

MPR 1X Register table

Measurements

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

Supported Functions	Start Address	Register Counts
Read holding registers	0	162

OK OK OK OK

Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR14S	MPR15S-22	MPR16S-21	MPR17S-23	MPR18S-32
0000	uint	2	V/10	Voltage L1-N	0.1	✓	✓	✓	✓	✓
0002	uint	2	V/10	Voltage L2-N	0.1	✓	✓	✓	✓	✓
0004	uint	2	V/10	Voltage L3-N	0.1	✓	✓	✓	✓	✓
0006	uint	2	V/10	Voltage L4-N	0.1					
0008	uint	2	V/10	Voltage L1-L2	0.1	✓	✓	✓	✓	✓
000A	uint	2	V/10	Voltage L2-L3	0.1	✓	✓	✓	✓	✓
000C	uint	2	V/10	Voltage L3-L1	0.1	✓	✓	✓	✓	✓
000E	uint	2	mA	Current L1	0.001	✓	✓	✓	✓	✓
0010	uint	2	mA	Current L2	0.001	✓	✓	✓	✓	✓
0012	uint	2	mA	Current L3	0.001	✓	✓	✓	✓	✓
0014	uint	2	mA	Current L4	0.001					
0016	uint	2	mA	Neutral Current = IL1+IL2+IL3	0.001	✓	✓	✓	✓	✓
0018	uint	2	Hz / 100	Measured frequency	0.01	✓	✓	✓	✓	✓
001A	float	2	W	Active power L1-N	1	✓	✓	✓	✓	✓
001C	float	2	W	Active power L2-N	1	✓	✓	✓	✓	✓
001E	float	2	W	Active power L3-N	1	✓	✓	✓	✓	✓
0020	float	2	W	Active power L4-N	1					
0022	float	2	W	Total import active power	1	✓	✓	✓	✓	✓
0024	float	2	W	Total export active power	1	✓	✓	✓	✓	✓
0026	float	2	W	ΣActive Power +/- = ΣP =P1+P2+P3	1	✓	✓	✓	✓	✓
0028	float	2	var	Reactive power L1	1	✓	✓	✓	✓	✓
002A	float	2	var	Reactive power L2	1	✓	✓	✓	✓	✓
002C	float	2	var	Reactive power L3	1	✓	✓	✓	✓	✓
002E	float	2	var	Reactive power L4	1					
0030	float	2	var	Quadrant 1 total reactive power	1	✓	✓	✓	✓	✓
0032	float	2	var	Quadrant 2 total reactive power	1	✓	✓	✓	✓	✓
0034	float	2	var	Quadrant 3 total reactive power	1	✓	✓	✓	✓	✓
0036	float	2	var	Quadrant 4 total reactive power	1	✓	✓	✓	✓	✓
0038	float	2	var	ΣReactive Power +/- = ΣQ=Q1+Q2+Q3	1	✓	✓	✓	✓	✓
003A	float	2	VA	Apparent power L1-N	1	✓	✓	✓	✓	✓
003C	float	2	VA	Apparent power L2-N	1	✓	✓	✓	✓	✓
003E	float	2	VA	Apparent power L3-N	1	✓	✓	✓	✓	✓
0040	float	2	VA	Apparent power L4-N	1					
0042	float	2	VA	Total import Apparent power	1	✓	✓	✓	✓	✓
0044	float	2	VA	Total export Apparent power	1	✓	✓	✓	✓	✓
0046	float	2	VA	ΣApparent Power +/- = ΣS=S1+S2+S3	1	✓	✓	✓	✓	✓
0048	int	2	-	Power Factor L1	0.001	✓	✓	✓	✓	✓
004A	int	2	-	Power Factor L2	0.001	✓	✓	✓	✓	✓
004C	int	2	-	Power Factor L3	0.001	✓	✓	✓	✓	✓
004E	int	2	-	Power Factor L4	0.001					
0050	int	2	-	ΣPOWER FACTOR +/- = ΣPF=PFL1+PFL2+PFL3	0.001	✓	✓	✓	✓	✓
0052	int	2	-	CosPhi L1	0.001	✓	✓	✓	✓	✓
0054	int	2	-	CosPhi L2	0.001	✓	✓	✓	✓	✓
0056	int	2	-	CosPhi L3	0.001	✓	✓	✓	✓	✓
0058	int	2	-	CosPhi L4	0.001					
005A	int	2	-	ΣCos Phi = COS_L1 + COS_L2 + COS_L3	0.001	✓	✓	✓	✓	✓
005C	int	2	-	Rotation field; 1=right, 0=none, -1=left	1	✓	✓	✓	✓	✓
005E	uint	2	%	Voltage Unbalance	0.1			✓	✓	✓
0060	uint	2	%	Current Unbalance	0.1			✓	✓	✓
0062	ulong	2	Angle	L1 Phase Voltage Angle	0.1	✓	✓	✓	✓	✓
0064	ulong	2	Angle	L2 Phase Voltage Angle	0.1	✓	✓	✓	✓	✓
0066	ulong	2	Angle	L3 Phase Voltage Angle	0.1	✓	✓	✓	✓	✓
0068	ulong	2	Angle	L4 Phase Voltage Angle	0.1					
006A	ulong	2	Angle	L1 Phase Current Angle	0.1	✓	✓	✓	✓	✓
006C	ulong	2	Angle	L2 Phase Current Angle	0.1	✓	✓	✓	✓	✓
006E	ulong	2	Angle	L3 Phase Current Angle	0.1	✓	✓	✓	✓	✓
0070	ulong	2	Angle	L4 Phase Current Angle	0.1					
0072	float	2		Analog Input 1	1					
0074	float	2		Analog Input 2	1					
0076	float	2		Analog Input 3	1					
0078	float	2		Analog Input 4	1					
007A	float	2		Analog Input 5	1					
007C	float	2		Analog Input 6	1					
007E	float	2		Analog Input 7	1					
0080	float	2		Analog Input 8	1					
0082	float	2	-	Analog Output 1	1					
0084	float	2	-	Analog Output 2	1					
0086	float	2	-	Analog Output 3	1					
0088	float	2	-	Analog Output 4	1					
008A	float	2	°C	Temperature Input 1	1					✓
008C	float	2	°C	Temperature Input 2	1					
008E	float	2	°C	Temperature Input 3	1					
0090	float	2	°C	Temperature Input 4	1					
0092	float	2	-	Temperature Input 5	1					
0094	float	2	-	Temperature Input 6	1					
0096	float	2	-	Temperature Input 7	1					
0098	float	2	-	Temperature Input 8	1					
009A	uint	2	h/1000	Hour Meter (Non Resetable)	0.001	✓	✓	✓	✓	✓
009C	uint	2	h/1000	Working Hour Counter	0.001	✓	✓	✓	✓	✓
009E	uint	2	-	Input Status			✓	✓	✓	✓
00A0	uint	2	-	Output Status			✓	✓	✓	✓

Energy

Supported Functions	Start Address	Register Counts
Read holding registers	200	178

Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR14S	MPR15S-22	MPR16S-21	MPR17S-23	MPR18S-32
00C8	Ulong	4	Wh	Consumed Active Energy L1	1	✓	✓	✓	✓	✓
00CC	Ulong	4	Wh	Consumed Active Energy L2	1	✓	✓	✓	✓	✓
00D0	Ulong	4	Wh	Consumed Active Energy L3	1	✓	✓	✓	✓	✓
00D4	Ulong	4	Wh	Consumed Active Energy L4	1					
00D8	Ulong	4	Wh	Total Consumed Energy L1..L3	1	✓	✓	✓	✓	✓
00DC	Ulong	4	Wh	Delivered Active Energy L1	1		✓	✓	✓	✓
00E0	Ulong	4	Wh	Delivered Active Energy L2	1		✓	✓	✓	✓
00E4	Ulong	4	Wh	Delivered Active Energy L3	1		✓	✓	✓	✓
00E8	Ulong	4	Wh	Delivered Active Energy L4	1					
00EC	Ulong	4	Wh	Total Delivered Energy L1..L3	1	✓	✓	✓	✓	✓
00F0	Ulong	4	VAh	Consumed Apparent energy L1	1	✓	✓	✓	✓	✓
00F4	Ulong	4	VAh	Consumed Apparent energy L2	1	✓	✓	✓	✓	✓
00F8	Ulong	4	VAh	Consumed Apparent energy L3	1	✓	✓	✓	✓	✓
00FC	Ulong	4	VAh	Consumed Apparent energy L4	1					
0100	Ulong	4	VAh	Total Consumed Apparent Energy L1..L3	1	✓	✓	✓	✓	✓
0104	Ulong	4	VAh	Delivered Apparent Energy L1	1		✓	✓	✓	✓
0108	Ulong	4	VAh	Delivered Apparent Energy L2	1		✓	✓	✓	✓
010C	Ulong	4	VAh	Delivered Apparent Energy L3	1		✓	✓	✓	✓
0110	Ulong	4	VAh	Delivered Apparent Energy L4	1					
0114	Ulong	4	VAh	Total Delivered Apparent energy L1..L3	1	✓	✓	✓	✓	✓
0118	Ulong	4	Varh	Quadrant 1 Reactive Energy L1	1		✓	✓	✓	✓
011C	Ulong	4	Varh	Quadrant 1 Reactive Energy L2	1		✓	✓	✓	✓
0120	Ulong	4	Varh	Quadrant 1 Reactive Energy L3	1		✓	✓	✓	✓

292	0124	Ulong	4	Varh	Quadrant 1 Reactive Energy L4	1								
296	0128	Ulong	4	Varh	Quadrant 1 total reactive Energy	1	✓	✓	✓	✓	✓	✓	✓	✓
300	012C	Ulong	4	Varh	Quadrant 2 Reactive Energy L1	1		✓	✓	✓	✓	✓	✓	✓
304	0130	Ulong	4	Varh	Quadrant 2 Reactive Energy L2	1		✓	✓	✓	✓	✓	✓	✓
308	0134	Ulong	4	Varh	Quadrant 2 Reactive Energy L3	1		✓	✓	✓	✓	✓	✓	✓
312	0138	Ulong	4	Varh	Quadrant 2 Reactive Energy L4	1								
316	013C	Ulong	4	Varh	Quadrant 2 total reactive Energy	1	✓	✓	✓	✓	✓	✓	✓	✓
320	0140	Ulong	4	Varh	Quadrant 3 Reactive Energy L1	1								
324	0144	Ulong	4	Varh	Quadrant 3 Reactive Energy L2	1		✓	✓	✓	✓	✓	✓	✓
328	0148	Ulong	4	Varh	Quadrant 3 Reactive Energy L3	1		✓	✓	✓	✓	✓	✓	✓
332	014C	Ulong	4	Varh	Quadrant 3 Reactive Energy L4	1								
336	0150	Ulong	4	Varh	Quadrant 3 total reactive Energy	1	✓	✓	✓	✓	✓	✓	✓	✓
340	0154	Ulong	4	Varh	Quadrant 4 Reactive Energy L1	1								
344	0158	Ulong	4	Varh	Quadrant 4 Reactive Energy L2	1		✓	✓	✓	✓	✓	✓	✓
348	015C	Ulong	4	Varh	Quadrant 4 Reactive Energy L3	1		✓	✓	✓	✓	✓	✓	✓
352	0160	Ulong	4	Varh	Quadrant 4 Reactive Energy L4	1								
356	0164	Ulong	4	Varh	Quadrant 4 total reactive Energy	1	✓	✓	✓	✓	✓	✓	✓	✓
360	0168	uint	2	-	Number Of pulse Meter (Max 8)	1								
362	016A	uint	2	-	Total pulse meter input 1	1		✓	✓	✓	✓	✓	✓	✓
364	016C	uint	2	-	Total pulse meter input 2	1		✓	✓	✓	✓	✓	✓	✓
366	016E	uint	2	-	Total pulse meter input 3	1								
368	0170	uint	2	-	Total pulse meter input 4	1								
370	0172	uint	2	-	Total pulse meter input 5	1								
372	0174	uint	2	-	Total pulse meter input 6	1								
374	0176	uint	2	-	Total pulse meter input 7	1								
376	0178	uint	2	-	Total pulse meter input 8	1								

