

EMMXX Register table

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

		START ADDRESS	FINISH ADDRESS	REGISTER COUNTS
1	MEASUREMENTS	0	0149	150
2	READ ONLY ENERGIES	200	0243	44
3	WRITEABLE ENERGIES	1500	1539	40
4	MIN. MAX. MAXDEMAND DEMAND	800	1335	536
5	THD	2000	2033	24
6	ALARM STATUS	20000	20025	26
7	ALARM DYNAMIC	20500	20531	32
8	LOAD PROFILE RECORD	23000	23061	62
9	15 MINUTE ENERGY RECORD	23200	23261	62
10	1 HOUR ENERGY RECORD	23400	23461	62
11	1 DAY ENERGY RECORD	23600	23661	62
12	VOLTAGE RECORD	25000	25059	60
13	CURRENT RECORD	24000	24035	36
14	POWER RECORD	26000	26119	120
15	THD RECORD	27000	27065	66
16	ANALOG TEMPERATURE RECORD	28000	28029	30
17	EVENT RECORDS	8016	8041	26
18	NETWORK SETTINGS	16384	16415	32
19	SETUP	17000	17373	374
20	CALENDAR SETUP	6000	6035	36
21	INPUT COIL CONTROLS	17950	17957	8
22	OUTPUT COIL CONTROLS	17968	17968	8
23	RELAYS COIL CONTROLS	17966	17973	8
24	LOG SETUP	21000	21023	24
25	LOG INDEX SETUP	21200	21221	22
26	LOG TIME STAMP SETUP	21400	21421	22
27	DEVICE IDENTIFICATION	60416	60455	40
28	RESET REGISTER	19968	19968	1
29	ENTES.NET	65000	65007	8
30	ENTES.ID	65032	65047	16

Measurements

Supported Functions	Start Address	Register Counts
Read holding registers	0	150

Address (Dec)	Address (Hex)	Format	Words count	Birim	Description	Multiplier	R/W	Range	EMR-53CS	EMR-53S	EMR-07S	EMR-04S
0000	0000	float	2	V	Voltage L1-N	1	R		✓	✓	✓	
0002	0002	float	2	V	Voltage L2-N	1	R		✓	✓	✓	
0004	0004	float	2	V	Voltage L3-N	1	R		✓	✓	✓	
0006	0006	float	2	-	N / A	1	R					
0008	0008	float	2	V	Voltage L1-L2	1	R		✓	✓	✓	
0010	000A	float	2	V	Voltage L2-L3	1	R		✓	✓	✓	
0012	000C	float	2	V	Voltage L3-L1	1	R		✓	✓	✓	
0014	000E	float	2	mA	Current L1	1	R		✓	✓	✓	
0016	0010	float	2	mA	Current L2	1	R		✓	✓	✓	
0018	0012	float	2	mA	Current L3	1	R		✓	✓	✓	
0020	0014	float	2	-	N / A	1	R					
0022	0016	float	2	mA	Neutral Current = I(L1)+I(L2)+I(L3)	1	R		✓	✓	✓	
0024	0018	float	2	Hz	Measured frequency	1	R		✓	✓	✓	
0026	001A	float	2	W	Active power L1-N	1	R		✓	✓	✓	✓
0028	001C	float	2	W	Active power L2-N	1	R		✓	✓	✓	✓
0030	001E	float	2	W	Active power L3-N	1	R		✓	✓	✓	✓
0032	0020	float	2	-	N / A	1	R					
0034	0022	float	2	W	Total import active power	1	R		✓	✓	✓	✓
0036	0024	float	2	W	Total export active power	1	R		✓	✓	✓	✓
0038	0026	float	2	W	Total Active power	1	R		✓	✓	✓	✓
0040	0028	float	2	VAR	Reactive power L1	1	R		✓	✓	✓	✓
0042	002A	float	2	VAR	Reactive power L2	1	R		✓	✓	✓	✓
0044	002C	float	2	VAR	Reactive power L3	1	R		✓	✓	✓	✓
0046	002E	float	2	-	N / A	1	R					
0048	0030	float	2	VAR	Quadrant 1 total reactive power	1	R		✓	✓	✓	✓
0050	0032	float	2	VAR	Quadrant 2 total reactive power	1	R		✓	✓	✓	✓
0052	0034	float	2	VAR	Quadrant 3 total reactive power	1	R		✓	✓	✓	✓
0054	0036	float	2	VAR	Quadrant 4 total reactive power	1	R		✓	✓	✓	✓
0056	0038	float	2	VAR	Total reactive power	1	R		✓	✓	✓	✓
0058	003A	float	2	VAR	Apparent power L1-N	1	R		✓	✓	✓	✓
0060	003C	float	2	VAR	Apparent power L2-N	1	R		✓	✓	✓	✓
0062	003E	float	2	VAR	Apparent power L3-N	1	R		✓	✓	✓	✓
0064	0040	float	2	-	N / A	1	R					
0066	0042	float	2	VA	Total import apparent power	1	R		✓	✓	✓	✓
0068	0044	float	2	VA	Total export apparent power	1	R		✓	✓	✓	✓
0070	0046	float	2	VA	Total Apperant Power	1	R		✓	✓	✓	✓
0072	0048	float	2	-	Power Factor L1	1	R		✓	✓	✓	✓
0074	004A	float	2	-	Power Factor L2	1	R		✓	✓	✓	✓
0076	004C	float	2	-	Power Factor L3	1	R		✓	✓	✓	✓
0078	004E	uint	2	-	N / A	1	R					
0080	0050	float	2	-	Power Factor Total Import	1	R		✓	✓	✓	✓
0082	0052	float	2	-	Power Factor Total Export	1	R		✓	✓	✓	✓
0084	0054	float	2	-	Power Factor Total	1	R		✓	✓	✓	✓
0086	0056	float	2	-	CosPhi L1	1	R		✓	✓	✓	✓
0088	0058	float	2	-	CosPhi L2	1	R		✓	✓	✓	✓
0090	005A	float	2	-	CosPhi L3	1	R		✓	✓	✓	✓
0092	005C	uint	2	-	N / A	1	R					
0094	005E	uint	2	-	N / A	1	R					
0096	0060	uint	2	-	N / A	1	R					
0098	0062	float	2	-	ΣCos Phi = COS L1 + COS L2 + COS L3	1	R		✓	✓	✓	✓
0100	0064	float	2	-	Rotation field, 1=right, 0=none, -1=left	1	R		✓	✓	✓	✓
0102	0066	float	2	%	Voltage Unbalance	1	R		✓	✓	✓	✓
0104	0068	uint	2	-	N / A	1	R					
0106	006A	float	2	Angle	L1 Phase Voltage Angle	1	R		✓	✓	✓	✓
0108	006C	float	2	Angle	L2 Phase Voltage Angle	1	R		✓	✓	✓	✓
0110	006E	float	2	Angle	L3 Phase Voltage Angle	1	R		✓	✓	✓	✓
0112	0070	uint	2	-	N / A	1	R					
0114	0072	float	2	Angle	L1 Phase Current Angle	1	R		✓	✓	✓	✓
0116	0074	float	2	Angle	L2 Phase Current Angle	1	R		✓	✓	✓	✓
0118	0076	float	2	Angle	L3 Phase Current Angle	1	R		✓	✓	✓	✓
0120	0078	uint	2	-	N / A	1	R					
0122	007A	uint	2	-	N / A	1	R					
0124	007C	uint	2	-	N / A	1	R					
0126	007E	uint	2	-	N / A	1	R					
0128	0080	float	2	°C	Internal Temp	1	R		✓	✓	✓	✓
0130	0082	uint	2	h/1000	Hour Meter (Non Resettable)	1	R		✓	✓	✓	✓
0132	0084	uint	2	h/1000	Workine Hour Counter	1	R		✓	✓	✓	✓
0134	0086	uint	2	-	Pulse Counter 1	1	R		✓	✓	✓	✓
0136	0088	uint	2	-	Pulse Counter 2	1	R		✓	✓	✓	✓
0138	008A	uint	2	-	Pulse Counter 3	1	R					
0140	008C	uint	2	-	Pulse Counter 4	1	R					
0142	008E	uint	2	-	Pulse Counter 5	1	R					
0144	0090	uint	2	-	Pulse Counter 6	1	R					
0146	0092	uint	2	-	Pulse Counter 7	1	R					
0148	0094	uint	2	-	Pulse Counter 8	1	R					

