2	VAR	Max. Total Q4 Reactive Power	1				✓	✓	✓	✓	✓
26040	65B8	float	2	VA	Max. Total Import Apparent Power	1				✓	✓	✓	✓	✓
26042	65BA	float	2	VA	Max. Total Export Apparent Power	1				✓	✓	✓	✓	✓
26044	65BC	float	2	W	Min. Total Import Active Power	1				✓	✓	✓	✓	✓
26046	65BE	float	2	W	Min. Total Export Active Power	1				✓	✓	✓	✓	✓
26048	65C0	float	2	VAR	Min. Total Q1 Reactive Power	1				✓	✓	✓	✓	✓
26050	65C2	float	2	VAR	Min. Total Q2 Reactive Power	1				✓	✓	✓	✓	✓
26052	65C4	float	2	VAR	Min. Total Q3 Reactive Power	1				✓	✓	✓	✓	✓
26054	65C6	float	2	VAR	Min. Total Q4 Reactive Power	1				✓	✓	✓	✓	✓
26056	65C8	float	2	VA	Min. Total Import Apparent Power	1				✓	✓	✓	✓	✓
26058	65CA	float	2	VA	Min. Total Export Apparent Power	1				✓	✓	✓	✓	✓
26060	65CC	uint32	2	-	Record Index	1				✓	✓	✓	✓	✓

THD Records

Supported Functions	Start Address	Register Counts
Read holding registers	27000	60

Address Dec	Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR34S-11	MPR32S	MPR34S-20	MPR45S	MPR46S	MPR47S	MPR42-OGT	MPR47-SE
27000	6978	uint32	2	Unix Time	Record Start Time	1					✓	✓	✓	✓
27002	697A	uint32	2	Unix Time	Record End Time	1					✓	✓	✓	✓
27004	697C	uint32	2	%	Average Total Harmonic Distorsion VL1	0.1					✓	✓	✓	✓
27006	697E	uint32	2	%	Average Total Harmonic Distorsion VL2	0.1					✓	✓	✓	✓
27008	6980	uint32	2	%	Average Total Harmonic Distorsion VL3	0.1					✓	✓	✓	✓
27010	6982	uint32	2	%	Average Total Harmoic Distorsion VLL12	0.1					✓	✓	✓	✓
27012	6984	uint32	2	%	Average Total Harmoic Distorsion VLL23	0.1					✓	✓	✓	✓
27014	6986	uint32	2	%	Average Total Harmoic Distorsion VLL31	0.1					✓	✓	✓	✓
27016	6988	uint32	2	%	Average Total Harmonic Distorsion IL1	0.1					✓	✓	✓	✓
27018	698A	uint32	2	%	Average Total Harmonic Distorsion IL2	0.1					✓	✓	✓	✓
27020	698C	uint32	2	%	Average Total Harmonic Distorsion IL3	0.1					✓	✓	✓	✓
27022	698E	uint32	2	%	Max Total Harmonic Distorsion VL1	0.1					✓	✓	✓	✓
27024	6990	uint32	2	%	Max Total Harmonic Distorsion VL2	0.1					✓	✓	✓	✓
27026	6992	uint32	2	%	Max Total Harmonic Distorsion VL3	0.1					✓	✓	✓	✓
27028	6994	uint32	2	%	Max Total Harmoic Distorsion VLL12	0.1					✓	✓	✓	✓
27030	6996	uint32	2	%	Max Total Harmoic Distorsion VLL23	0.1					✓	✓	✓	✓
27032	6998	uint32	2	%	Max otal Harmoic Distorsion VLL31	0.1					✓	✓	✓	✓
27034	699A	uint32	2	%	Max Total Harmonic Distorsion IL1	0.1					✓	✓	✓	✓
27036	699C	uint32	2	%	Max Total Harmonic Distorsion IL2	0.1					✓	✓	✓	✓
27038	699E	uint32	2	%	Max Total Harmonic Distorsion IL3	0.1					✓	✓	✓	✓
27040	69A0	uint32	2	%	Min Total Harmonic Distorsion VL1	0.1					✓	✓	✓	✓
27042	69A2	uint32	2	%	Min Total Harmonic Distorsion VL2	0.1					✓	✓	✓	✓
27044	69A4	uint32	2	%	Min Total Harmonic Distorsion VL3	0.1					✓	✓	✓	✓
27046	69A6	uint32	2	%	Min Total Harmoic Distorsion VLL12	0.1					✓	✓	✓	✓
27048	69A8	uint32	2	%	Min Total Harmoic Distorsion VLL23	0.1					✓	✓	✓	✓
27050	69AA	uint32	2	%	Min Total Harmoic Distorsion VLL31	0.1					✓	✓	✓	✓
27052	69AC	uint32	2	%	Min Total Harmonic Distorsion IL1	0.1					✓	✓	✓	✓
27054	69AE	uint32	2	%	Min Total Harmonic Distorsion IL2	0.1					✓	✓	✓	✓
27056	69B0	uint32	2	%	Min Total Harmonic Distorsion IL3	0.1					✓	✓	✓	✓
27058	69B2	uint32	2	-	Record Index	1					✓	✓	✓	✓