Energy

Supported Functions	Start Address	Register Counts
Write single register	1500	160

Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR14S	MPR15S-22	MPR16S-21	MPR17S-23	MPR18S-32
1500	05DC	Ulong	4	Wh	Consumed Active Energy L1	1				
1504	05E0	Ulong	4	Wh	Consumed Active Energy L2	1				
1508	05E4	Ulong	4	Wh	Consumed Active Energy L3	1				
1512	05E8	Ulong	4	Wh	Consumed Active Energy L4	1				
1516	05EC	Ulong	4	Wh	Total Consumed Energy L1..L3	1				
1520	05F0	Ulong	4	Wh	Delivered Active Energy L1	1				
1524	05F4	Ulong	4	Wh	Delivered Active Energy L2	1				
1528	05F8	Ulong	4	Wh	Delivered Active Energy L3	1				
1532	05FC	Ulong	4	Wh	Delivered Active Energy L4	1				
1536	0600	Ulong	4	Wh	Total Delivered Energy L1..L3	1				
1540	0604	Ulong	4	VAh	Consumed Apparent energy L1	1				
1544	0608	Ulong	4	VAh	Consumed Apparent energy L2	1				
1548	060C	Ulong	4	VAh	Consumed Apparent energy L3	1				
1552	0610	Ulong	4	VAh	Consumed Apparent energy L4	1				
1556	0614	Ulong	4	VAh	Total Consumed Apparent Energy L1..L3	1				
1560	0618	Ulong	4	VAh	Delivered Apparent Energy L1	1				
1564	061C	Ulong	4	VAh	Delivered Apparent Energy L2	1				
1568	0620	Ulong	4	VAh	Delivered Apparent Energy L3	1				
1572	0624	Ulong	4	VAh	Delivered Apparent Energy L4	1				
1576	0628	Ulong	4	VAh	Total Delivered Apparent energy L1..L3	1				
1580	062C	Ulong	4	Varh	Quadrant 1 Reactive Energy L1	1				
1584	0630	Ulong	4	Varh	Quadrant 1 Reactive Energy L2	1				
1588	0634	Ulong	4	Varh	Quadrant 1 Reactive Energy L3	1				
1592	0638	Ulong	4	Varh	Quadrant 1 Reactive Energy L4	1				
1596	063C	Ulong	4	Varh	Quadrant 1 total reactive Energy	1				
1600	0640	Ulong	4	Varh	Quadrant 2 Reactive Energy L1	1				
1604	0644	Ulong	4	Varh	Quadrant 2 Reactive Energy L2	1				
1608	0648	Ulong	4	Varh	Quadrant 2 Reactive Energy L3	1				
1612	064C	Ulong	4	Varh	Quadrant 2 Reactive Energy L4	1				
1616	0650	Ulong	4	Varh	Quadrant 2 total reactive Energy	1				
1620	0654	Ulong	4	Varh	Quadrant 3 Reactive Energy L1	1				
1624	0658	Ulong	4	Varh	Quadrant 3 Reactive Energy L2	1				
1628	065C	Ulong	4	Varh	Quadrant 3 Reactive Energy L3	1				
1632	0660	Ulong	4	Varh	Quadrant 3 Reactive Energy L4	1				
1636	0664	Ulong	4	Varh	Quadrant 3 total reactive Energy	1				
1640	0668	Ulong	4	Varh	Quadrant 4 Reactive Energy L1	1				
1644	066C	Ulong	4	Varh	Quadrant 4 Reactive Energy L2	1				
1648	0670	Ulong	4	Varh	Quadrant 4 Reactive Energy L3	1				
1652	0674	Ulong	4	Varh	Quadrant 4 Reactive Energy L4	1				
1656	0678	Ulong	4	Varh	Quadrant 4 total reactive Energy	1				

Energy per tariff

Supported Functions	Start Address	Register Counts
Read holding registers	500	42

Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR14S	MPR15S-22	MPR16S-21	MPR17S-23	MPR18S-32
500	01F4	ushort	1	-	Number Of Tariff	1		✓	✓	✓
501	01F5	ushort	1	-	Tariff Number In Progress	1		✓	✓	✓
502	01F6	ulong	4	kWh	Positive Active Energies Tariff1	1		✓	✓	✓
506	01FA	ulong	4	kWh	Positive Active Energies Tariff2	1		✓	✓	✓
510	01FE	ulong	4	kWh	Positive Active Energies Tariff3	1		✓	✓	✓
514	0202	ulong	4	kWh	Positive Active Energies Tariff4	1		✓	✓	✓
518	0206	ulong	4	kWh	Positive Active Energies Tariff5	1		✓	✓	✓
522	020A	ulong	4	kWh	Positive Active Energies Tariff6	1		✓	✓	✓
526	020E	ulong	4	kWh	Positive Active Energies Tariff7	1		✓	✓	✓
530	0212	ulong	4	kWh	Positive Active Energies Tariff8	1		✓	✓	✓
534	0216	ulong	4	kWh	Generator Energies	1		✓	✓	✓
538	021A	ulong	4	kWh	Total tariff energies	1	✓	✓	✓	✓

Min-Max, Max Demand, Demand Measurement

Supported Functions	Start Address	Register Counts
Read holding registers	800	568

Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR14S	MPR15S-22	MPR16S-21	MPR17S-23	MPR18S-32
800	0320	uint	2	V/10	L1 Phase Max Voltage	0.1	✓	✓	✓	✓
802	0322	uint	2	Time	L1 Phase Max Voltage Time	Unix Time Stamp	✓	✓	✓	✓
804	0324	uint	2	V/10	L2 Phase Max Voltage	0.1	✓	✓	✓	✓
806	0326	uint	2	Time	L2 Phase Max Voltage Time	Unix Time Stamp	✓	✓	✓	✓
808	0328	uint	2	V/10	L3 Phase Max Voltage	0.1	✓	✓	✓	✓
810	032A	uint	2	Time	L3 Phase Max Voltage Time	Unix Time Stamp	✓	✓	✓	✓
812	032C	uint	2	V/10	L4 Phase Max Voltage	0.1				
814	032E	uint	2	Time	L4 Phase Max Voltage Time	Unix Time Stamp				
816	0330	uint	2	V/10	L1-L2 Max Voltage	0.1	✓	✓	✓	✓
818	0332	uint	2	Time	L1-L2 Max Voltage Time	Unix Time Stamp	✓	✓	✓	✓
820	0334	uint	2	V/10	L2-L3 Max Voltage	0.1	✓	✓	✓	✓
822	0336	uint	2	Time	L2-L3 Max Voltage Time	Unix Time Stamp	✓	✓	✓	✓
824	0338	uint	2	V/10	L3-L1 Max Voltage	0.1	✓	✓	✓	✓
826	033A	uint	2	Time	L3-L1 Max Voltage Time	Unix Time Stamp	✓	✓	✓	✓
828	033C	uint	2	A/10	L1 Phase Max Current	0.001	✓	✓	✓	✓
830	033E	uint	2	Time	L1 Phase Max Current Time	Unix Time Stamp	✓	✓	✓	✓
832	0340	uint	2	A/10	L2 Phase Max Current	0.001	✓	✓	✓	✓
834	0342	uint	2	Time	L2 Phase Max Current Time	Unix Time Stamp	✓	✓	✓	✓
836	0344	uint	2	A/10	L3 Phase Max Current	0.001	✓	✓	✓	✓
838	0346	uint	2	Time	L3 Phase Max Current Time	Unix Time Stamp	✓	✓	✓	✓
840	0348	uint	2	A/10	L4 Phase Max Current	0.001				