Read Only Energies

Supported Functions	Start Address	Register Counts
Read holding registers	200	44

Address (Dec)	Address (Hex)	Format	Words count	Birim	Description	Multiplier	R/W	Range	EMR-53CS	EMR-53S	EMR-07S	EMR-04S
0200	00C8	ulong	4	Wh	Import Active Energy	1	R		✓	✓	✓	✓
0204	00CC	ulong	4	Wh	Export Active Energy	1	R		✓	✓	✓	✓
0208	00D0	ulong	4	Varh	Import Inductive Reactive Energy	1	R		✓	✓	✓	✓
0212	00D4	ulong	4	Varh	Import Capacitive Reactive Energy	1	R		✓	✓	✓	✓
0216	00D8	ulong	4	Varh	Export Inductive Reactive Energy	1	R		✓	✓	✓	✓
0220	00DC	ulong	4	Varh	Export Capacitive Reactive Energy	1	R		✓	✓	✓	✓
0224	00E0	ulong	4	Vah	Import Apparent Energy	1	R		✓	✓	✓	✓
0228	00E4	ulong	4	Vah	Export Apparent Energy	1	R		✓	✓	✓	✓
0232	00E8	ulong	4	Wh	Generator Import Active Energy	1	R		✓	✓	✓	✓
0236	00EC	ulong	4	Wh	Generator Export Active Energy	1	R		✓	✓	✓	✓

0240	00F0	uint	2	-	N/A	-	R						
0242	00F2	uint	2	-	N/A	-	R						

Writeable Energies

Supported Functions	Start Address	Register Counts
Read holding registers	1500	40
Write Single registers		
Write Multiple registers		

Address (Dec)	Address (Hex)	Format	Words count	Birim	Description	Multiplier	R/W	Range	EMR-53CS	EMR-53S	EMR-07S	EMR-04S
1500	05DC	ulong	4	Wh	Import Active Energy	1	R/W		✓	✓	✓	✓
1504	05E0	ulong	4	Wh	Export Active Energy	1	R/W		✓	✓	✓	✓
1508	05E4	ulong	4	Varh	Import Inductive Reactive Energy	1	R/W		✓	✓	✓	✓
1512	05E8	ulong	4	Varh	Import Capacitive Reactive Energy	1	R/W		✓	✓	✓	✓
1516	05EC	ulong	4	Varh	Export Inductive Reactive Energy	1	R/W		✓	✓	✓	✓
1520	05F0	ulong	4	Varh	Export Capacitive Reactive Energy	1	R/W		✓	✓	✓	✓
1524	05F4	ulong	4	VAh	Import Apparent Energy	1	R/W		✓	✓	✓	✓
1528	05F8	ulong	4	VAh	Export Apparent Energy	1	R/W		✓	✓	✓	✓
1532	05FC	ulong	4	Wh	Generator Import Active Energy	1	R/W		✓	✓	✓	✓
1536	0600	ulong	4	Wh	Generator Export Active Energy	1	R/W		✓	✓	✓	✓