Analog Records

Supported Functions	Start Address	Register Counts
Read holding registers	28000	30

Address Dec	Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR34S-11	MPR32S	MPR34S-20	MPR45S	MPR46S	MPR47S	MPR42-OGT	MPR47-SE
28000	6D60	uint32	2	Unix Time	Record End Time	1				✓	✓	✓	✓	✓
28002	6D62	uint32	2	Unix Time	Record Start Time	1				✓	✓	✓	✓	✓
28004	6D64	float	2	C	Average Analog Channel 1	1				✓	✓	✓	✓	✓
28006	6D66	float	2	C	Average Analog Channel 2	1				✓	✓	✓	✓	✓
28008	6D68	float	2	C	Average Analog Channel 3	1				✓	✓	✓	✓	✓
28010	6D6A	float	2	C	Average Analog Channel 4	1				✓	✓	✓	✓	✓
28012	6D6C	float	2	C	Max Analog Channel 1	1				✓	✓	✓	✓	✓
28014	6D6E	float	2	C	Max Analog Channel 2	1				✓	✓	✓	✓	✓
28016	6D70	float	2	C	Max Analog Channel 3	1				✓	✓	✓	✓	✓
28018	6D72	float	2	C	Max Analog Channel 4	1				✓	✓	✓	✓	✓
28020	6D74	float	2	C	Min Analog Channel 1	1				✓	✓	✓	✓	✓
28022	6D76	float	2	C	Min Analog Channel 2	1				✓	✓	✓	✓	✓
28024	6D78	float	2	C	Min Analog Channel 3	1				✓	✓	✓	✓	✓
28026	6D7A	float	2	C	Min Analog Channel 4	1				✓	✓	✓	✓	✓
28028	6D7C	uint32	2	-	Record Index	1				✓	✓	✓	✓	✓

Device Identification

Supported Functions	Start Address	Register Counts
Read holding registers	60416	40