842	034A	uint	2	Time	L4 Phase Max Current Time	Unix Time Stamp					
844	034C	uint	2	A/10	IN Max Current	0.001	✓	✓	✓	✓	✓
846	034E	uint	2	Time	IN Max Current Time	Unix Time Stamp	✓	✓	✓	✓	✓
848	0350	float	2	W/10	L1 Phase Max Active Power	1	✓	✓	✓	✓	✓
850	0352	uint	2	Time	L1 Phase Max Active Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
852	0354	float	2	W/10	L2 Phase Max Active Power	1	✓	✓	✓	✓	✓
854	0356	uint	2	Time	L2 Phase Max Active Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
856	0358	float	2	W/10	L3 Phase Max Active Power	1	✓	✓	✓	✓	✓
858	035A	uint	2	Time	L3 Phase Max Active Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
860	035C	float	2	W/10	L4 Phase Max Active Power	1					
862	035E	uint	2	Time	L4 Phase Max Active Power Time	Unix Time Stamp					
864	0360	float	2	W/10	Max Total Import Active Power	1	✓	✓	✓	✓	✓
866	0362	uint	2	Time	Max Total Import Active Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
868	0364	float	2	W/10	Max Total Export Active Power	1	✓	✓	✓	✓	✓
870	0366	uint	2	Time	Max Total Export Active Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
872	0368	float	2	W/10	Max Total Active Power	1	✓	✓	✓	✓	✓
874	036A	uint	2	Time	Max Total Active Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
876	036C	float	2	Var/10	L1 Phase Max Reactive Power	1	✓	✓	✓	✓	✓
878	036E	uint	2	Time	L1 Phase Max Reactive Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
880	0370	float	2	Var/10	L2 Phase Max Reactive Power	1	✓	✓	✓	✓	✓
882	0372	uint	2	Time	L2 Phase Max Reactive Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
884	0374	float	2	Var/10	L3 Phase Max Reactive Power	1	✓	✓	✓	✓	✓
886	0376	uint	2	Time	L3 Phase Max Reactive Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
888	0378	float	2	Var/10	L4 Phase Max Reactive Power	1					
890	037A	uint	2	Time	L4 Phase Max Reactive Power Time	Unix Time Stamp					
892	037C	float	2	Var/10	Quadrant 1 Max Reactive Power	1	✓	✓	✓	✓	✓
894	037E	uint	2	Time	Quadrant 1 Max Reactive Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
896	0380	float	2	Var/10	Quadrant 2 Max Reactive Power	1	✓	✓	✓	✓	✓
898	0382	uint	2	Time	Quadrant 2 Max Reactive Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
900	0384	float	2	Var/10	Quadrant 3 Max Reactive Power	1	✓	✓	✓	✓	✓
902	0386	uint	2	Time	Quadrant 3 Max Reactive Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
904	0388	float	2	Var/10	Quadrant 4 Max Reactive Power	1	✓	✓	✓	✓	✓
906	038A	uint	2	Time	Quadrant 4 Max Reactive Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
908	038C	float	2	Var/10	Quadrant Total Max Reactive Power	1	✓	✓	✓	✓	✓
910	038E	uint	2	Time	Quadrant Total Max Reactive Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
912	0390	float	2	VA/10	L1 Phase Max Apparent Power	1	✓	✓	✓	✓	✓
914	0392	uint	2	Time	L1 Phase Max Apparent Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
916	0394	float	2	VA/10	L2 Phase Max Apparent Power	1	✓	✓	✓	✓	✓
918	0396	uint	2	Time	L2 Phase Max Apparent Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
920	0398	float	2	VA/10	L3 Phase Max Apparent Power	1	✓	✓	✓	✓	✓
922	039A	uint	2	Time	L3 Phase Max Apparent Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
924	039C	float	2	VA/10	L4 Phase Max Apparent Power	1					
926	039E	uint	2	Time	L4 Phase Max Apparent Power Time	Unix Time Stamp					
928	03A0	float	2	VA/10	Max Total Import Apparent Power	1	✓	✓	✓	✓	✓
930	03A2	uint	2	Time	Max Total Import Apparent Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
932	03A4	float	2	VA/10	Max Total Export Apparent Power	1	✓	✓	✓	✓	✓
934	03A6	uint	2	Time	Max Total Export Apparent Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
936	03A8	float	2	VA/10	Max Total Apparent Power	1	✓	✓	✓	✓	✓
938	03AA	uint	2	Time	Max Total Apparent Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
940	03AC	uint	2	F/10	Max System Frequency	0.1	✓	✓	✓	✓	✓
942	03AE	uint	2	Time	Max System Frequency Time	Unix Time Stamp	✓	✓	✓	✓	✓
944	03B0	uint	2	%	L1 Phase Max. Voltage THD	0.1		✓	✓	✓	✓
946	03B2	uint	2	Time	L1 Phase Max. Voltage THD Time	Unix Time Stamp		✓	✓	✓	✓
948	03B4	uint	2	%	L2 Phase Max Voltage THD	0.1		✓	✓	✓	✓
950	03B6	uint	2	Time	L2 Phase Max. Voltage THD Time	Unix Time Stamp		✓	✓	✓	✓
952	03B8	uint	2	%	L3 Phase Max. Voltage THD	0.1		✓	✓	✓	✓
954	03BA	uint	2	Time	L3 Phase Max. Voltage THD Time	Unix Time Stamp		✓	✓	✓	✓
956	03BC	uint	2	%	L4 Phase Max. Voltage THD	0.1					
958	03BE	uint	2	Time	L4 Phase Max. Voltage THD Time	Unix Time Stamp					
960	03C0	uint	2	%	L1-L2 Max Voltage THD	0.1		✓	✓	✓	✓
962	03C2	uint	2	Time	L1-L2 Max Voltage THD Time	Unix Time Stamp		✓	✓	✓	✓
964	03C4	uint	2	%	L2-L3 Max Voltage THD	0.1		✓	✓	✓	✓
966	03C6	uint	2	Time	L2-L3 Max Voltage THD Time	Unix Time Stamp		✓	✓	✓	✓
968	03C8	uint	2	%	L3-L1 Max Voltage THD	0.1		✓	✓	✓	✓
970	03CA	uint	2	Time	L3-L1 Max Voltage THD Time	Unix Time Stamp		✓	✓	✓	✓
972	03CC	uint	2	%	L1 Phase Max Current THD	0.1		✓	✓	✓	✓
974	03CE	uint	2	Time	L1 Phase Max Current THD Time	Unix Time Stamp		✓	✓	✓	✓
976	03D0	uint	2	%	L2 Phase Max Current THD	0.1		✓	✓	✓	✓
978	03D2	uint	2	Time	L2 Phase Max Current THD Time	Unix Time Stamp		✓	✓	✓	✓
980	03D4	uint	2	%	L3 Phase Max Current THD	0.1		✓	✓	✓	✓
982	03D6	uint	2	Time	L3 Phase Max Current THD Time	Unix Time Stamp		✓	✓	✓	✓
984	03D8	uint	2	%	L4 Phase Max Current THD	0.1					
986	03DA	uint	2	Time	L4 Phase Max Current THD Time	Unix Time Stamp					
988	03DC	uint	2	V/10	L1 Phase Min Voltage	0.1	✓	✓	✓	✓	✓
990	03DE	uint	2	Time	L1 Phase Min Voltage Time	Unix Time Stamp	✓	✓	✓	✓	✓
992	03E0	uint	2	V/10	L2 Phase Min Voltage	0.1	✓	✓	✓	✓	✓
994	03E2	uint	2	Time	L2 Phase Min Voltage Time	Unix Time Stamp	✓	✓	✓	✓	✓
996	03E4	uint	2	V/10	L3 Phase Min Voltage	0.1	✓	✓	✓	✓	✓
998	03E6	uint	2	Time	L3 Phase Min Voltage Time	Unix Time Stamp	✓	✓	✓	✓	✓
1000	03E8	uint	2	V/10	L4 Phase Min Voltage	0.1					
1002	03EA	uint	2	Time	L4 Phase Min Voltage Time	Unix Time Stamp					
1004	03EC	uint	2	V/10	L1-L2 Min Voltage	0.1	✓	✓	✓	✓	✓
1006	03EE	uint	2	Time	L1-L2 Min Voltage Time	Unix Time Stamp	✓	✓	✓	✓	✓
1008	03F0	uint	2	V/10	L2-L3 Min Voltage	0.1	✓	✓	✓	✓	✓
1010	03F2	uint	2	Time	L2-L3 Min Voltage Time	Unix Time Stamp	✓	✓	✓	✓	✓
1012	03F4	uint	2	V/10	L3-L1 Min Voltage	0.1	✓	✓	✓	✓	✓
1014	03F6	uint	2	Time	L3-L1 Min Voltage Time	Unix Time Stamp	✓	✓	✓	✓	✓
1016	03F8	uint	2	A/10	L1 Phase Min Current	0.001	✓	✓	✓	✓	✓
1018	03FA	uint	2	Time	L1 Phase Min Current Time	Unix Time Stamp	✓	✓	✓	✓	✓
1020	03FC	uint	2	A/10	L2 Phase Min Current	0.001	✓	✓	✓	✓	✓
1022	03FE	uint	2	Time	L2 Phase Min Current Time	Unix Time Stamp	✓	✓	✓	✓	✓
1024	0400	uint	2	A/10	L3 Phase Min Current	0.001	✓	✓	✓	✓	✓
1026	0402	uint	2	Time	L3 Phase Min Current Time	Unix Time Stamp	✓	✓	✓	✓	✓
1028	0404	uint	2	A/10	L4 Phase Min Current	0.001					
1030	0406	uint	2	Time	L4 Phase Min Current Time	Unix Time Stamp					
1032	0408	uint	2	A/10	IN Min Current	0.001	✓	✓	✓	✓	✓
1034	040A	uint	2	Time	IN Min Current Time	Unix Time Stamp	✓	✓	✓	✓	✓
1036	040C	float	2	W/10	L1 Phase Min Active Power	1	✓	✓	✓	✓	✓
1038	040E	uint	2	Time	L1 Phase Min Active Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
1040	0410	float	2	W/10	L2 Phase Min Active Power	1	✓	✓	✓	✓	✓
1042	0412	uint	2	Time	L2 Phase Min Active Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
1044	0414	float	2	W/10	L3 Phase Min Active Power	1	✓	✓	✓	✓	✓
1046	0416	uint	2	Time	L3 Phase Min Active Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
1048	0418	float	2	W/10	L4 Phase Min Active Power	1					
1050	041A	uint	2	Time	L4 Phase Min Active Power Time	Unix Time Stamp					
1052	041C	float	2	W/10	Min Total Import Active Power	1	✓	✓	✓	✓	✓
1054	041E	uint	2	Time	Min Total Import Active Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
1056	0420	float	2	W/10	Min Total Export Active Power	1	✓	✓	✓	✓	✓
1058	0422	uint	2	Time	Min Total Export Active Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
1060	0424	float	2	W/10	Min Total Active Power	1	✓	✓	✓	✓	✓
1062	0426	uint	2	Time	Min Total Active Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
1064	0428	float	2	Var/10	L1 Phase Min Reactive Power	1	✓	✓	✓	✓	✓
1066	042A	uint	2	Time	L1 Phase Min Reactive Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
1068	042C	float	2	Var/10	L2 Phase Min Reactive Power	1	✓	✓	✓	✓	✓
1070	042E	uint	2	Time	L2 Phase Min Reactive Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
1072	0430	float	2	Var/10	L3 Phase Min Reactive Power	1	✓	✓	✓	✓	✓
1074	0432	uint	2	Time	L3 Phase Min Reactive Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
1076	0434	float	2	Var/10	L4 Phase Min Reactive Power	1					
1078	0436	uint	2	Time	L4 Phase Min Reactive Power Time	Unix Time Stamp					
1080	0438	float	2	Var/10	Quadrant 1 Min Reactive Power	1	✓	✓	✓	✓	✓