Min-Max, Max Demand, Demand Measurement

Supported Functions	Start Address	Register Counts
Read holding registers	800	536

Address (Dec)	Address (Hex)	Format	Words count	Birim	Description	Multiplier	R/W	Range	EMR-53CS	EMR-53S	EMR-07S	EMR-04S
0800	0320	float	2	V	L1 Phase Max Voltage	1	R		✓	✓	✓	✓
0802	0322	uint	2	Time	L1 Phase Max Voltage Time	Unix Time Stamp	R		✓	✓	✓	✓
0804	0324	float	2	V	L2 Phase Max Voltage	1	R		✓	✓	✓	✓
0806	0326	uint	2	Time	L2 Phase Max Voltage Time	Unix Time Stamp	R		✓	✓	✓	✓
0808	0328	float	2	V	L3 Phase Max Voltage	1	R		✓	✓	✓	✓
0810	032A	uint	2	Time	L3 Phase Max Voltage Time	Unix Time Stamp	R		✓	✓	✓	✓
0812	032C	uint	2	-	N/A	1	R					
0814	032E	uint	2	-	N/A	Unix Time Stamp	R					
0816	0330	float	2	V	L1-L2 Max Voltage	1	R		✓	✓	✓	✓
0818	0332	uint	2	Time	L1-L2 Max Voltage Time	Unix Time Stamp	R		✓	✓	✓	✓
0820	0334	float	2	V	L2-L3 Max Voltage	1	R		✓	✓	✓	✓
0822	0336	uint	2	Time	L2-L3 Max Voltage Time	Unix Time Stamp	R		✓	✓	✓	✓
0824	0338	float	2	V	L3-L1 Max Voltage	1	R		✓	✓	✓	✓
0826	033A	uint	2	Time	L3-L1 Max Voltage Time	Unix Time Stamp	R		✓	✓	✓	✓
0828	033C	float	2	A	L1 Phase Max Current	1	R		✓	✓	✓	✓
0830	033E	uint	2	Time	L1 Phase Max Current Time	Unix Time Stamp	R		✓	✓	✓	✓
0832	0340	float	2	A	L2 Phase Max Current	1	R		✓	✓	✓	✓
0834	0342	uint	2	Time	L2 Phase Max Current Time	Unix Time Stamp	R		✓	✓	✓	✓
0836	0344	float	2	A	L3 Phase Max Current	1	R		✓	✓	✓	✓
0838	0346	uint	2	Time	L3 Phase Max Current Time	Unix Time Stamp	R		✓	✓	✓	✓
0840	0348	uint	2	-	N/A	1	R					
0842	034A	uint	2	-	N/A	Unix Time Stamp	R					
0844	034C	float	2	A	L4 Phase Max Current	1	R		✓	✓	✓	✓
0846	034E	uint	2	Time	L4 Phase Max Current Time	Unix Time Stamp	R		✓	✓	✓	✓
0848	0350	float	2	Hz	Max System Frequency	1	R		✓	✓	✓	✓
0850	0352	uint	2	Time	Max System Frequency Time	Unix Time Stamp	R		✓	✓	✓	✓
0852	0354	float	2	%	Max Unbalance	1	R		✓	✓	✓	✓
0854	0356	uint	2	Time	Max Unbalance Time	Unix Time Stamp	R		✓	✓	✓	✓
0856	0358	float	2	W	L1 Phase Max Active Power	1	R		✓	✓	✓	✓
0858	035A	uint	2	Time	L1 Phase Max Active Power Time	Unix Time Stamp	R		✓	✓	✓	✓
0860	035C	float	2	W	L2 Phase Max Active Power	1	R		✓	✓	✓	✓
0862	035E	uint	2	Time	L2 Phase Max Active Power Time	Unix Time Stamp	R		✓	✓	✓	✓
0864	0360	float	2	W	L3 Phase Max Active Power	1	R		✓	✓	✓	✓
0866	0362	uint	2	Time	L3 Phase Max Active Power Time	Unix Time Stamp	R		✓	✓	✓	✓
0868	0364	uint	2	-	N/A	1	R					
0870	0366	uint	2	-	N/A	Unix Time Stamp	R					
0872	0368	float	2	W	Max Total Import Active Power	1	R		✓	✓	✓	✓
0874	036A	uint	2	Time	Max Total Import Active Power Time	Unix Time Stamp	R		✓	✓	✓	✓
0876	036C	float	2	W	Max Total Export Active Power	1	R		✓	✓	✓	✓
0878	036E	uint	2	Time	Max Total Export Active Power Time	Unix Time Stamp	R		✓	✓	✓	✓
0880	0370	float	2	W	Max Total Active Power	1	R		✓	✓	✓	✓
0882	0372	uint	2	Time	Max Total Active Power Time	Unix Time Stamp	R		✓	✓	✓	✓
0884	0374	float	2	VAR	L1 Phase Max Reactive Power	1	R		✓	✓	✓	✓
0886	0376	uint	2	Time	L1 Phase Max Reactive Power Time	Unix Time Stamp	R		✓	✓	✓	✓
0888	0378	float	2	VAR	L2 Phase Max Reactive Power	1	R		✓	✓	✓	✓
0890	037A	uint	2	Time	L2 Phase Max Reactive Power Time	Unix Time Stamp	R		✓	✓	✓	✓
0892	037C	float	2	VAR	L3 Phase Max Reactive Power	1	R		✓	✓	✓	✓
0894	037E	uint	2	Time	L3 Phase Max Reactive Power Time	Unix Time Stamp	R		✓	✓	✓	✓
0896	0380	uint	2	-	N/A	1	R					
0898	0382	uint	2	-	N/A	Unix Time Stamp	R					
0900	0384	float	2	VAR	Quadrant 1 Max Reactive Power	1	R		✓	✓	✓	✓
0902	0386	uint	2	Time	Quadrant 1 Max Reactive Power Time	Unix Time Stamp	R		✓	✓	✓	✓
0904	0388	float	2	VAR	Quadrant 2 Max Reactive Power	1	R		✓	✓	✓	✓
0906	038A	uint	2	Time	Quadrant 2 Max Reactive Power Time	Unix Time Stamp	R		✓	✓	✓	✓
0908	038C	float	2	VAR	Quadrant 3 Max Reactive Power	1	R		✓	✓	✓	✓
0910	038E	uint	2	Time	Quadrant 3 Max Reactive Power Time	Unix Time Stamp	R		✓	✓	✓	✓
0912	0390	float	2	VAR	Quadrant 4 Max Reactive Power	1	R		✓	✓	✓	✓
0914	0392	uint	2	Time	Quadrant 4 Max Reactive Power Time	Unix Time Stamp	R		✓	✓	✓	✓
0916	0394	float	2	VAR	Quadrant Total Max Reactive Power	1	R		✓	✓	✓	✓
0918	0396	uint	2	Time	Quadrant Total Max Reactive Power Time	Unix Time Stamp	R		✓	✓	✓	✓
0920	0398	float	2	VA	L1 Phase Max Apperant Power	1	R		✓	✓	✓	✓
0922	039A	uint	2	Time	L1 Phase Max Apperant Power Time	Unix Time Stamp	R		✓	✓	✓	✓
0924	039C	float	2	VA	L2 Phase Max Apperant Power	1	R		✓	✓	✓	✓
0926	039E	uint	2	Time	L2 Phase Max Apperant Power Time	Unix Time Stamp	R		✓	✓	✓	✓
0928	03A0	float	2	VA	L3 Phase Max Apperant Power	1	R		✓	✓	✓	✓
0930	03A2	uint	2	Time	L3 Phase Max Apperant Power Time	Unix Time Stamp	R		✓	✓	✓	✓
0932	03A4	uint	2	-	N/A	1	R					
0934	03A6	uint	2	-	N/A	Unix Time Stamp	R					
0936	03A8	float	2	VA	Max Total Import Apperant Power	1	R		✓	✓	✓	✓
0938	03AA	uint	2	Time	Max Total Import Apperant Power Time	Unix Time Stamp	R		✓	✓	✓	✓
0940	03AC	float	2	VA	Max Total Export Apperant Power	1	R		✓	✓	✓	✓
0942	03AE	uint	2	Time	Max Total Export Apperant Power Time	Unix Time Stamp	R		✓	✓	✓	✓
0944	03B0	float	2	VA	Max Total Apperant Power	1	R		✓	✓	✓	✓
0946	03B2	uint	2	Time	Max Total Apperant Power Time	Unix Time Stamp	R		✓	✓	✓	✓
0948	03B4	uint	2	-	N/A	1	R					
0950	03B6	uint	2	-	N/A	Unix Time Stamp	R					
0952	03B8	uint	2	-	N/A	1	R					
0954	03BA	uint	2	-	N/A	Unix Time Stamp	R					
0956	03BC	uint	2	-	N/A	1	R					
0958	03BE	uint	2	-	N/A	Unix Time Stamp	R					
0960	03C0	uint	2	-	N/A	1	R					
0962	03C2	uint	2	-	N/A	Unix Time Stamp	R					
0964	03C4	uint	2	-	N/A	1	R					
0966	03C6	uint	2	-	N/A	Unix Time Stamp	R					
0968	03C8	uint	2	-	N/A	1	R					
0970	03CA	uint	2	-	N/A	Unix Time Stamp	R					
0972	03CC	uint	2	-	N/A	1	R					
0974	03CE	uint	2	-	N/A	Unix Time Stamp	R					
0976	03D0	uint	2	-	N/A	1	R					
0978	03D2	uint	2	-	N/A	Unix Time Stamp	R					
0980	03D4	uint	2	-	N/A	1	R					
0982	03D6	uint	2	-	N/A	Unix Time Stamp	R					
0984	03D8	uint	2	-	N/A	1	R					
0986	03DA	uint	2	-	N/A	Unix Time Stamp	R					
0988	03DC	uint	2	-	N/A	1	R					
0990	03DE	uint	2	-	N/A	Unix Time Stamp	R					
0992	03E0	float	2	V	L1 Phase Min Voltage	1	R		✓	✓	✓	✓
0994	03E2	uint	2	Time	L1 Phase Min Voltage Time	Unix Time Stamp	R		✓	✓	✓	✓
0996	03E4	float	2	V	L2 Phase Min Voltage	1	R		✓	✓	✓	✓
0998	03E6	uint	2	Time	L2 Phase Min Voltage Time	Unix Time Stamp	R		✓	✓	✓	✓
1000	03E8	float	2	V	L3 Phase Min Voltage	1	R		✓	✓	✓	✓
1002	03EA	uint	2	Time	L3 Phase Min Voltage Time	Unix Time Stamp	R		✓	✓	✓	✓
1004	03EC	uint	2	-	N/A	1	R					
1006	03EE	uint	2	-	N/A	Unix Time Stamp	R					
1008	03F0	float	2	V	L1-L2 Min Voltage	1	R		✓	✓	✓	✓
1010	03F2	uint	2	Time	L1-L2 Min Voltage Time	Unix Time Stamp	R		✓	✓	✓	✓
1012	03F4	float	2	V	L2-L3 Min Voltage	1	R		✓	✓	✓	✓

1310	051E	float	2	A	IN Phase Sum Current Demand	1	R		✓	✓	✓	✓
1312	0520	float	2	W	PL1 Sum Active Power Demand	1	R		✓	✓	✓	✓
1314	0522	float	2	W	PL2 Sum Active Power Demand	1	R		✓	✓	✓	✓
1316	0524	float	2	W	PL3 Sum Active Power Demand	1	R		✓	✓	✓	✓
1318	0526	float	2	W	Total Active Sum. Power Demand	1	R		✓	✓	✓	✓
1320	0528	float	2	W	Total Active Import Sum. Power Demand	1	R		✓	✓	✓	✓
1322	052A	float	2	W	Total Active Export Sum. Power Demand	1	R		✓	✓	✓	✓
1324	052C	float	2	VA	SL1 Sum Active Power Demand	1	R		✓	✓	✓	✓
1326	052E	float	2	VA	SL2 Sum Active Power Demand	1	R		✓	✓	✓	✓
1328	0530	float	2	VA	SL3 Sum Active Power Demand	1	R		✓	✓	✓	✓
1330	0532	float	2	VA	Total Apparent Sum. Power Demand	1	R		✓	✓	✓	✓
1332	0534	float	2	VA	Total Apparent Import Sum. Power Demand	1	R		✓	✓	✓	✓
1334	0536	float	2	VA	Total Apparent Export Sum. Power Demand	1	R		✓	✓	✓	✓