Address Dec	Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR34S-11	MPR32S	MPR34S-20	MPR45S	MPR46S	MPR47S	MPR42-OGT	MPR47-SE
60416	EC00	uint16	1	-	Device ID	1	✓	✓	✓	✓	✓	✓	✓	✓
60417	EC01	uint16	1	-	Device ID && Versiyon No	1	✓	✓	✓	✓	✓	✓	✓	✓
60418	EC02	uint32	2	-	Serial Number	1	✓	✓	✓	✓	✓	✓	✓	✓
60420	EC04	uint32	2	-	Software Version	1	✓	✓	✓	✓	✓	✓	✓	✓
60422	EC06	uint32	2	-	Hardware Version	1	✓	✓	✓	✓	✓	✓	✓	✓
60424	EC08	uint32	2	-	Modbus Table Version	1	✓	✓	✓	✓	✓	✓	✓	✓
60426	EC0A	uint32	2	-	Boot loader version	1	✓	✓	✓	✓	✓	✓	✓	✓
60428	EC0C	uint32	2	Unix Time	Fabrication Date	1	✓	✓	✓	✓	✓	✓	✓	✓
60430	EC0E	uint32	2	Unix Time	Calibration Date	1	✓	✓	✓	✓	✓	✓	✓	✓
60432	EC10	uint32	2	-	Bağlantı Test Sonucu									✓
60434	EC12	uint16	1	1	MAC Address Part 1	1								✓
60435	EC13	uint16	1	1	MAC Address Part 2	1								✓
60436	EC14	uint16	1	1	MAC Address Part 3	1								✓
60437	EC15	uint32	2	Unix Time	System Start Time	1								✓
60439	EC17	uint32	2	-	ETH Software Version									✓
60441	EC19	uint32	2	-	ETH Boot loader version									✓
60443	EC1B	uint32	2	-	Reserved	1								✓
60445	EC1D	uint32	2	-	Ip Address	1								✓
60447	EC1F	uint32	2	-	Subnet Mask Address	1								✓
60449	EC21	uint32	2	-	Gateway Address	1								✓
60451	EC23	uint32	2	-	DNS 1	1								✓
60453	EC25	uint32	2	-	DNS Alter	1								✓
60455	EC27	uint16	1	-	Connection Status	1								✓

Entes Identification

Supported Functions	Start Address	Register Counts
Read holding registers	65032	16

Address Dec	Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR34S-11	MPR32S	MPR34S-20	MPR45S	MPR46S	MPR47S	MPR42-OGT	MPR47-SE
65032	FE08	string	4	-	Product Code	1	✓	✓	✓	✓	✓	✓	✓	✓
65036	FE0C	string	2	-	Revision	1	✓	✓	✓	✓	✓	✓	✓	✓
65038	FE0E	string	3	-	Fabrication Date	1	✓	✓	✓	✓	✓	✓	✓	✓
65041	FE11	string	1	-	Fab ID	1	✓	✓	✓	✓	✓	✓	✓	✓
65042	FE12	uint32	1	-	Product Line ID	1	✓	✓	✓	✓	✓	✓	✓	✓
65043	FE13	uint32	5	-	Serial Number	1	✓	✓	✓	✓	✓	✓	✓	✓

MODEL	Available Features
MPR32	Alarm
MPR32S	Alarm, RS-485
MPR34-11	Alarm. THD I&V. Tariff. 1DI/1DO
MPR34S-11	Alarm, RS-485, THD I&V, Tariff, 1DI/1DO
MPR34-20	Alarm, THD I&V, Tariff, 2DI
MPR34S-20	Alarm, RS-485, THD I&V, Tariff, 2DI
MPR45	Work Hour, Event Logs
MPR45S	Work Hour, Alarm, Records, Event Logs
MPR46	Work Hour. Event Logs
MPR46S	Work Hour, Alarm, Records, Event Logs
MPR47S	Work Hour, Alarm, Records, Event Logs
MPR47SE	Work Hour, Alarm, Records, Event Logs,Ethernet

MODBUS DESCRIPTION

Cihaza ait bütün register adresleri "base 0" baz almaktadır yani adres kısmında yazılan değerler direk olarak kullanılacaktır. Bazı modbus kütüphaneleri "base 1" sistemine göre çalışmaktadır. Bu durumlarda adres kısmında yazılan değerlere 1 eklenmesi gerekmektedir. Tüm register alanlarında bulunan datalar "MSB first" olarak gönderilmektedir. Cihazdan okunan register'lann birleştirilmesi buna göre yapılmalıdır.