1082	043A	uint	2	Time	Quadrant 1 Min Reactive Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
1084	043C	float	2	Var/10	Quadrant 2 Min Reactive Power	1	✓	✓	✓	✓	✓
1086	043E	uint	2	Time	Quadrant 2 Min Reactive Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
1088	0440	float	2	Var/10	Quadrant 3 Min Reactive Power	1	✓	✓	✓	✓	✓
1090	0442	uint	2	Time	Quadrant 3 Min Reactive Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
1092	0444	float	2	Var/10	Quadrant 4 Min Reactive Power	1	✓	✓	✓	✓	✓
1094	0446	uint	2	Time	Quadrant 4 Min Reactive Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
1096	0448	float	2	Var/10	Quadrant Total Min Reactive Power	1	✓	✓	✓	✓	✓
1098	044A	uint	2	Time	Quadrant Total Min Reactive Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
1100	044C	float	2	VA/10	L1 Phase Min Apparent Power	1	✓	✓	✓	✓	✓
1102	044E	uint	2	Time	L1 Phase Min Apparent Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
1104	0450	float	2	VA/10	L2 Phase Min Apparent Power	1	✓	✓	✓	✓	✓
1106	0452	uint	2	Time	L2 Phase Min Apparent Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
1108	0454	float	2	VA/10	L3 Phase Min Apparent Power	1	✓	✓	✓	✓	✓
1110	0456	uint	2	Time	L3 Phase Min Apparent Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
1112	0458	float	2	VA/10	L4 Phase Min Apparent Power	1					
1114	045A	uint	2	Time	L4 Phase Min Apparent Power Time	Unix Time Stamp					
1116	045C	float	2	VA/10	Min Total Import Apparent Power	1	✓	✓	✓	✓	✓
1118	045E	uint	2	Time	Min Total Import Apparent Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
1120	0460	float	2	VA/10	Min Total Export Apparent Power	1	✓	✓	✓	✓	✓
1122	0462	uint	2	Time	Min Total Export Apparent Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
1124	0464	float	2	VA/10	Min Total Apparent Power	1	✓	✓	✓	✓	✓
1126	0466	uint	2	Time	Min Total Apparent Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
1128	0468	uint	2	F/10	Min System Frequency	0.1	✓	✓	✓	✓	✓
1130	046A	uint	2	Time	Min System Frequency Time	Unix Time Stamp	✓	✓	✓	✓	✓
1132	046C	uint	2	%	L1 Phase Min. Voltage THD	0.1		✓	✓	✓	✓
1134	046E	uint	2	Time	L1 Phase Min. Voltage THD Time	Unix Time Stamp		✓	✓	✓	✓
1136	0470	uint	2	%	L2 Phase Min Voltage THD	0.1		✓	✓	✓	✓
1138	0472	uint	2	Time	L2 Phase Min. Voltage THD Time	Unix Time Stamp		✓	✓	✓	✓
1140	0474	uint	2	%	L3 Phase Min. Voltage THD	0.1		✓	✓	✓	✓
1142	0476	uint	2	Time	L3 Phase Min. Voltage THD Time	Unix Time Stamp		✓	✓	✓	✓
1144	0478	uint	2	%	L4 Phase Min. Voltage THD	0.1					
1146	047A	uint	2	Time	L4 Phase Min. Voltage THD Time	Unix Time Stamp					
1148	047C	uint	2	%	L1-L2 Min Voltage THD	0.1		✓	✓	✓	✓
1150	047E	uint	2	Time	L1-L2 Min Voltage THD Time	Unix Time Stamp		✓	✓	✓	✓
1152	0480	uint	2	%	L2-L3 Min Voltage THD	0.1		✓	✓	✓	✓
1154	0482	uint	2	Time	L2-L3 Min Voltage THD Time	Unix Time Stamp		✓	✓	✓	✓
1156	0484	uint	2	%	L3-L1 Min Voltage THD	0.1		✓	✓	✓	✓
1158	0486	uint	2	Time	L3-L1 Min Voltage THD Time	Unix Time Stamp		✓	✓	✓	✓
1160	0488	uint	2	%	L1 Phase Min Current THD	0.1		✓	✓	✓	✓
1162	048A	uint	2	Time	L1 Phase Min Current THD Time	Unix Time Stamp		✓	✓	✓	✓
1164	048C	uint	2	%	L2 Phase Min Current THD	0.1		✓	✓	✓	✓
1166	048E	uint	2	Time	L2 Phase Min Current THD Time	Unix Time Stamp		✓	✓	✓	✓
1168	0490	uint	2	%	L3 Phase Min Current THD	0.1		✓	✓	✓	✓
1170	0492	uint	2	Time	L3 Phase Min Current THD Time	Unix Time Stamp		✓	✓	✓	✓
1172	0494	uint	2	%	L4 Phase Min Current THD	0.1					
1174	0496	uint	2	Time	L4 Phase Min Current THD Time	Unix Time Stamp					
1176	0498	uint	2	mA	L1 Phase Current Demand	0.001	✓	✓	✓	✓	✓
1178	049A	uint	2	mA	L2 Phase Current Demand	0.001	✓	✓	✓	✓	✓
1180	049C	uint	2	mA	L3 Phase Current Demand	0.001	✓	✓	✓	✓	✓
1182	049E	uint	2	mA	L4 Phase Current Demand	0.001					
1184	04A0	uint	2	mA	IN Current Demand	0.001	✓	✓	✓	✓	✓
1186	04A2	float	2	W/10	L1 Phase Active Power Demand	1	✓	✓	✓	✓	✓
1188	04A4	float	2	W/10	L2 Phase Active Power Demand	1	✓	✓	✓	✓	✓
1190	04A6	float	2	W/10	L3 Phase Active Power Demand	1	✓	✓	✓	✓	✓
1192	04A8	float	2	W/10	L4 Phase Active Power Demand	1					
1194	04AA	float	2	W/10	Total Import Active Power Demand	1	✓	✓	✓	✓	✓
1196	04AC	float	2	W/10	Total Export Active Power Demand	1	✓	✓	✓	✓	✓
1198	04AE	float	2	W/10	Total Active Power Demand	1					
1200	04B0	float	2	Var/10	L1 Phase Reactive Power Demand	1					
1202	04B2	float	2	Var/10	L2 Phase Reactive Power Demand	1					
1204	04B4	float	2	Var/10	L3 Phase Reactive Power Demand	1					
1206	04B6	float	2	Var/10	L4 Phase Reactive Power Demand	1					
1208	04B8	float	2	Var/10	Quadrant 1 Total Reactive Powe Demand	1					
1210	04BA	float	2	Var/10	Quadrant 2 Total Reactive Powe Demand	1					
1212	04BC	float	2	Var/10	Quadrant 3 Total Reactive Powe Demand	1					
1214	04BE	float	2	Var/10	Quadrant 4 Total Reactive Power Demand	1					
1216	04C0	float	2	Var/10	Total Reactive Power Demand	1					
1218	04C2	float	2	VA/10	L1 Phase Apparent Power Demand	1	✓	✓	✓	✓	✓
1220	04C4	float	2	VA/10	L2 Phase Apparent Power Demand	1	✓	✓	✓	✓	✓
1222	04C6	float	2	VA/10	L3 Phase Apparent Power Demand	1	✓	✓	✓	✓	✓
1224	04C8	float	2	VA/10	L4 Phase Apparent Power Demand	1					
1226	04CA	float	2	VA/10	Total Import Apparent Power Demand	1	✓	✓	✓	✓	✓
1228	04CC	float	2	VA/10	Total Export Apparent Power Demand	1	✓	✓	✓	✓	✓
1230	04CE	float	2	VA/10	Total Apparent Power Demand	1					
1232	04D0	uint	2	mA	L1 Phase Max. Current Demand	0.001	✓	✓	✓	✓	✓
1234	04D2	uint	2	Time	L1 Phase Max. Current Demand Time	Unix Time Stamp	✓	✓	✓	✓	✓
1236	04D4	uint	2	mA	L2 Phase Max. Current Demand	0.001	✓	✓	✓	✓	✓
1238	04D6	uint	2	Time	L2 Phase Max. Current Demand Time	Unix Time Stamp	✓	✓	✓	✓	✓
1240	04D8	uint	2	mA	L3 Phase Max. Current Demand	0.001	✓	✓	✓	✓	✓
1242	04DA	uint	2	Time	L3 Phase Max. Current Demand Time	Unix Time Stamp	✓	✓	✓	✓	✓
1244	04DC	uint	2	mA	L4 Phase Max. Current Demand	0.001					
1246	04DE	uint	2	Time	L4 Phase Max. Current Demand Time	Unix Time Stamp					
1248	04E0	uint	2	mA	IN Max. Current Demand	0.001	✓	✓	✓	✓	✓
1250	04E2	uint	2	Time	IN Phase Max. Current Demand Time	Unix Time Stamp	✓	✓	✓	✓	✓
1252	04E4	float	2	W/10	PL1 Max Active Import Power	1	✓	✓	✓	✓	✓
1254	04E6	uint	2	Time	PL1 Max Active Import Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
1256	04E8	float	2	W/10	PL1 Max Active Export Power	1	✓	✓	✓	✓	✓
1258	04EA	uint	2	Time	PL1 Max Active Export Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
1260	04EC	float	2	W/10	PL2 Max Active Import Power	1	✓	✓	✓	✓	✓
1262	04EE	uint	2	Time	PL2 Max Active Import Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
1264	04F0	float	2	W/10	PL2 Max Active Export Power	1	✓	✓	✓	✓	✓
1266	04F2	uint	2	Time	PL2 Max Active Export Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
1268	04F4	float	2	W/10	PL3 Max Active Import Power	1	✓	✓	✓	✓	✓
1270	04F6	uint	2	Time	PL3 Max Active Import Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
1272	04F8	float	2	W/10	PL3 Max Active Export Power	1	✓	✓	✓	✓	✓
1274	04FA	uint	2	Time	PL3 Max Active Export Power Time	Unix Time Stamp	✓	✓	✓	✓	✓
1276	04FC	float	2	W/10	PL4 Max Active Import Power	1					
1278	04FE	uint	2	Time	PL4 Max Active Import Power Time	Unix Time Stamp					
1280	0500	float	2	W/10	PL4 Max Active Export Power	1					
1282	0502	uint	2	Time	PL4 Max Active Export Power Time	Unix Time Stamp					
1284	0504	float	2	W/10	Total Active Power Import Max Demand	1	✓	✓	✓	✓	✓
1286	0506	uint	2	Time	Total Active Power Import Max Demand Time	Unix Time Stamp	✓	✓	✓	✓	✓
1288	0508	float	2	W/10	Total Active Power Export Max Demand	1	✓	✓	✓	✓	✓
1290	050A	uint	2	Time	Total Active Power Export Max Demand Time	Unix Time Stamp	✓	✓	✓	✓	✓
1292	050C	float	2	Var/10	L1 Phase Max Demand Reactive Power	1					
1294	050E	uint	2	Time	L1 Phase Max Demand Reactive Power Time	Unix Time Stamp					
1296	0510	float	2	Var/10	L2 Phase Max Demand Reactive Power	1					
1298	0512	uint	2	Time	L2 Phase Max Demand Reactive Power Time	Unix Time Stamp					
1300	0514	float	2	Var/10	L3 Phase Max Demand Reactive Power	1					
1302	0516	uint	2	Time	L3 Phase Max Demand Reactive Power Time	Unix Time Stamp					
1304	0518	float	2	Var/10	L4 Phase Max Demand Reactive Power	1					
1306	051A	uint	2	Time	L4 Phase Max Demand Reactive Power Time	Unix Time Stamp					
1308	051C	float	2	Var/10	Quadrant 1 Max Demand Reactive Power	1					
1310	051E	uint	2	Time	Quadrant 1 Max Demand Reactive Power Time	Unix Time Stamp					
1312	0520	float	2	Var/10	Quadrant 2 Max Demand Reactive Power	1					
1314	0522	uint	2	Time	Quadrant 2 Max Demand Reactive Power Time	Unix Time Stamp					
1316	0524	float	2	Var/10	Quadrant 3 Max Demand Reactive Power	1					
1318	0526	uint	2	Time	Quadrant 3 Max Demand Reactive Power Time	Unix Time Stamp					
1320	0528	float	2	Var/10	Quadrant 4 Max Demand Reactive Power	1					

1322	052A	uint	2	Time	Quadrant 4 Max Demand Reactive Power Time	Unix Time Stamp								
1324	052C	float	2	Var/10	Quadrant Total Max Demand Reactive Power	1								
1326	052E	uint	2	Time	Quadrant Total Max Demand Reactive Power Time	Unix Time Stamp								
1328	0530	float	2	W/10	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/10	SL1 Max Demand Export Power	1	✓	✓	✓	✓	✓	✓	✓	✓
1334	0536	uint	2	Time	SL1 Max Demand Export Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1336	0538	float	2	W/10	SL2 Max Demand Import Power	1	✓	✓	✓	✓	✓	✓	✓	✓
1338	053A	uint	2	Time	SL2 Max Demand Import Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1340	053C	float	2	W/10	SL2 Max Demand Export Power	1	✓	✓	✓	✓	✓	✓	✓	✓
1342	053E	uint	2	Time	SL2 Max Demand Export Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1344	0540	float	2	W/10	SL3 Max Demand Import Power	1	✓	✓	✓	✓	✓	✓	✓	✓
1346	0542	uint	2	Time	SL3 Max Demand Import Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1348	0544	float	2	W/10	SL3 Max Demand Export Power	1	✓	✓	✓	✓	✓	✓	✓	✓
1350	0546	uint	2	Time	SL3 Max Demand Export Power Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1352	0548	float	2	W/10	SL4 Max Demand Import Power	1								
1354	054A	uint	2	Time	SL4 Max Demand Import Power Time	Unix Time Stamp								
1356	054C	float	2	W/10	SL4 Max Demand Export Power	1								
1358	054E	uint	2	Time	SL4 Max Demand Export Power Time	Unix Time Stamp								
1360	0550	float	2	VA/10	Total Apparent Power Max Demand	1	✓	✓	✓	✓	✓	✓	✓	✓
1362	0552	uint	2	Time	Total Apparent Power Max Demand Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓
1364	0554	float	2	VA/10	Total Apparent Power Max Demand	1	✓	✓	✓	✓	✓	✓	✓	✓
1366	0556	uint	2	Time	Total Apparent Power Max Demand Time	Unix Time Stamp	✓	✓	✓	✓	✓	✓	✓	✓

Harmonics

THD

Supported Functions	Start Address	Register Counts
Read holding registers	2000	24

Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR14S	MPR15S-22	MPR16S-21	MPR17S-23	MPR18S-32			
2000	07D0	uint	2	%	Total Harmoic Distorsion VLL12	0.1		✓	✓	✓	✓	✓	✓
2002	07D2	uint	2	%	Total Harmoic Distorsion VLL23	0.1		✓	✓	✓	✓	✓	✓
2004	07D4	uint	2	%	Total Harmoic Distorsion VLL31	0.1		✓	✓	✓	✓	✓	✓
2006	07D6	uint	2	%	Total Harmonic Distorsion VL1	0.1		✓	✓	✓	✓	✓	✓
2008	07D8	uint	2	%	Total Harmonic Distorsion VL2	0.1		✓	✓	✓	✓	✓	✓
2010	07DA	uint	2	%	Total Harmonic Distorsion VL3	0.1		✓	✓	✓	✓	✓	✓
2012	07DC	uint	2	%	Total Harmonic Distorsion VL4	0.1							
2014	07DE	uint	2	%	Total Harmonic Distorsion IL1	0.1		✓	✓	✓	✓	✓	✓
2016	07E0	uint	2	%	Total Harmonic Distorsion IL2	0.1		✓	✓	✓	✓	✓	✓
2018	07E2	uint	2	%	Total Harmonic Distorsion IL3	0.1		✓	✓	✓	✓	✓	✓
2020	07E4	uint	2	%	Total Harmonic Distorsion IL4	0.1							
2022	07E6	uint	2	%	Total Harmonic Distorsion IN	0.1		✓	✓	✓	✓	✓	✓