THD

Supported Functions	Start Address	Register Counts
Read holding registers	2000	24

Address (Dec)	Address (Hex)	Format	Words count	Birim	Description	Multiplier	R/W	Range	EMR-53CS	EMR-53S	EMR-07S	EMR-04S
2000	07D0	float	2	%	Total Harmonic Distorsion VLL12	100	R		✓	✓		
2002	07D2	float	2	%	Total Harmonic Distorsion VLL23	100	R		✓	✓		
2004	07D4	float	2	%	Total Harmonic Distorsion VLL31	100	R		✓	✓		
2006	07D6	float	2	%	Total Harmonic Distorsion VL2	100	R		✓	✓		
2008	07D8	float	2	%	Total Harmonic Distorsion VL3	100	R		✓	✓		
2010	07DA	float	2	%	Total Harmonic Distorsion VL3	100	R		✓	✓		
2012	07DC	uint	2	-	N / A	100	R					
2014	07DE	float	2	%	Total Harmonic Distorsion IL1	100	R		✓	✓		
2016	07E0	float	2	%	Total Harmonic Distorsion IL2	100	R		✓	✓		
2018	07E2	float	2	%	Total Harmonic Distorsion IL3	100	R		✓	✓		
2020	07E4	uint	2	-	N / A	100	R					
2022	07E6	float	2	%	Total Harmonic Distorsion IN	100	R		✓	✓		

THD I Harmonic Order

Supported Functions	Start Address	Register Counts
Read holding registers	3000	322

Address (Dec)	Address (Hex)	Format	Words count	Birim	Description	Multiplier	R/W	Range	EMR-53CS	EMR-53S	EMR-07S	EMR-04S
3000	0B88	uint	1	-	Zero Data	1	R		✓	✓		
3001	0B89	uint	1	-	Number of Harmonics	1	R		31	31	0	0
3002	0B8A	float	2	A	AMPLITUDE H_IL1_0	1	R		✓	✓		
3004	0B8C	float	2	A	AMPLITUDE H_IL2_0	1	R		✓	✓		
3006	0B8E	float	2	A	AMPLITUDE H_IL3_0	1	R		✓	✓		
3008	0B8D	float	2	A	N / A	1	R					
3010	0B8C	float	2	A	AMPLITUDE H_ILN_0	1	R		✓	✓		
3012	0B8C	float	2	A	AMPLITUDE H_IL1_1	1	R		✓	✓		
3014	0B8C	float	2	A	AMPLITUDE H_IL2_1	1	R		✓	✓		
3016	0B8C	float	2	A	AMPLITUDE H_IL3_1	1	R		✓	✓		
3018	0B8A	float	2	A	N / A	1	R					
3020	0B8C	float	2	A	AMPLITUDE H_ILN_1	1	R		✓	✓		
3022	0B8C	float	2	A	AMPLITUDE H_IL1_2	1	R		✓	✓		
3024	0B8D	float	2	A	AMPLITUDE H_IL2_2	1	R		✓	✓		
3026	0B8D	float	2	A	AMPLITUDE H_IL3_2	1	R		✓	✓		
3028	0B8A	float	2	A	N / A	1	R					
3030	0B8D	float	2	A	AMPLITUDE H_ILN_2	1	R		✓	✓		
3032	0B8B	float	2	A	AMPLITUDE H_IL1_3	1	R		✓	✓		
3034	0B8A	float	2	A	AMPLITUDE H_IL2_3	1	R		✓	✓		
3036	0B8C	float	2	A	AMPLITUDE H_IL3_3	1	R		✓	✓		
3038	0B8E	float	2	A	N / A	1	R					
3040	0B8E	float	2	A	AMPLITUDE H_ILN_3	1	R		✓	✓		
3042	0B8E	float	2	A	AMPLITUDE H_IL1_4	1	R		✓	✓		
3044	0B8E	float	2	A	AMPLITUDE H_IL2_4	1	R		✓	✓		
3046	0B8E	float	2	A	AMPLITUDE H_IL3_4	1	R		✓	✓		
3048	0B8E	float	2	A	N / A	1	R					
3050	0B8A	float	2	A	AMPLITUDE H_ILN_4	1	R		✓	✓		
3052	0B8C	float	2	A	AMPLITUDE H_IL1_5	1	R		✓	✓		
3054	0B8E	float	2	A	AMPLITUDE H_IL2_5	1	R		✓	✓		
3056	0B8F	float	2	A	AMPLITUDE H_IL3_5	1	R		✓	✓		
3058	0B8F	float	2	A	N / A	1	R					
3060	0B8F	float	2	A	AMPLITUDE H_ILN_5	1	R		✓	✓		
3062	0B8F	float	2	A	AMPLITUDE H_IL1_6	1	R		✓	✓		
3064	0B8F	float	2	A	AMPLITUDE H_IL2_6	1	R		✓	✓		
3066	0B8A	float	2	A	AMPLITUDE H_IL3_6	1	R		✓	✓		
3068	0B8C	float	2	A	N / A	1	R					
3070	0B8E	float	2	A	AMPLITUDE H_ILN_6	1	R		✓	✓		
3072	0C00	float	2	A	AMPLITUDE H_IL1_7	1	R		✓	✓		
3074	0C02	float	2	A	AMPLITUDE H_IL2_7	1	R		✓	✓		
3076	0C04	float	2	A	AMPLITUDE H_IL3_7	1	R		✓	✓		
3078	0C06	float	2	A	N / A	1	R					
3080	0C08	float	2	A	AMPLITUDE H_ILN_7	1	R		✓	✓		
3082	0C0A	float	2	A	AMPLITUDE H_IL1_8	1	R		✓	✓		
3084	0C0C	float	2	A	AMPLITUDE H_IL2_8	1	R		✓	✓		
3086	0C0E	float	2	A	AMPLITUDE H_IL3_8	1	R		✓	✓		
3088	0C10	float	2	A	N / A	1	R					
3090	0C12	float	2	A	AMPLITUDE H_ILN_8	1	R		✓	✓		
3092	0C14	float	2	A	AMPLITUDE H_IL1_9	1	R		✓	✓		
3094	0C16	float	2	A	AMPLITUDE H_IL2_9	1	R		✓	✓		
3096	0C18	float	2	A	AMPLITUDE H_IL3_9	1	R		✓	✓		
3098	0C1A	float	2	A	N / A	1	R					
3100	0C1C	float	2	A	AMPLITUDE H_ILN_9	1	R		✓	✓		
3102	0C1E	float	2	A	AMPLITUDE H_IL1_10	1	R		✓	✓		
3104	0C20	float	2	A	AMPLITUDE H_IL2_10	1	R		✓	✓		
3106	0C22	float	2	A	AMPLITUDE H_IL3_10	1	R		✓	✓		
3108	0C24	float	2	A	N / A	1	R					
3110	0C26	float	2	A	AMPLITUDE H_ILN_10	1	R		✓	✓		
3112	0C28	float	2	A	AMPLITUDE H_IL1_11	1	R		✓	✓		
3114	0C2A	float	2	A	AMPLITUDE H_IL2_11	1	R		✓	✓		
3116	0C2C	float	2	A	AMPLITUDE H_IL3_11	1	R		✓	✓		
3118	0C2E	float	2	A	N / A	1	R					
3120	0C30	float	2	A	AMPLITUDE H_ILN_11	1	R		✓	✓		
3122	0C32	float	2	A	AMPLITUDE H_IL1_12	1	R		✓	✓		
3124	0C34	float	2	A	AMPLITUDE H_IL2_12	1	R		✓	✓		
3126	0C36	float	2	A	AMPLITUDE H_IL3_12	1	R		✓	✓		
3128	0C38	float	2	A	N / A	1	R					
3130	0C3A	float	2	A	AMPLITUDE H_ILN_12	1	R		✓	✓		
3132	0C3C	float	2	A	AMPLITUDE H_IL1_13	1	R		✓	✓		
3134	0C3E	float	2	A	AMPLITUDE H_IL2_13	1	R		✓	✓		
3136	0C40	float	2	A	AMPLITUDE H_IL3_13	1	R		✓	✓		
3138	0C42	float	2	A	N / A	1	R					
3140	0C44	float	2	A	AMPLITUDE H_ILN_13	1	R		✓	✓		
3142	0C46	float	2	A	AMPLITUDE H_IL1_14	1	R		✓	✓		
3144	0C48	float	2	A	AMPLITUDE H_IL2_14	1	R		✓	✓		
3146	0C4A	float	2	A	AMPLITUDE H_IL3_14	1	R		✓	✓		
3148	0C4C	float	2	A	N / A	1	R					
3150	0C4E	float	2	A	AMPLITUDE H_ILN_14	1	R		✓	✓		
3152	0C50	float	2	A	AMPLITUDE H_IL1_15	1	R		✓	✓		
3154	0C52	float	2	A	AMPLITUDE H_IL2_15	1	R		✓	✓		
3156	0C54	float	2	A	AMPLITUDE H_IL3_15	1	R		✓	✓		
3158	0C56	float	2	A	N / A	1	R					
3160	0C58	float	2	A	AMPLITUDE H_ILN_15	1	R		✓	✓		
3162	0C5A	float	2	A	AMPLITUDE H_IL1_16	1	R		✓	✓		
3164	0C5C	float	2	A	AMPLITUDE H_IL2_16	1	R		✓	✓		
3166	0C5E	float	2	A	AMPLITUDE H_IL3_16	1	R		✓	✓		
3168	0C60	float	2	A	N / A	1	R					
3170	0C52	float	2	A	AMPLITUDE H_ILN_16	1	R		✓	✓		
3172	0C64	float	2	A	AMPLITUDE H_IL1_17	1	R		✓	✓		
3174	0C66	float	2	A	AMPLITUDE H_IL2_17	1	R		✓	✓		
3176	0C68	float	2	A	AMPLITUDE H_IL3_17	1	R		✓	✓		
3178	0C6A	float	2	A	N / A	1	R					
3180	0C6C	float	2	A	AMPLITUDE H_ILN_17	1	R		✓	✓		