Cihazda bulunan data tipleri ve byte karşılıkları:

short, ushort: 16 bit, 2 Byte

uint, int, float: 32 bit, 4 Byte

ulong: 64 Bit, 8 Byte

USHORT okuma örneği(Tüm 16 bit (2 Byte) okumalarda geçerlidir):

Gün değerini MODBUS Holding Register Fonksiyonu ile okumak için gönderilecek olan sorgu aşağıdaki şekildedir:

Sorgu: 01 03 17 70 00 01 65 80

Cevap: 01 03 02 00 1E 4C 38

Gün değerine ait değerler 00 1E

Alınan bu datanın gerçek değerinin elde edilmesi için aşağıdaki şekilde birleştirilmesi gerekmektedir:

High Byte: 0x00

Low Byte: 0x1E

Hexadecimal karşılığı: 0x001E. Data sıralaması High Byte, Low Byte şeklinde yapılır.

Decimal karşılığı: 30

Gerçek değeri (gün değeri): (Decimal Karşılığı) * Multiplier = 30*1 = 30

UINT okuma örneği(Tüm 32 bit (4Byte) okumalarda geçerlidir):

Faz 1 enerilimi MODBUS Holding Register Fonksiyonu ile okumak için gönderilecek olan sorgu asaiıdaki sekildedir:

Faz 1 gerilimini MODBUS Holding Register Fonksiyonu ile okumak için gönderilecek olan sorgu aşağıdaki şekildedir.
Sorgu : 01 03 00 00 00 02 08 C4
Cevap: 01 03 04 00 00 08 EE BF 7D
Faz 1 gerilimine ait değerler 00 00 08 EE.
Alınan bu datanın gerçek değerinin elde edilmesi için aşağıdaki şekilde birleştirilmesi gerekmektedir:
High Word : 0x0000
Low Word: 0x08EE
Hexadecimal karşılığı: 0x000008EE. Data sıralaması HighWord,LowWord şeklinde yapılır.
Decimal karşılığı: 2286
Gerçek değeri (Voltaj karşılığı): (Decimal karşılığı)*Multiplier = 2286*0,1 = 228,6V

Referanslar:
Modbus okuması yaparken aşağıdaki sitelerden yararlanabilirsiniz:

LOG READING EXPLANATION

Cihaz üzerinde alınan log kayıtlarını okumak için aşağıdaki işlemlerin yapılması gerekmektedir:
1. Okunmak istenen log kaydına ait index register'ının istenen değere kurulması gerekmektedir. En son alınan kaydı okumak için ilgili log index register'ına 0xFFFFFFFF değeri yazılmalıdır. Cihaz reseti sonrası default olarak index register'ları 0xFFFFFFFF değeri ile başlar.
2. Okunmak istenen log kaydı ile ilgili register index'i kurulduktan sonra log'a ait olan register'lar bütün olarak "Read Holding Register" fonksiyonu ile okunmalıdır. Log register'ları parçalı olarak okunamaz yani bir log'a ait register sayısı 20 ise 20 adet register bir arada okunmalıdır. Daha az okuma yapılmasına izin verilmez. Her bir okuma sonrasında ilgili log'a ait index register değeri 1 azalacaktır. Okunacak log kalmadığında ilgili log'a ait tüm register değerleri 0xFFFF olarak okunacaktır. Bu durumda kayıtlı olan tüm kayıtların okunduğunu anlaşılabilecektir.

Aşağıdaki adımlardan biri yapıldığında ilgili kayda ait kayıtları okuyabilmek için log index register'ına 0xFFFFFFFF değeri yazılmalıdır. Bu işlemin ardından record index değeri kayıt edilmiş olan en yeni log'un index'ine getirilmiş olur. Ayrıca özellikle okunmak istenen bir kayıt index'i varsa index register'ına bu değeri yazarak o index'e ait kayıt okunabilecektir.
1. İlgili kayda ait kayıtların bir kısmı okunduğu durumda
2. İlgili kayda ait tüm kayıtlar okundu ve bunda+8135Bn sonra yeni kayıtlar oluştuğu durumda
3. İlgili kayda ait tüm kayıtlar okundu ve bundan sonra yeni kayıtlar alınmadığı durumda
NOT: Yukarıdaki açıklamalar sadece MB_VER_0_2_0 için geçerlidir.