Individual Current Harmonic Order

Supported Functions	Start Address	Register Counts
Read holding registers	3000	251

Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR14S	MPR15S-22	MPR16S-21	MPR17S-23	MPR18S-32			
3000	0BB8	ushort	1	%	Number Of Harmonics	0.1			✓	✓	✓	✓	✓
3001	0BB9	ushort	1	%	H_IL1_2	0.1			✓	✓	✓	✓	✓
3002	0BBA	ushort	1	%	H_IL2_2	0.1			✓	✓	✓	✓	✓
3003	0BBB	ushort	1	%	H_IL3_2	0.1			✓	✓	✓	✓	✓
3004	0BBC	ushort	1	%	H_IL4_2	0.1							
3005	0BBD	ushort	1	%	H_ILN_2	0.1			✓	✓	✓	✓	✓
3006	0BBE	ushort	1	%	H_IL1_3	0.1			✓	✓	✓	✓	✓
3007	0BBF	ushort	1	%	H_IL2_3	0.1			✓	✓	✓	✓	✓
3008	0BC0	ushort	1	%	H_IL3_3	0.1			✓	✓	✓	✓	✓
3009	0BC1	ushort	1	%	H_IL4_3	0.1							
3010	0BC2	ushort	1	%	H_ILN_3	0.1			✓	✓	✓	✓	✓
#SAYI!	.....	.....	.....	.....	.....	.....			✓	✓	✓	✓	✓
#SAYI!	.....	.....	.....	.....	.....	.....			✓	✓	✓	✓	✓
#SAYI!	.....	.....	.....	.....	.....	.....			✓	✓	✓	✓	✓
3241	0CA9	ushort	1	%	H_IL1_50	0.1			✓	✓	✓	✓	✓
3242	0CAA	ushort	1	%	H_IL2_50	0.1			✓	✓	✓	✓	✓
3243	0CAB	ushort	1	%	H_IL3_50	0.1			✓	✓	✓	✓	✓
3244	0CAC	ushort	1	%	H_IL4_50	0.1							
3245	0CAD	ushort	1	%	H_ILN_50	0.1			✓	✓	✓	✓	✓
3246	0CAE	ushort	1	%	H_IL1_51	0.1			✓	✓	✓	✓	✓
3247	0CAF	ushort	1	%	H_IL2_51	0.1			✓	✓	✓	✓	✓
3248	0CB0	ushort	1	%	H_IL3_51	0.1			✓	✓	✓	✓	✓
3249	0CB1	ushort	1	%	H_IL4_51	0.1							
3250	0CB2	ushort	1	%	H_ILN_51	0.1			✓	✓	✓	✓	✓

Individual Voltage Harmonic Order

Supported Functions	Start Address	Register Counts
Read holding registers	4000	201

Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR14S	MPR15S-22	MPR16S-21	MPR17S-23	MPR18S-32			
4000	0FA0	ushort	1	%	Number Of Harmonics	0.1			✓	✓	✓	✓	✓
4001	0FA1	ushort	1	%	H_V1_2	0.1			✓	✓	✓	✓	✓
4002	0FA2	ushort	1	%	H_V2_2	0.1			✓	✓	✓	✓	✓
4003	0FA3	ushort	1	%	H_V3_2	0.1			✓	✓	✓	✓	✓
4004	0FA4	ushort	1	%	H_V4_2	0.1							
4005	0FA5	ushort	1	%	H_V1_3	0.1			✓	✓	✓	✓	✓
4006	0FA6	ushort	1	%	H_V2_3	0.1			✓	✓	✓	✓	✓
4007	0FA7	ushort	1	%	H_V3_3	0.1			✓	✓	✓	✓	✓
4008	0FA8	ushort	1	%	H_V4_3	0.1							
#SAYI!	.....	.....	.....	.....	.....	.....			✓	✓	✓	✓	✓
#SAYI!	.....	.....	.....	.....	.....	.....			✓	✓	✓	✓	✓
#SAYI!	.....	.....	.....	.....	.....	.....			✓	✓	✓	✓	✓
4193	1061	ushort	1	%	H_V1_50	0.1			✓	✓	✓	✓	✓
4194	1062	ushort	1	%	H_V2_50	0.1			✓	✓	✓	✓	✓
4195	1063	ushort	1	%	H_V3_50	0.1			✓	✓	✓	✓	✓
4196	1064	ushort	1	%	H_V4_50	0.1							
4197	1065	ushort	1	%	H_V1_51	0.1			✓	✓	✓	✓	✓
4198	1066	ushort	1	%	H_V2_51	0.1			✓	✓	✓	✓	✓
4199	1067	ushort	1	%	H_V3_51	0.1			✓	✓	✓	✓	✓
4200	1068	ushort	1	%	H_V4_51	0.1							

Individual VLL Harmonic Order

Supported Functions	Start Address	Register Counts
Read holding registers	5000	151

Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR14S	MPR15S-22	MPR16S-21	MPR17S-23	MPR18S-32			
5000	1388	ushort	1	%	NUM_OF_HARMONICS	0.1			✓	✓	✓	✓	✓
5001	1389	ushort	1	%	H_VLL1_2_2	0.1			✓	✓	✓	✓	✓
5002	138A	ushort	1	%	H_VLL2_3_2	0.1			✓	✓	✓	✓	✓
5003	138B	ushort	1	%	H_VLL3_1_2	0.1			✓	✓	✓	✓	✓
5004	138C	ushort	1	%	H_VLL1_2_3	0.1			✓	✓	✓	✓	✓
5005	138D	ushort	1	%	H_VLL2_3_3	0.1			✓	✓	✓	✓	✓
5006	138E	ushort	1	%	H_VLL3_1_3	0.1			✓	✓	✓	✓	✓
5007	138F	ushort	1	%	H_VLL1_2_4	0.1			✓	✓	✓	✓	✓

5008	1390	ushort	1	%	H_VLL2_3_4	0.1			✓	✓	✓
5009	1391	ushort	1	%	H_VLL3_1_4	0.1			✓	✓	✓
#SAY!	.....	.....	.....	.....	.....	.....			✓	✓	✓
#SAY!	.....	.....	.....	.....	.....	.....			✓	✓	✓
#SAY!	.....	.....	.....	.....	.....	.....			✓	✓	✓
5145	1419	ushort	1	%	H_VLL1_2_50	0.1			✓	✓	✓
5146	141A	ushort	1	%	H_VLL2_3_50	0.1			✓	✓	✓
5147	141B	ushort	1	%	H_VLL3_1_50	0.1			✓	✓	✓
5148	141C	ushort	1	%	H_VLL1_2_51	0.1			✓	✓	✓
5149	141D	ushort	1	%	H_VLL2_3_51	0.1			✓	✓	✓
5150	141E	ushort	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 Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR14S	MPR15S-22	MPR16S-21	MPR17S-23	MPR18S-32	
16384	4000	ushort	1	-	Network Type: 0: 3P4W 1: 3P3W 2: ARON 3: 3P4W Balanced 4: 3P3W Balanced	1	✓	✓	✓	✓	✓
16385	4001	ushort	1	A	Current Transformer Secondary: 0: 1A 1: 5A	1	✓	✓	✓	✓	✓
16386	4002	ushort	1	A	Current Transformer Primary: 5 -- 9999	1	✓	✓	✓	✓	✓
0		ushort	1	-	Voltage Transformer Present: 0-None 1-Present	1	✓	✓	✓	✓	✓
16388	4004	ushort	1	V	Voltage Transformer Secondary: 50 -- 300	1	✓	✓	✓	✓	✓
16389	4005	uint	2	V	Voltage Transformer Primary: 50 -- 999999	1	✓	✓	✓	✓	✓
16391	4007	ushort	1	Minutes	P Demand Time: 1: 1 Minute 5: 5 Minutes 10: 10Minutes 15: 15Minutes 20: 20Minutes 30: 30Minutes 60: 60Minutes	1					
16392	4008	ushort	1	Minutes	I Demand Time: 1: 1 Minute 5: 5 Minutes 10: 10Minutes 15: 15Minutes 20: 20Minutes 30: 30Minutes 60: 60Minutes	1	✓	✓	✓	✓	✓
16393	4009	ushort	1	Minutes	V Average Time 1: 1 Minute 5: 5 Minutes 10: 10Minutes 15: 15Minutes 20: 20Minutes 30: 30Minutes 60: 60Minutes	1					
16394	400A	ushort	1	Hz	System Frequency: 0: 50 Hz 1: 60 Hz	1	✓	✓	✓	✓	✓
16395	400B	uint	2	V	System Voltage: VT_Primary --- 25V* primary/secondary	1	✓	✓	✓	✓	✓
16397	400D	ushort	1	A	System Current: CT_Primary --- 1A	1	✓	✓	✓	✓	✓
16398	400E	ushort	1	%	Sag Level: 70% -- 98%	0.1					
16399	400F	ushort	1	%	Sag Hysteresis: 0.5% -- 5%	0.1					
16400	4010	ushort	1	%	Swell Level: 102% -- 130%	0.1					
16401	4011	ushort	1	%	Swell Hysteresis: 0.5% -- 5%	0.1					

SETUP		
Supported Functions	Start Address	Register Counts
Read holding registers	17000	141
Write single register		
Write multiple registers		

Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR14S	MPR15S-22	MPR16S-21	MPR17S-23	MPR18S-32	
17000	4268	ushort	1	-	Network Type: 0: 3P4W 1: 3P3W 2: ARON 3: 3P4W Balanced 4: 3P3W Balanced	1	✓	✓	✓	✓	✓
17001	4269	ushort	1	A	Current Transformer Secondary: 0: 1A 1: 5A	1	✓	✓	✓	✓	✓
17002	426A	ushort	1	A	Current Transformer Primary: 5 -- 9999	1	✓	✓	✓	✓	✓
17003	426B	ushort	1	-	Voltage Transformer Present: 0-None 1-Present	1	✓	✓	✓	✓	✓
17004	426C	ushort	1	V	Voltage Transformer Secondary: 50 -- 300	1	✓	✓	✓	✓	✓
17005	426D	uint	2	V	Voltage Seconder Primary: 50 -- 999999	1	✓	✓	✓	✓	✓
17007	426F	ushort	1	Minutes	P Demand Time: 1: 1 Minute 5: 5 Minutes 10: 10Minutes 15: 15Minutes 20: 20Minutes 30: 30Minutes 60: 60Minutes	1					
17008	4270	ushort	1	Minutes	I Demand Time: 1: 1 Minute 5: 5 Minutes 10: 10Minutes 15: 15Minutes 20: 20Minutes 30: 30Minutes 60: 60Minutes	1	✓	✓	✓	✓	✓