3182	OC6E	float	2	A	AMPLITUDE H_IL1_18	1	R		✓	✓		
3184	OC70	float	2	A	AMPLITUDE H_IL2_18	1	R		✓	✓		
3186	OC72	float	2	A	AMPLITUDE H_IL3_18	1	R		✓	✓		
3188	OC74	float	2	A	N/A	1	R		✓	✓		
3190	OC76	float	2	A	AMPLITUDE H_ILN_18	1	R		✓	✓		
3192	OC78	float	2	A	AMPLITUDE H_IL1_19	1	R		✓	✓		
3194	OC7A	float	2	A	AMPLITUDE H_IL2_19	1	R		✓	✓		
3196	OC7C	float	2	A	AMPLITUDE H_IL3_19	1	R		✓	✓		
3198	OC7E	float	2	A	N/A	1	R		✓	✓		
3200	OC80	float	2	A	AMPLITUDE H_ILN_19	1	R		✓	✓		
3202	OC82	float	2	A	AMPLITUDE H_IL1_20	1	R		✓	✓		
3204	OC84	float	2	A	AMPLITUDE H_IL2_20	1	R		✓	✓		
3206	OC86	float	2	A	AMPLITUDE H_IL3_20	1	R		✓	✓		
3208	OC88	float	2	A	N/A	1	R		✓	✓		
3210	OC8A	float	2	A	AMPLITUDE H_ILN_20	1	R		✓	✓		
3212	OC8C	float	2	A	AMPLITUDE H_IL1_21	1	R		✓	✓		
3214	OC8E	float	2	A	AMPLITUDE H_IL2_21	1	R		✓	✓		
3216	OC90	float	2	A	AMPLITUDE H_IL3_21	1	R		✓	✓		
3218	OC92	float	2	A	N/A	1	R		✓	✓		
3220	OC94	float	2	A	AMPLITUDE H_ILN_21	1	R		✓	✓		
3222	OC96	float	2	A	AMPLITUDE H_IL1_22	1	R		✓	✓		
3224	OC98	float	2	A	AMPLITUDE H_IL2_22	1	R		✓	✓		
3226	OC9A	float	2	A	AMPLITUDE H_IL3_22	1	R		✓	✓		
3228	OC9C	float	2	A	N/A	1	R		✓	✓		
3230	OC9E	float	2	A	AMPLITUDE H_ILN_22	1	R		✓	✓		
3232	OCAD	float	2	A	AMPLITUDE H_IL1_23	1	R		✓	✓		
3234	OCA2	float	2	A	AMPLITUDE H_IL2_23	1	R		✓	✓		
3236	OCA4	float	2	A	AMPLITUDE H_IL3_23	1	R		✓	✓		
3238	OCA6	float	2	A	N/A	1	R		✓	✓		
3240	OCA8	float	2	A	AMPLITUDE H_ILN_23	1	R		✓	✓		
3242	OCAA	float	2	A	AMPLITUDE H_IL1_24	1	R		✓	✓		
3244	OCA2	float	2	A	AMPLITUDE H_IL2_24	1	R		✓	✓		
3246	OCAE	float	2	A	AMPLITUDE H_IL3_24	1	R		✓	✓		
3248	OCB0	float	2	A	N/A	1	R		✓	✓		
3250	OCB2	float	2	A	AMPLITUDE H_ILN_24	1	R		✓	✓		
3252	OCB4	float	2	A	AMPLITUDE H_IL1_25	1	R		✓	✓		
3254	OCB6	float	2	A	AMPLITUDE H_IL2_25	1	R		✓	✓		
3256	OCB8	float	2	A	AMPLITUDE H_IL3_25	1	R		✓	✓		
3258	OCBA	float	2	A	N/A	1	R		✓	✓		
3260	OCBC	float	2	A	AMPLITUDE H_ILN_25	1	R		✓	✓		
3262	OCBE	float	2	A	AMPLITUDE H_IL1_26	1	R		✓	✓		
3264	OCCE	float	2	A	AMPLITUDE H_IL2_26	1	R		✓	✓		
3266	OC2	float	2	A	AMPLITUDE H_IL3_26	1	R		✓	✓		
3268	OC4	float	2	A	N/A	1	R		✓	✓		
3270	OC5	float	2	A	AMPLITUDE H_ILN_26	1	R		✓	✓		
3272	OC6	float	2	A	AMPLITUDE H_IL1_27	1	R		✓	✓		
3274	OC7	float	2	A	AMPLITUDE H_IL2_27	1	R		✓	✓		
3276	OC8	float	2	A	AMPLITUDE H_IL3_27	1	R		✓	✓		
3278	OC9	float	2	A	N/A	1	R		✓	✓		
3280	OC0	float	2	A	AMPLITUDE H_ILN_27	1	R		✓	✓		
3282	OC2	float	2	A	AMPLITUDE H_IL1_28	1	R		✓	✓		
3284	OC4	float	2	A	AMPLITUDE H_IL2_28	1	R		✓	✓		
3286	OC6	float	2	A	AMPLITUDE H_IL3_28	1	R		✓	✓		
3288	OC8	float	2	A	N/A	1	R		✓	✓		
3290	OC9	float	2	A	AMPLITUDE H_ILN_28	1	R		✓	✓		
3292	OC0	float	2	A	AMPLITUDE H_IL1_29	1	R		✓	✓		
3294	OC2	float	2	A	AMPLITUDE H_IL2_29	1	R		✓	✓		
3296	OC4	float	2	A	AMPLITUDE H_IL3_29	1	R		✓	✓		
3298	OC6	float	2	A	N/A	1	R		✓	✓		
3300	OC7	float	2	A	AMPLITUDE H_ILN_29	1	R		✓	✓		
3302	OC8	float	2	A	AMPLITUDE H_IL1_30	1	R		✓	✓		
3304	OC9	float	2	A	AMPLITUDE H_IL2_30	1	R		✓	✓		
3306	OC0	float	2	A	AMPLITUDE H_IL3_30	1	R		✓	✓		
3308	OC2	float	2	A	N/A	1	R		✓	✓		
3310	OC3	float	2	A	AMPLITUDE H_ILN_30	1	R		✓	✓		
3312	OC4	float	2	A	AMPLITUDE H_IL1_31	1	R		✓	✓		
3314	OC5	float	2	A	AMPLITUDE H_IL2_31	1	R		✓	✓		
3316	OC6	float	2	A	AMPLITUDE H_IL3_31	1	R		✓	✓		
3318	OC7	float	2	A	N/A	1	R		✓	✓		
3320	OC8	float	2	A	AMPLITUDE H_ILN_31	1	R		✓	✓		