17009	4271	ushort	1	Minutes	V Average Time 1: 1 Minute 5: 5 Minutes 10: 10Minutes 15: 15Minutes 20: 20Minutes 30: 30Minutes 60: 60Minutes	1					
17010	4272	ushort	1	Hz	System Frequency: 0: 50 Hz 1: 60 Hz	1	✓	✓	✓	✓	✓
17011	4273	uint	2	V	System Voltage: VT_Primary ---25V* primary/secondary	1	✓	✓	✓	✓	✓
17013	4275	ushort	1	A	System Current: CT_Primary --- 1A	1	✓	✓	✓	✓	✓
17014	4276	ushort	1	%	Sag Level: 70% -- 98%	0.1					
17015	4277	ushort	1	%	Sag Hysteresis: 0.5% -- 5%	0.1					
17016	4278	ushort	1	%	Swell Level: 102% -- 130%	0.1					
17017	4279	ushort	1	%	Swell Hysteresis: 0.5% -- 5%	0.1					
17018	427A	ushort	1	-	OUT1 Type: 0: REMOTE 1: PULSE 2: ALARM	1		✓	✓	✓	✓
17019	427B	ushort	1	-	OUT2 Type: 0: REMOTE 1: PULSE 2: ALARM	1		✓		✓	✓
17020	427C	ushort	1	-	OUT3 Type: 0: REMOTE 1: PULSE 2: ALARM	1					
17021	427D	ushort	1	-	OUT4 Type: 0: REMOTE 1: PULSE 2: ALARM	1					
17022	427E	ushort	1	-	INPUT1 Type: 0: digital 1: PULSE 2: Generator	1		✓	✓	✓	✓
17023	427F	ushort	1	-	INPUT2 Type: 0: digital 1: PULSE 2: Generator	1		✓	✓	✓	✓
17024	4280	ushort	1	-	INPUT3 Type: 0: digital 1: PULSE 2: Generator	1					
17025	4281	ushort	1	-	INPUT4 Type: 0: digital 1: PULSE 2: Generator	1					
17026	4282	ushort	1	-	Analog Output 1 Type: 0: 0 -- 5 V 1: 0 -- 10V 2: -5 -- 5V 3: -10 -- 10 V 4: N/A 5: 4 -- 20mA 6: 0 -- 20mA 7: 0 -- 24mA	1				✓	
17027	4283	ushort	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	1				✓	
17028	4284	int	2	Depends on parameter	Analog Output1 High	Depends on parameter				✓	
17030	4286	int	2	Depends on parameter	Analog Output1 Low	Depends on parameter				✓	
17032	4288	ushort	1	-	Analog Output 2 Type:	1					
17033	4289	ushort	1	-	Analog Output 2 Parameter:	1					
17034	428A	uint	2	Depends on parameter	Analog Output2 High	Depends on parameter					
17036	428C	uint	2	Depends on parameter	Analog Output2 Low	Depends on parameter					
17038	428E	ushort	1	-	Analog Output 3 Type:	1					
17039	428F	ushort	1	-	Analog Output 3 Parameter:	1					
17040	4290	uint	2	Depends on parameter	Analog Output3 High	Depends on parameter					
17042	4292	uint	2	Depends on parameter	Analog Output3 Low	Depends on parameter					
17044	4294	ushort	1	-	Analog Output 4 Type:	1					
17045	4295	ushort	1	-	Analog Output 4 Parameter:	1					
17046	4296	uint	2	Depends on parameter	Analog Output4 High	Depends on parameter					
17048	4298	uint	2	Depends on parameter	Analog Output4 Low	Depends on parameter					
17050	429A	ushort	1	-	Pulse Input 1: 0: Pasive 1: Active	1		✓		✓	✓
17051	429B	ushort	1	-	Pulse Input 1 Ratio: 1 -- 20000	1		✓		✓	✓
17052	429C	ushort	1	-	Pulse Input 2: 0: Pasive 1: Active	1		✓		✓	✓
17053	429D	ushort	1	-	Pulse Input 2 Ratio: 1 -- 20000	1		✓		✓	✓

17054	429E	ushort	1	-	Pulse Input 3: 0: Pasive 1: Active	1					
17055	429F	ushort	1	-	Pulse Input 3 Ratio: 1 -- 20000	1					
17056	42A0	ushort	1	-	Pulse Input 4: 0: Pasive 1: Active	1					
17057	42A1	ushort	1	-	Pulse Input 4 Ratio: 1 -- 20000	1					
17058	42A2	ushort	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		✓		✓	✓
17059	42A3	ushort	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 Apparent Energy(Q14) 8: Total Export Apparent Energy(Q23) 9: Total Import Active Energy (L1) 10: Total Import Active Energy (L2) 11:Total Import Active Energy (L3)	1		✓		✓	✓
17060	42A4	ushort	1	kWh	Pulse Output 1 Ratio: 0: 1 1: 10 2: 100 3: 1000 4: 10000 5: 100000 6: 1000000	1		✓		✓	✓
17061	42A5	ushort	1	ms	Pulse Output 1 Pulse Width: between 20 - 1000 ms	1		✓		✓	✓
17062	42A6	ushort	1	ms	Pulse Output 1 Pulse Duty: between 20 - 1000 ms	1		✓		✓	✓
17063	42A7	ushort	1	-	Pulse Output 2 Parameter:	1					
17064	42A8	ushort	1	-	Pulse Output 2 Ratio:	1					
17065	42A9	ushort	1	ms	Pulse Output 2 Pulse Width:	1					
17066	42AA	ushort	1	ms	Pulse Output 2 Pulse Duty:	1					
17067	42AB	ushort	1	-	Pulse Output3 Parameter:	1					
17068	42AC	ushort	1	-	Pulse Output 3 Ratio:	1					
17069	42AD	ushort	1	ms	Pulse Output 3 Pulse Width:	1					
17070	42AE	ushort	1	ms	Pulse Output 3 Pulse Duty:	1					
17071	42AF	ushort	1	-	Pulse Output4 Parameter:	1					
17072	42B0	ushort	1	-	Pulse Output 4 Ratio:	1					
17073	42B1	ushort	1	ms	Pulse Output 4 Pulse Width:	1					
17074	42B2	ushort	1	ms	Pulse Output 4 Pulse Duty:	1					
17075	42B3	ushort	1	-	Alarm1 Status: 0: Pasive 1: Active	1	✓	✓	✓	✓	✓
17076	42B4	ushort	1	-	Alarm1 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:Working Hour 25: Input 1 26: Input 2	1	✓	✓	✓	✓	✓
17077	42B5	ushort	1	-	0: HIGH 1: LOW 2: In window 3: Out window	1	✓	✓	✓	✓	✓
17078	42B6	ushort	1	s	Alarm 1 On Time: 0-- 9999	0.1	✓	✓	✓	✓	✓
17079	42B7	ushort	1	s	Alarm 1 Off Time: 0-- 9999	0.1	✓	✓	✓	✓	✓
17080	42B8	ushort	1	-	0: Output 1 1: Output 2 2: Output 3 3: Output 4	1	✓	✓	✓	✓	✓
17081	42B9	int	2	Depends on parameter	Alarm 1 High Threshold Value	Depends on parameter	✓	✓	✓	✓	✓
17083	42BB	int	2	Depends on parameter	Alarm 1 Low Threshold Value	Depends on parameter	✓	✓	✓	✓	✓
17085	42BD	ushort	1	%	Alarm 1 Hysteresis	0.1	✓	✓	✓	✓	✓
17086	42BE	ushort	1	-	Alarm2 Status:	1	✓	✓	✓	✓	✓
17087	42BF	ushort	1	-	Alarm2 Parameter:	1	✓	✓	✓	✓	✓
17088	42C0	ushort	1	-	.....	1	✓	✓	✓	✓	✓
17089	42C1	ushort	1	s	.....	0.1	✓	✓	✓	✓	✓
17090	42C2	ushort	1	s	.....	0.1	✓	✓	✓	✓	✓
17091	42C3	ushort	1	-	.....	1	✓	✓	✓	✓	✓

17139	42F3	ushort	1	DAY	DST END DAY: 0 : SUNDAY 1: MONDAY 2: TUESDAY 3: WEDNESDAY 4: THURDAY 5: FRIDAY 6: SATURDAY	1	✓	✓	✓	✓	✓
17140	42F4	ushort	1	hour	DST End Hour: 0-23	1	✓	✓	✓	✓	✓
17141	42F5	ushort	1	-	Tariff Activate: 0: Disable 1: Enable	1	✓	✓	✓	✓	✓

DATE/HOUR

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

Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR14S	MPR15S-22	MPR16S-21	MPR17S-23	MPR18S-32
6000	1770	ushort	1	DAY 1-31	1	✓	✓	✓	✓	✓
6001	1771	ushort	1	month MONTH 1-12	1	✓	✓	✓	✓	✓
6002	1772	ushort	1	Yil YEAR 2000-2199	1	✓	✓	✓	✓	✓
6003	1773	ushort	1	hour HOUR 0-23	1	✓	✓	✓	✓	✓
6004	1774	ushort	1	MINUTE MINUTES 0-59	1	✓	✓	✓	✓	✓
6005	1775	ushort	1	Second SECONDS 0-59	1	✓	✓	✓	✓	✓
6006	1776	ushort	1	DAY 0: SUNDAY 1: MONDAY 2: TUESDAY 3: WEDNESDAY 4: THURDAY 5: FRIDAY 6: SATURDAY	1	✓	✓	✓	✓	✓
6007	1777	short	1	- -24 -- +24		✓	✓	✓	✓	✓
6008	1778	ushort	1	- 0: DISABLE 1: EUROPE 2: AMERICA 3: MANUAL	1	✓	✓	✓	✓	✓
6009	1779	ushort	1	month DST Start Month: 1-12	1	✓	✓	✓	✓	✓
6010	177A	ushort	1	week DST Start Week: 0: First 1: Second 2: Third 3: Fourth 4: Last	1	✓	✓	✓	✓	✓
6011	177B	ushort	1	DAY DST Start DAY: 0 : SUNDAY 1: MONDAY 2: TUESDAY 3: WEDNESDAY 4: THURDAY 5: FRIDAY 6: SATURDAY	1	✓	✓	✓	✓	✓
6012	177C	ushort	1	hour DST Start Hour: 0-23	1	✓	✓	✓	✓	✓
6013	177D	ushort	1	month DST End Month: 1-12	1	✓	✓	✓	✓	✓
6014	177E	ushort	1	week DST END Week: 0: First 1: Second 2: Third 3: Fourth 4: Last	1	✓	✓	✓	✓	✓
6015	177F	ushort	1	DAY DST END DAY: 0 : SUNDAY 1: MONDAY 2: TUESDAY 3: WEDNESDAY 4: THURDAY 5: FRIDAY 6: SATURDAY	1	✓	✓	✓	✓	✓
6016	1780	ushort	1	hour DST End Hour: 0-23	1	✓	✓	✓	✓	✓
6017	1781	ushort	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 Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR14S	MPR15S-22	MPR16S-21	MPR17S-23	MPR18S-32
22000	55F0	ushort	1	Hour/Minutes Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256	✓	✓	✓	✓	✓
22001	55F1	ushort	1	- Tariff Number Settings : 0-8	1	✓	✓	✓	✓	✓
22002	55F2	ushort	1	Hour/Minutes Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256	✓	✓	✓	✓	✓
22003	55F3	ushort	1	- Tariff Number Settings : 0-8	1	✓	✓	✓	✓	✓
22004	55F4	ushort	1	Hour/Minutes Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256	✓	✓	✓	✓	✓
22005	55F5	ushort	1	- Tariff Number Settings : 0-8	1	✓	✓	✓	✓	✓
22006	55F6	ushort	1	Hour/Minutes Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256	✓	✓	✓	✓	✓
22007	55F7	ushort	1	- Tariff Number Settings : 0-8	1	✓	✓	✓	✓	✓

22008	55F8	ushort	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256	✓	✓	✓	✓	✓
22009	55F9	ushort	1	-	Tariff Number Settings : 0-8	1	✓	✓	✓	✓	✓
22010	55FA	ushort	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256	✓	✓	✓	✓	✓
22011	55FB	ushort	1	-	Tariff Number Settings : 0-8	1	✓	✓	✓	✓	✓
22012	55FC	ushort	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256	✓	✓	✓	✓	✓
22013	55FD	ushort	1	-	Tariff Number Settings : 0-8	1	✓	✓	✓	✓	✓
22014	55FE	ushort	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256	✓	✓	✓	✓	✓
22015	55FF	ushort	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 Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR14S	MPR15S-22	MPR16S-21	MPR17S-23	MPR18S-32
9000	2328	ushort	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256	✓	✓	✓	✓
9001	2329	ushort	1	-	Tariff Number Settings : 0-8	1	✓	✓	✓	✓
9002	232A	ushort	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256	✓	✓	✓	✓
9003	232B	ushort	1	-	Tariff Number Settings : 0-8	1	✓	✓	✓	✓
9004	232C	ushort	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256	✓	✓	✓	✓
9005	232D	ushort	1	-	Tariff Number Settings : 0-8	1	✓	✓	✓	✓
9006	232E	ushort	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256	✓	✓	✓	✓
9007	232F	ushort	1	-	Tariff Number Settings : 0-8	1	✓	✓	✓	✓
9008	2330	ushort	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256	✓	✓	✓	✓
9009	2331	ushort	1	-	Tariff Number Settings : 0-8	1	✓	✓	✓	✓
9010	2332	ushort	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256	✓	✓	✓	✓
9011	2333	ushort	1	-	Tariff Number Settings : 0-8	1	✓	✓	✓	✓
9012	2334	ushort	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256	✓	✓	✓	✓
9013	2335	ushort	1	-	Tariff Number Settings : 0-8	1	✓	✓	✓	✓
9014	2336	ushort	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256	✓	✓	✓	✓
9015	2337	ushort	1	-	Tariff Number Settings : 0-8	1	✓	✓	✓	✓

TARIFF SETTINGS OF WEEKDAY

Supported Functions	Start Address	Register Counts
Read holding registers	9000	16
Write single register		
Write multiple registers		

Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR14S	MPR15S-22	MPR16S-21	MPR17S-23	MPR18S-32
10000	2710	ushort	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256	✓	✓	✓	✓
10001	2711	ushort	1	-	Tariff Number Settings : 0-8	1	✓	✓	✓	✓
10002	2712	ushort	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256	✓	✓	✓	✓
10003	2713	ushort	1	-	Tariff Number Settings : 0-8	1	✓	✓	✓	✓
10004	2714	ushort	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256	✓	✓	✓	✓
10005	2715	ushort	1	-	Tariff Number Settings : 0-8	1	✓	✓	✓	✓
10006	2716	ushort	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256	✓	✓	✓	✓
10007	2717	ushort	1	-	Tariff Number Settings : 0-8	1	✓	✓	✓	✓
10008	2718	ushort	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256	✓	✓	✓	✓
10009	2719	ushort	1	-	Tariff Number Settings : 0-8	1	✓	✓	✓	✓

10010	271A	ushort	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256	✓	✓	✓	✓	✓
10011	271B	ushort	1	-	Tariff Number Settings : 0-8	1	✓	✓	✓	✓	✓
10012	271C	ushort	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256	✓	✓	✓	✓	✓
10013	271D	ushort	1	-	0-8	1	✓	✓	✓	✓	✓
10014	271E	ushort	1	Hour/Minutes	Start Hour and Start Minutes Settings: Hour * 256 + Minute	Hour Value: Register Value / 256 Minute Value: Register Value % 256	✓	✓	✓	✓	✓
10015	271F	ushort	1	-	Tariff Number Settings : 0-8	1	✓	✓	✓	✓	✓

ALARM STATUS

Supported Functions	Start Address	Register Counts
Read holding registers	20000	36

Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR14S	MPR15S-22	MPR16S-21	MPR17S-23	MPR18S-32
20000	4E20	ushort	1	-	Alarm Output Number : 0 - 3	1		✓	✓	✓
	4E21	ushort	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, 0x00B0: 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, 0x0136: P2 + P3 Demand, 0x0137: P1 + P2 + P3 Demand, 0x0138: P4 Demand	1		✓	✓	✓
20001	4E22	int	2	Depends on parameter.	Alarm 1 on lower threshold min value	Depends on parameter		✓	✓	✓
20002	4E24	ushort	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, 0x00B0: 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, 0x0136: P2 + P3 Demand, 0x0137: P1 + P2 + P3 Demand, 0x0138: P4 Demand	1		✓	✓	✓
20004	4E25	int	2	Depends on parameter	Alarm 1 on upper threshold max. value	Depends on parameter		✓	✓	✓
20005	4E27	uint	2	s	Alarm 1 Duration	1		✓	✓	✓
#SAY!!	.....	.....	.....	.....	.....	.....		✓	✓	✓
#SAY!!	.....	.....	.....	.....	.....	.....		✓	✓	✓
#SAY!!	.....	.....	.....	.....	.....	.....		✓	✓	✓
20027	4E3B	ushort	1	-	Alarm Output Number : 0 - 3	1		✓	✓	✓
	4E3C	ushort	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, 0x00B0: 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, 0x0136: P2 + P3 Demand, 0x0137: P1 + P2 + P3 Demand, 0x0138: P4 Demand	1		✓	✓	✓
20028	4E3D	int	2	Depends on parameter	Alarm 4 on lower threshold min value	Depends on parameter		✓	✓	✓
20029								✓	✓	✓

Same parameters continuous as Alarm 2 and Alarm3

20031	4E3F	ushort	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, 0x00B0: 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, 0x100: 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, 0x0136: P2 + P3 Demand, 0x0137: P1 + P2 + P3 Demand, 0x0138: P4 Demand	1													
20032	4E40	int	2	Depends on parameter.	Alarm 4 on upper threshold max. value	Depends on parameter													
20034	4E42	uint	2	s	Alarm 4 Duration	1													

EVENT LOG RECORD

Supported Functions	Start Address	Register Counts
Read holding registers	8016	19

Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR14S	MPR15S-22	MPR16S-21	MPR17S-23	MPR18S-32
8016	1F50	uint	2	Unix Time	Start Time	1				
8018	1F52	uint	2	Unix Time	End Time	1				
8020	1F54	uint	2	Second	Duration	1				
8022	1F56	ushort	1	?	Cycle	?				
8023	1F57	ushort	1	-	Type	1				
8024	1F58	ushort	1	-	Source	1				
8025	1F59	ushort	1	-	Param	1				
8026	1F5A	int	2	Depends on parameter	High	Depends on parameter				
8028	1F5C	int	2	Depends on parameter	Low	Depends on parameter				
8030	1F5E	int	2	Depends on parameter	High Value	Depends on parameter				
8032	1F60	int	2	Depends on parameter	Low Value	Depends on parameter				
8034	1F62	ushort	1	-	index	1				

Supported Functions	Start Address	Register Counts
Write holding registers	8000	2

Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR14S	MPR15S-22	MPR16S-21	MPR17S-23	MPR18S-32
8000	1F40	short	1	-	Record Index: -1: Next Record 1-500: Record Index	-				

RESET

Supported Functions	Start Address	Register Counts
Write holding registers	14000	1

Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR14S	MPR15S-22	MPR16S-21	MPR17S-23	MPR18S-32
14000	36B0	ushort	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 Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR14S	MPR15S-22	MPR16S-21	MPR17S-23	MPR18S-32
21000	5208	ushort	1	-	Profile Records Enable: 0: Disable 1: Enable	1				
21001	5209	ushort	1	-	Profile Synchronizing: 0: Disable 1: Enable	1				
21002	520A	ushort	1	Minutes	Profile Records Record Time: 0: 1 Minute 1: 5 Minutes 2: 10Minutes 3: 15 Minutes 4: 20Minutes 5: 30Minutes 6: 60Minutes	1				
21003	520B	ushort	1	-	Current Records Enable:	1				
21004	520C	ushort	1	-	Current Synchronizing: 0: Disable 1: Enable	1				
21005	520D	ushort	1	Minutes	Current Records Record Time: 0: 1 Minute 1: 5 Minutes 2: 10Minutes 3: 15 Minutes 4: 20Minutes 5: 30Minutes 6: 60Minutes	1				
21006	520E	ushort	1	-	Voltage Records Enable: 0: Disable 1: Enable	1				

21007	520F	ushort	1	-	Voltage Synchronizing: 0: Disable 1: Enable	1		✓	✓	✓	✓
21008	5210	ushort	1	Minutes	Voltage Records Record Time: 0: 1 Minute 1: 5 Minutes 2: 10Minutes 3: 15Minutes 4: 20Minutes 5: 30Minutes 6: 60Minutes	1		✓	✓	✓	✓
21009	5211	ushort	1	-	Power Records Enable: 0: Disable 1: Enable	1		✓	✓	✓	✓
21010	5212	ushort	1	-	Power Synchronizing: 0: Disable 1: Enable	1		✓	✓	✓	✓
21011	5213	ushort	1	Minutes	Power Records Record Time: 0: 1 Minute 1: 5 Minutes 2: 10Minutes 3: 15Minutes 4: 20Minutes 5: 30Minutes 6: 60Minutes	1		✓	✓	✓	✓
21012	5214	ushort	1	-	THD Records Enable: 0: Disable 1: Enable	1		✓	✓	✓	✓
21013	5215	ushort	1	-	THD Synchronizing: 0: Disable 1: Enable	1		✓	✓	✓	✓
21014	5216	ushort	1	Minutes	THD Records Record Time: 0: 1 Minute 1: 5 Minutes 2: 10Minutes 3: 15Minutes 4: 20Minutes 5: 30Minutes 6: 60Minutes	1		✓	✓	✓	✓

Records Time Stamp Register

Supported Functions	Start Address	Register Counts
Write multiple registers	21100	10

The index of record, which is closest to the date written in this register will be written in record index register at address 21200-21209.
If 0xFFFFFFFF is written, the last index record will be saved in record index register at address 21200-21209

Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR14S	MPR15S-22	MPR16S-21	MPR17S-23	MPR18S-32
21100	526C	uint	2	Unix Time	Profile Records Time Stamp	1	✓	✓	✓	✓
21102	526E	uint	2	Unix Time	Voltage Records Time Stamp	1	✓	✓	✓	✓
21104	5270	uint	2	Unix Time	Current Records Time Stamp	1	✓	✓	✓	✓
21106	5272	uint	2	Unix Time	Power Records Time Stamp	1	✓	✓	✓	✓
21108	5274	uint	2	Unix Time	THD Records Time Stamp	1	✓	✓	✓	✓

Records Index Register

Supported Functions	Start Address	Register Counts
Read holding registers	21200	10
Write multiple registers		

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

Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR14S	MPR15S-22	MPR16S-21	MPR17S-23	MPR18S-32
21200	52D0	uint	2	-	Profile Records Index Register	1	✓	✓	✓	✓
21202	52D2	uint	2	-	Voltage Records Index Register	1	✓	✓	✓	✓
21204	52D4	uint	2	-	Current Records Index Register	1	✓	✓	✓	✓
21206	52D6	uint	2	-	Power Records Index Register	1	✓	✓	✓	✓
21208	52D8	uint	2	-	THD Records Index Register	1	✓	✓	✓	✓

Profile Records

Supported Functions	Start Address	Register Counts
Read holding registers	23000	28

Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR14S	MPR15S-22	MPR16S-21	MPR17S-23	MPR18S-32
23000	59D8	uint	2	Unix Time	Record Start Time	1	✓	✓	✓	✓
23002	59DA	uint	2	Unix Time	Record End Time	1	✓	✓	✓	✓
23004	59DC	uint	2	W	Consumed Active Energy	1	✓	✓	✓	✓
23006	59DE	uint	2	VAR	Q1 Reactive Energy	1	✓	✓	✓	✓
23008	59E0	uint	2	VAR	Q4 Reactive Energy	1	✓	✓	✓	✓
23010	59E2	uint	2	VA	Consumed Apparent Energy	1	✓	✓	✓	✓
23012	59E4	uint	2	W	Delivered Active Energy	1	✓	✓	✓	✓
23014	59E6	uint	2	VAR	Q2 Reactive Energy	1	✓	✓	✓	✓
23016	59E8	uint	2	VAR	Q3 Reactive Energy	1	✓	✓	✓	✓
23018	59EA	uint	2	VA	Delivered Apparent Energy	1	✓	✓	✓	✓
23020	59EC	uint	2	W	Consumed Active Energy Tariff Generator	1	✓	✓	✓	✓
23022	59EE	ushort	1	-	Pulse Counter 1	1	✓	✓	✓	✓
23023	59EF	ushort	1	-	Pulse Counter 2	1	✓	✓	✓	✓
23024	59F0	ushort	1	-	Pulse Counter 3	1	✓	✓	✓	✓
23025	59F1	ushort	1	-	Pulse Counter 4	1	✓	✓	✓	✓
23026	59F2	uint	2	-	Record Index	1	✓	✓	✓	✓