THD VLN Harmonic Order

Supported Functions	Start Address	Register Counts
Read holding registers	4000	258

Address (Dec)	Address (Hex)	Format	Words count	Bitm	Description	Multiplier	R/W	Range	EMR-53CS	EMR-53S	EMR-075	EMR-045
4000	0FA0	uint	1	-	Zero Data	1	R		✓	✓		
4001	0FA1	uint	1	-	Number of Harmonics	1	R		31	31		0
4002	0FA2	float	2	V	AMPLITUDE H_VL1_0	1	R		✓	✓		
4004	0FA4	float	2	V	AMPLITUDE H_VL2_0	1	R		✓	✓		
4006	0FA6	float	2	V	AMPLITUDE H_VL3_0	1	R		✓	✓		
4008	0FA8	float	2	V	N/A	1	R		✓	✓		
4010	0FAA	float	2	V	AMPLITUDE H_VL1_1	1	R		✓	✓		
4012	0FAC	float	2	V	AMPLITUDE H_VL2_1	1	R		✓	✓		
4014	0FAE	float	2	V	AMPLITUDE H_VL3_1	1	R		✓	✓		
4016	0FB0	float	2	V	N/A	1	R		✓	✓		
4018	0FB2	float	2	V	AMPLITUDE H_VL1_2	1	R		✓	✓		
4020	0FB4	float	2	V	AMPLITUDE H_VL2_2	1	R		✓	✓		
4022	0FB6	float	2	V	AMPLITUDE H_VL3_2	1	R		✓	✓		
4024	0FB8	float	2	V	N/A	1	R		✓	✓		
4026	0FBA	float	2	V	AMPLITUDE H_VL1_3	1	R		✓	✓		
4028	0FBC	float	2	V	AMPLITUDE H_VL2_3	1	R		✓	✓		
4030	0FBE	float	2	V	AMPLITUDE H_VL3_3	1	R		✓	✓		
4032	0FC0	float	2	V	N/A	1	R		✓	✓		
4034	0FC2	float	2	V	AMPLITUDE H_VL1_4	1	R		✓	✓		
4036	0FC4	float	2	V	AMPLITUDE H_VL2_4	1	R		✓	✓		
4038	0FC6	float	2	V	AMPLITUDE H_VL3_4	1	R		✓	✓		
4040	0FC8	float	2	V	N/A	1	R		✓	✓		
4042	0FCA	float	2	V	AMPLITUDE H_VL1_5	1	R		✓	✓		
4044	0FCC	float	2	V	AMPLITUDE H_VL2_5	1	R		✓	✓		
4046	0FCE	float	2	V	AMPLITUDE H_VL3_5	1	R		✓	✓		
4048	0FDD	float	2	V	N/A	1	R		✓	✓		
4050	0FDE	float	2	V	AMPLITUDE H_VL1_6	1	R		✓	✓		
4052	0FDA	float	2	V	AMPLITUDE H_VL2_6	1	R		✓	✓		
4054	0FDE	float	2	V	AMPLITUDE H_VL3_6	1	R		✓	✓		
4056	0FDB	float	2	V	N/A	1	R		✓	✓		
4058	0FDA	float	2	V	AMPLITUDE H_VL1_7	1	R		✓	✓		
4060	0FDC	float	2	V	AMPLITUDE H_VL2_7	1	R		✓	✓		
4062	0FDE	float	2	V	AMPLITUDE H_VL3_7	1	R		✓	✓		
4064	0FED	float	2	V	N/A	1	R		✓	✓		
4066	0FE2	float	2	V	AMPLITUDE H_VL1_8	1	R		✓	✓		
4068	0FE4	float	2	V	AMPLITUDE H_VL2_8	1	R		✓	✓		
4070	0FE6	float	2	V	AMPLITUDE H_VL3_8	1	R		✓	✓		
4072	0FE8	float	2	V	N/A	1	R		✓	✓		
4074	0FEA	float	2	V	AMPLITUDE H_VL1_9	1	R		✓	✓		
4076	0FEC	float	2	V	AMPLITUDE H_VL2_9	1	R		✓	✓		
4078	0FEE	float	2	V	AMPLITUDE H_VL3_9	1	R		✓	✓		
4080	0FEF	float	2	V	N/A	1	R		✓	✓		
4082	0FF2	float	2	V	AMPLITUDE H_VL1_10	1	R		✓	✓		
4084	0FF4	float	2	V	AMPLITUDE H_VL2_10	1	R		✓	✓		
4086	0FF6	float	2	V	AMPLITUDE H_VL3_10	1	R		✓	✓		
4088	0FF8	float	2	V	N/A	1	R		✓	✓		
4090	0FFA	float	2	V	AMPLITUDE H_VL1_11	1	R		✓	✓		
4092	0FFC	float	2	V	AMPLITUDE H_VL2_11	1	R		✓	✓		
4094	0FFE	float	2	V	AMPLITUDE H_VL3_11	1	R		✓	✓		
4096	1000	float	2	V	N/A	1	R		✓	✓		
4098	1002	float	2	V	AMPLITUDE H_VL1_12	1	R		✓	✓		
4100	1004	float	2	V	AMPLITUDE H_VL2_12	1	R		✓	✓		
4102	1006	float	2	V	AMPLITUDE H_VL3_12	1	R		✓	✓		
4104	1008	float	2	V	N/A	1	R		✓	✓		
4106	100A	float	2	V	AMPLITUDE H_VL1_13	1	R		✓	✓		
4108	100C	float	2	V	AMPLITUDE H_VL2_13	1	R		✓	✓		
4110	100E	float	2	V	AMPLITUDE H_VL3_13	1	R		✓	✓		
4112	1010	float	2	V	N/A	1	R		✓	✓		
4114	1012	float	2	V	AMPLITUDE H_VL1_14	1	R		✓	✓		
4116	1014	float	2	V	AMPLITUDE H_VL2_14	1	R		✓	✓		