Current Records

Supported Functions	Start Address	Register Counts
Read holding registers	24000	30

Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR14S	MPR15S-22	MPR16S-21	MPR17S-23	MPR18S-32
24000	5DC0	uint	2	Unix Time	Record End Time	1	✓	✓	✓	✓
24002	5DC2	uint	2	Unix Time	Record Start Time	1	✓	✓	✓	✓
24004	5DC4	uint	2	A	Average Current IL1	0.001	✓	✓	✓	✓
24006	5DC6	uint	2	A	Average Current IL2	0.001	✓	✓	✓	✓
24008	5DC8	uint	2	A	Average Current IL3	0.001	✓	✓	✓	✓
24010	5DCA	uint	2	A	Average Current ILN	0.001	✓	✓	✓	✓
24012	5DCC	uint	2	A	Max Current IL1	0.001	✓	✓	✓	✓
24014	5DCE	uint	2	A	Max Current IL2	0.001	✓	✓	✓	✓
24016	5DD0	uint	2	A	Max Current IL3	0.001	✓	✓	✓	✓
24018	5DD2	uint	2	A	Max Current ILN	0.001	✓	✓	✓	✓
24020	5DD4	uint	2	A	Min Current IL1	0.001	✓	✓	✓	✓
24022	5DD6	uint	2	A	Min Current IL2	0.001	✓	✓	✓	✓
24024	5DD8	uint	2	A	Min Current IL3	0.001	✓	✓	✓	✓
24026	5DDA	uint	2	A	Min Current ILN	0.001	✓	✓	✓	✓
24028	5DDC	uint	2	-	Record Index	1	✓	✓	✓	✓

Voltage Records		
Supported Functions	Start Address	Register Counts
Read holding registers	25000	54

Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR14S	MPR15S-22	MPR16S-21	MPR17S-23	MPR18S-32
25000	61A8	uint	2	-	Record End Time	1		✓	✓	✓
25002	61AA	uint	2	Unix Time	Record Start Time	1		✓	✓	✓
25004	61AC	uint	2	V	Voltage L1-N	0.1		✓	✓	✓
25006	61AE	uint	2	V	Voltage L2-N	0.1		✓	✓	✓
25008	61B0	uint	2	V	Voltage L3-N	0.1		✓	✓	✓
25010	61B2	uint	2	V	Voltage L4-N	0.1		✓	✓	✓
25012	61B4	uint	2	V	Voltage L1-L2	0.1		✓	✓	✓
25014	61B6	uint	2	V	Voltage L2-L3	0.1		✓	✓	✓
25016	61B8	uint	2	V	Voltage L3-L1	0.1		✓	✓	✓
25018	61BA	uint	2	Hz	Frequency	0.01		✓	✓	✓
25020	61BC	uint	2	V	Voltage L1-N	0.1		✓	✓	✓
25022	61BE	uint	2	V	Voltage L2-N	0.1		✓	✓	✓
25024	61C0	uint	2	V	Voltage L3-N	0.1		✓	✓	✓
25026	61C2	uint	2	V	Voltage L4-N	0.1		✓	✓	✓
25028	61C4	uint	2	V	Voltage L1-L2	0.1		✓	✓	✓
25030	61C6	uint	2	V	Voltage L2-L3	0.1		✓	✓	✓
25032	61C8	uint	2	V	Voltage L3-L1	0.1		✓	✓	✓
25034	61CA	uint	2	Hz	Frequency	0.01		✓	✓	✓
25036	61CC	uint	2	V	Voltage L1-N	0.1		✓	✓	✓
25038	61CE	uint	2	V	Voltage L2-N	0.1		✓	✓	✓
25040	61D0	uint	2	V	Voltage L3-N	0.1		✓	✓	✓
25042	61D2	uint	2	V	Voltage L4-N	0.1		✓	✓	✓
25044	61D4	uint	2	V	Voltage L1-L2	0.1		✓	✓	✓
25046	61D6	uint	2	V	Voltage L2-L3	0.1		✓	✓	✓
25048	61D8	uint	2	V	Voltage L3-L1	0.1		✓	✓	✓
25050	61DA	uint	2	Hz	Frequency	0.01		✓	✓	✓
25052	61DC	uint	2	-	Record Index	1		✓	✓	✓

Power Records		
Supported Functions	Start Address	Register Counts
Read holding registers	26000	64

Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR14S	MPR15S-22	MPR16S-21	MPR17S-23	MPR18S-32
26000	6590	uint	2	Unix Time	Record End Time	1		✓	✓	✓
26002	6592	uint	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	uint	2	-	Average total inductive import cosphi value	0.001		✓	✓	✓
26022	65A6	uint	2	-	Average total capacitive import cosphi value	0.001		✓	✓	✓
26024	65A8	uint	2	-	Average total inductive export cosphi value	0.001		✓	✓	✓
26026	65AA	uint	2	-	Average total capacitive export cosphi value	0.001		✓	✓	✓
26028	65AC	uint	2	-	Average total PF	0.001		✓	✓	✓
26030	65AE	float	2	W	Max. Total import active power	1		✓	✓	✓
26032	65B0	float	2	W	Max. Total export active power	1		✓	✓	✓
26034	65B2	float	2	VAR	Max. Total Q1 Reactive Power	1		✓	✓	✓
26036	65B4	float	2	VAR	Max. Total Q2 Reactive Power	1		✓	✓	✓
26038	65B6	float	2	VAR	Max. Total Q3 Reactive Power	1		✓	✓	✓
26040	65B8	float	2	VAR	Max. Total Q4 Reactive Power	1		✓	✓	✓
26042	65BA	float	2	VA	Max. Total Import Apparent Power	1		✓	✓	✓
26044	65BC	float	2	VA	Max. Total Export Apparent Power	1		✓	✓	✓
26046	65BE	float	2	W	Min. Total Import Active Power	1		✓	✓	✓
26048	65C0	float	2	W	Min. Total Export Active Power	1		✓	✓	✓
26050	65C2	float	2	VAR	Min. Total Q1 Reactive Power	1		✓	✓	✓
26052	65C4	float	2	VAR	Min. Total Q2 Reactive Power	1		✓	✓	✓
26054	65C6	float	2	VAR	Min. Total Q3 Reactive Power	1		✓	✓	✓
26056	65C8	float	2	VAR	Min. Total Q4 Reactive Power	1		✓	✓	✓
26058	65CA	float	2	VA	Min. Total Import Apparent Power	1		✓	✓	✓
26060	65CC	float	2	VA	Min. Total Export Apparent Power	1		✓	✓	✓
26062	65CE	uint	2	-	Record Index	1		✓	✓	✓

THD Records		
Supported Functions	Start Address	Register Counts
Read holding registers	27000	60

Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR14S	MPR15S-22	MPR16S-21	MPR17S-23	MPR18S-32
27000	6978	uint	2	-	Record Index	1		✓	✓	✓
27002	697A	uint	2	Unix Time	Record Time	1		✓	✓	✓
27004	697C	uint	2	%	Average Total Harmonic Distorsion VL1	0.1		✓	✓	✓
27006	697E	uint	2	%	Average Total Harmonic Distorsion VL2	0.1		✓	✓	✓
27008	6980	uint	2	%	Average Total Harmonic Distorsion VL3	0.1		✓	✓	✓
27010	6982	uint	2	%	Average Total Harmoic Distorsion VLL12	0.1		✓	✓	✓
27012	6984	uint	2	%	Average Total Harmoic Distorsion VLL23	0.1		✓	✓	✓
27014	6986	uint	2	%	Average Total Harmoic Distorsion VLL31	0.1		✓	✓	✓
27016	6988	uint	2	%	Average Total Harmonic Distorsion IL1	0.1		✓	✓	✓
27018	698A	uint	2	%	Average Total Harmonic Distorsion IL2	0.1		✓	✓	✓
27020	698C	uint	2	%	Average Total Harmonic Distorsion IL3	0.1		✓	✓	✓
27022	698E	uint	2	%	Max Total Harmonic Distorsion VL1	0.1		✓	✓	✓
27024	6990	uint	2	%	Max Total Harmonic Distorsion VL2	0.1		✓	✓	✓
27026	6992	uint	2	%	Max Total Harmonic Distorsion VL3	0.1		✓	✓	✓
27028	6994	uint	2	%	Max Total Harmoic Distorsion VLL12	0.1		✓	✓	✓
27030	6996	uint	2	%	Max Total Harmoic Distorsion VLL23	0.1		✓	✓	✓
27032	6998	uint	2	%	Max otal Harmoic Distorsion VLL31	0.1		✓	✓	✓
27034	699A	uint	2	%	Max Total Harmonic Distorsion IL1	0.1		✓	✓	✓
27036	699C	uint	2	%	Max Total Harmonic Distorsion IL2	0.1		✓	✓	✓
27038	699E	uint	2	%	Max Total Harmonic Distorsion IL3	0.1		✓	✓	✓
27040	69A0	uint	2	%	Min Total Harmonic Distorsion VL1	0.1		✓	✓	✓
27042	69A2	uint	2	%	Min Total Harmonic Distorsion VL2	0.1		✓	✓	✓
27044	69A4	uint	2	%	Min Total Harmonic Distorsion VL3	0.1		✓	✓	✓
27046	69A6	uint	2	%	Min Total Harmoic Distorsion VLL12	0.1		✓	✓	✓
27048	69A8	uint	2	%	Min Total Harmoic Distorsion VLL23	0.1		✓	✓	✓
27050	69AA	uint	2	%	Min Total Harmoic Distorsion VLL31	0.1		✓	✓	✓
27052	69AC	uint	2	%	Min Total Harmonic Distorsion IL1	0.1		✓	✓	✓
27054	69AE	uint	2	%	Min Total Harmonic Distorsion IL2	0.1		✓	✓	✓
27056	69B0	uint	2	%	Min Total Harmonic Distorsion IL3	0.1		✓	✓	✓
27058	69B2	uint	2	-	Record Index	1		✓	✓	✓

Device Identification		
Supported Functions	Start Address	Register Counts
Read holding registers	60416	16

Address Hex	Format	Word Counts	Unit	Remarks	Multiplier	MPR14S	MPR15S-22	MPR16S-21	MPR17S-23	MPR18S-32
60416	EC00	ushort	1	-	Device ID	1	✓	✓	✓	✓

60417	EC01	ushort	1	-	Device ID && Versiyon No	1	✓	✓	✓	✓	✓
60418	EC02	uint	2	-	Serial Number	1	✓	✓	✓	✓	✓
60420	EC04	uint	2	-	Software Version	1	✓	✓	✓	✓	✓
60422	EC06	uint	2	-	Hardware Version	1	✓	✓	✓	✓	✓
60424	EC08	uint	2	-	Modbus Table Version	1	✓	✓	✓	✓	✓
60426	EC0A	uint	2	-	Boot loader version	1	✓	✓	✓	✓	✓
60428	EC0C	uint	2	Unix Time	Fabrication Date	1	✓	✓	✓	✓	✓
60430	EC0E	uint	2	Unix Time	Calibration Date	1	✓	✓	✓	✓	✓

MODEL	Available Features
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

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