4118	1016	float	2	V	AMPLITUDE H_VL3_14	1	R			✓	✓		
4120	1018	float	2	V	N/A	1	R						
4122	101A	float	2	V	AMPLITUDE H_VL1_15	1	R			✓	✓		
4124	101C	float	2	V	AMPLITUDE H_VL2_15	1	R			✓	✓		
4126	101E	float	2	V	AMPLITUDE H_VL3_15	1	R			✓	✓		
4128	1020	float	2	V	N/A	1	R						
4130	1022	float	2	V	AMPLITUDE H_VL1_16	1	R			✓	✓		
4132	1024	float	2	V	AMPLITUDE H_VL2_16	1	R			✓	✓		
4134	1026	float	2	V	AMPLITUDE H_VL3_16	1	R			✓	✓		
4136	1028	float	2	V	N/A	1	R						
4138	102A	float	2	V	AMPLITUDE H_VL1_17	1	R			✓	✓		
4140	102C	float	2	V	AMPLITUDE H_VL2_17	1	R			✓	✓		
4142	102E	float	2	V	AMPLITUDE H_VL3_17	1	R			✓	✓		
4144	1030	float	2	V	N/A	1	R						
4146	1032	float	2	V	AMPLITUDE H_VL1_18	1	R			✓	✓		
4148	1034	float	2	V	AMPLITUDE H_VL2_18	1	R			✓	✓		
4150	1036	float	2	V	AMPLITUDE H_VL3_18	1	R			✓	✓		
4152	1038	float	2	V	N/A	1	R						
4154	103A	float	2	V	AMPLITUDE H_VL1_19	1	R			✓	✓		
4156	103C	float	2	V	AMPLITUDE H_VL2_19	1	R			✓	✓		
4158	103E	float	2	V	AMPLITUDE H_VL3_19	1	R			✓	✓		
4160	1040	float	2	V	N/A	1	R						
4162	1042	float	2	V	AMPLITUDE H_VL1_20	1	R			✓	✓		
4164	1044	float	2	V	AMPLITUDE H_VL2_20	1	R			✓	✓		
4166	1046	float	2	V	AMPLITUDE H_VL3_20	1	R			✓	✓		
4168	1048	float	2	V	N/A	1	R						
4170	104A	float	2	V	AMPLITUDE H_VL1_21	1	R			✓	✓		
4172	104C	float	2	V	AMPLITUDE H_VL2_21	1	R			✓	✓		
4174	104E	float	2	V	AMPLITUDE H_VL3_21	1	R			✓	✓		
4176	1050	float	2	V	N/A	1	R						
4178	1052	float	2	V	AMPLITUDE H_VL1_22	1	R			✓	✓		
4180	1054	float	2	V	AMPLITUDE H_VL2_22	1	R			✓	✓		
4182	1056	float	2	V	AMPLITUDE H_VL3_22	1	R			✓	✓		
4184	1058	float	2	V	N/A	1	R						
4186	105A	float	2	V	AMPLITUDE H_VL1_23	1	R			✓	✓		
4188	105C	float	2	V	AMPLITUDE H_VL2_23	1	R			✓	✓		
4190	105E	float	2	V	AMPLITUDE H_VL3_23	1	R			✓	✓		
4192	1060	float	2	V	N/A	1	R						
4194	1062	float	2	V	AMPLITUDE H_VL1_24	1	R			✓	✓		
4196	1064	float	2	V	AMPLITUDE H_VL2_24	1	R			✓	✓		
4198	1066	float	2	V	AMPLITUDE H_VL3_24	1	R			✓	✓		
4200	1068	float	2	V	N/A	1	R						
4202	106A	float	2	V	AMPLITUDE H_VL1_25	1	R			✓	✓		
4204	106C	float	2	V	AMPLITUDE H_VL2_25	1	R			✓	✓		
4206	106E	float	2	V	AMPLITUDE H_VL3_25	1	R			✓	✓		
4208	1070	float	2	V	N/A	1	R						
4210	1072	float	2	V	AMPLITUDE H_VL1_26	1	R			✓	✓		
4212	1074	float	2	V	AMPLITUDE H_VL2_26	1	R			✓	✓		
4214	1076	float	2	V	AMPLITUDE H_VL3_26	1	R			✓	✓		
4216	1078	float	2	V	N/A	1	R						
4218	107A	float	2	V	AMPLITUDE H_VL1_27	1	R			✓	✓		
4220	107C	float	2	V	AMPLITUDE H_VL2_27	1	R			✓	✓		
4222	107E	float	2	V	AMPLITUDE H_VL3_27	1	R			✓	✓		
4224	1080	float	2	V	N/A	1	R						
4226	1082	float	2	V	AMPLITUDE H_VL1_28	1	R			✓	✓		
4228	1084	float	2	V	AMPLITUDE H_VL2_28	1	R			✓	✓		
4230	1086	float	2	V	AMPLITUDE H_VL3_28	1	R			✓	✓		
4232	1088	float	2	V	N/A	1	R						
4234	108A	float	2	V	AMPLITUDE H_VL1_29	1	R			✓	✓		
4236	108C	float	2	V	AMPLITUDE H_VL2_29	1	R			✓	✓		
4238	108E	float	2	V	AMPLITUDE H_VL3_29	1	R			✓	✓		
4240	1090	float	2	V	N/A	1	R						
4242	1092	float	2	V	AMPLITUDE H_VL1_30	1	R			✓	✓		
4244	1094	float	2	V	AMPLITUDE H_VL2_30	1	R			✓	✓		
4246	1096	float	2	V	AMPLITUDE H_VL3_30	1	R			✓	✓		
4248	1098	float	2	V	N/A	1	R						
4250	109A	float	2	V	AMPLITUDE H_VL1_31	1	R			✓	✓		
4252	109C	float	2	V	AMPLITUDE H_VL2_31	1	R			✓	✓		
4254	109E	float	2	V	AMPLITUDE H_VL3_31	1	R			✓	✓		
4256	10A0	float	2	V	N/A	1	R						

THD VLL Harmonic Order

Supported Functions	Start Address	Register Counts
Read holding registers	5000	194

Address (Dec)	Address (Hex)	Format	Words count	Birim	Description	Multiplier	R/W	Range	EMR-53CS	EMR-53S	EMR-075	EMR-045	
5000	1388	uint	1	-	Zero Data	1	R		✓	✓			
5001	1389	uint	1	-	Number of Harmonics	1	R		✓	31	31	0	0
5002	138A	float	2	V	AMPLITUDE H_VL11_0	1	R		✓	✓			
5004	138C	float	2	V	AMPLITUDE H_VL12_0	1	R		✓	✓			
5006	138E	float	2	V	AMPLITUDE H_VL13_0	1	R		✓	✓			
5008	1390	float	2	V	AMPLITUDE H_VL11_1	1	R		✓	✓			
5010	1392	float	2	V	AMPLITUDE H_VL12_1	1	R		✓	✓			
5012	1394	float	2	V	AMPLITUDE H_VL13_1	1	R		✓	✓			
5014	1396	float	2	V	AMPLITUDE H_VL11_2	1	R		✓	✓			
5016	1398	float	2	V	AMPLITUDE H_VL12_2	1	R		✓	✓			
5018	139A	float	2	V	AMPLITUDE H_VL13_2	1	R		✓	✓			
5020	139C	float	2	V	AMPLITUDE H_VL11_3	1	R		✓	✓			
5022	139E	float	2	V	AMPLITUDE H_VL12_3	1	R		✓	✓			
5024	13A0	float	2	V	AMPLITUDE H_VL13_3	1	R		✓	✓			
5026	13A2	float	2	V	AMPLITUDE H_VL11_4	1	R		✓	✓			
5028	13A4	float	2	V	AMPLITUDE H_VL12_4	1	R		✓	✓			
5030	13A6	float	2	V	AMPLITUDE H_VL13_4	1	R		✓	✓			
5032	13A8	float	2	V	AMPLITUDE H_VL11_5	1	R		✓	✓			
5034	13AA	float	2	V	AMPLITUDE H_VL12_5	1	R		✓	✓			
5036	13AC	float	2	V	AMPLITUDE H_VL13_5	1	R		✓	✓			
5038	13AE	float	2	V	AMPLITUDE H_VL11_6	1	R		✓	✓			
5040	13B0	float	2	V	AMPLITUDE H_VL12_6	1	R		✓	✓			
5042	13B2	float	2	V	AMPLITUDE H_VL13_6	1	R		✓	✓			
5044	13B4	float	2	V	AMPLITUDE H_VL11_7	1	R		✓	✓			
5046	13B6	float	2	V	AMPLITUDE H_VL12_7	1	R		✓	✓			
5048	13B8	float	2	V	AMPLITUDE H_VL13_7	1	R		✓	✓			
5050	13BA	float	2	V	AMPLITUDE H_VL11_8	1	R		✓	✓			
5052	13BC	float	2	V	AMPLITUDE H_VL12_8	1	R		✓	✓			
5054	13BE	float	2	V	AMPLITUDE H_VL13_8	1	R		✓	✓			
5056	13C0	float	2	V	AMPLITUDE H_VL11_9	1	R		✓	✓			
5058	13C2	float	2	V	AMPLITUDE H_VL12_9	1	R		✓	✓			
5060	13C4	float	2	V	AMPLITUDE H_VL13_9	1	R		✓	✓			
5062	13C6	float	2	V	AMPLITUDE H_VL11_10	1	R		✓	✓			
5064	13C8	float	2	V	AMPLITUDE H_VL12_10	1	R		✓	✓			
5066	13CA	float	2	V	AMPLITUDE H_VL13_10	1	R		✓	✓			
5068	13CC	float	2	V	AMPLITUDE H_VL11_11	1	R		✓	✓			
5070	13CE	float	2	V	AMPLITUDE H_VL12_11	1	R		✓	✓			
5072	13D0	float	2	V	AMPLITUDE H_VL13_11	1	R		✓	✓			
5074	13D2	float	2	V	AMPLITUDE H_VL11_12	1	R		✓	✓			
5076	13D4	float	2	V	AMPLITUDE H_VL12_12	1	R		✓	✓			
5078	13D6	float	2	V	AMPLITUDE H_VL13_12	1	R		✓	✓			
5080	13D8	float	2	V	AMPLITUDE H_VL11_13	1	R		✓	✓			
5082	13DA	float	2	V	AMPLITUDE H_VL12_13	1	R		✓	✓			
5084	13DC	float	2	V	AMPLITUDE H_VL13_13	1	R		✓	✓			
5086	13DE	float	2	V	AMPLITUDE H_VL11_14	1	R		✓	✓			
5088	13E0	float	2	V	AMPLITUDE H_VL12_14	1	R		✓	✓			
5090	13E2	float	2	V	AMPLITUDE H_VL13_14	1	R		✓	✓			
5092	13E4	float	2	V	AMPLITUDE H_VL11_15	1	R		✓	✓			
5094	13E6	float	2	V	AMPLITUDE H_VL12_15	1	R		✓	✓			
5096	13E8	float	2	V	AMPLITUDE H_VL13_15	1	R		✓	✓			
5098	13EA	float	2	V	AMPLITUDE H_VL11_16	1	R		✓	✓			
5100	13EC	float	2	V	AMPLITUDE H_VL12_16	1	R		✓	✓			
5102	13EE	float	2	V	AMPLITUDE H_VL13_16	1	R		✓	✓			
5104	13F0	float	2	V	AMPLITUDE H_VL11_17	1	R		✓	✓			
5106	13F2	float	2	V	AMPLITUDE H_VL12_17	1	R		✓	✓			
5108	13F4	float	2	V	AMPLITUDE H_VL13_17	1	R		✓	✓			
5110	13F6	float	2	V	AMPLITUDE H_VL11_18	1	R		✓	✓			
5112	13F8	float	2	V	AMPLITUDE H_VL12_18	1	R		✓	✓			
5114	13FA	float	2	V	AMPLITUDE H_VL13_18	1	R		✓	✓			

5116	13FC	float	2	V	AMPLITUDE H_VLL1_19	1	R		✓	✓		
5118	13FE	float	2	V	AMPLITUDE H_VLL2_19	1	R		✓	✓		
5120	1400	float	2	V	AMPLITUDE H_VLL3_19	1	R		✓	✓		
5122	1402	float	2	V	AMPLITUDE H_VLL1_20	1	R		✓	✓		
5124	1404	float	2	V	AMPLITUDE H_VLL2_20	1	R		✓	✓		
5126	1406	float	2	V	AMPLITUDE H_VLL3_20	1	R		✓	✓		
5128	1408	float	2	V	AMPLITUDE H_VLL1_21	1	R		✓	✓		
5130	140A	float	2	V	AMPLITUDE H_VLL2_21	1	R		✓	✓		
5132	140C	float	2	V	AMPLITUDE H_VLL3_21	1	R		✓	✓		
5134	140E	float	2	V	AMPLITUDE H_VLL1_22	1	R		✓	✓		
5136	1410	float	2	V	AMPLITUDE H_VLL2_22	1	R		✓	✓		
5138	1412	float	2	V	AMPLITUDE H_VLL3_22	1	R		✓	✓		
5140	1414	float	2	V	AMPLITUDE H_VLL1_23	1	R		✓	✓		
5142	1416	float	2	V	AMPLITUDE H_VLL2_23	1	R		✓	✓		
5144	1418	float	2	V	AMPLITUDE H_VLL3_23	1	R		✓	✓		
5146	141A	float	2	V	AMPLITUDE H_VLL1_24	1	R		✓	✓		
5148	141C	float	2	V	AMPLITUDE H_VLL2_24	1	R		✓	✓		
5150	141E	float	2	V	AMPLITUDE H_VLL3_24	1	R		✓	✓		
5152	1420	float	2	V	AMPLITUDE H_VLL1_25	1	R		✓	✓		
5154	1422	float	2	V	AMPLITUDE H_VLL2_25	1	R		✓	✓		
5156	1424	float	2	V	AMPLITUDE H_VLL3_25	1	R		✓	✓		
5158	1426	float	2	V	AMPLITUDE H_VLL1_26	1	R		✓	✓		
5160	1428	float	2	V	AMPLITUDE H_VLL2_26	1	R		✓	✓		
5162	142A	float	2	V	AMPLITUDE H_VLL3_26	1	R		✓	✓		
5164	142C	float	2	V	AMPLITUDE H_VLL1_27	1	R		✓	✓		
5166	142E	float	2	V	AMPLITUDE H_VLL2_27	1	R		✓	✓		
5168	1430	float	2	V	AMPLITUDE H_VLL3_27	1	R		✓	✓		
5170	1432	float	2	V	AMPLITUDE H_VLL1_28	1	R		✓	✓		
5172	1434	float	2	V	AMPLITUDE H_VLL2_28	1	R		✓	✓		
5174	1436	float	2	V	AMPLITUDE H_VLL3_28	1	R		✓	✓		
5176	1438	float	2	V	AMPLITUDE H_VLL1_29	1	R		✓	✓		
5178	143A	float	2	V	AMPLITUDE H_VLL2_29	1	R		✓	✓		
5180	143C	float	2	V	AMPLITUDE H_VLL3_29	1	R		✓	✓		
5182	143E	float	2	V	AMPLITUDE H_VLL1_30	1	R		✓	✓		
5184	1440	float	2	V	AMPLITUDE H_VLL2_30	1	R		✓	✓		
5186	1442	float	2	V	AMPLITUDE H_VLL3_30	1	R		✓	✓		
5188	1444	float	2	V	AMPLITUDE H_VLL1_31	1	R		✓	✓		
5190	1446	float	2	V	AMPLITUDE H_VLL2_31	1	R		✓	✓		
5192	1448	float	2	V	AMPLITUDE H_VLL3_31	1	R		✓	✓		

ALARM STATUS

Supported Functions	Start Address	Register Counts
Read holding registers	20000	26

Address (Dec)	Address (Hex)	Format	Words count	Birm	Description	Multiplier	R/W	Range	EMR-53CS	EMR-53S	EMR-07S	EMR-04S
20000	4E20	uint	2	-	N/A	1	R		✓	✓	✓	✓
					Bit 0 : L1 Phase Loss Bit 1 : L2 Phase Loss Bit 2 : L3 Phase Loss Bit 3 : Null Bit 4 : Null Bit 5 : Inverse Phase Sequence Bit 6 : Null Bit 7 : Null Bit 8 : Null Bit 9 : Null Bit 10 : Null Bit 11 : Null Bit 12 : Null Bit 13 : Null Bit 14 : Null Bit 15 : Null Bit 16 : Null Bit 17 : Null Bit 18 : Null Bit 19 : Null Bit 20 : Null Bit 21 : Null Bit 22 : Null Bit 23 : Null Bit 24 : Custom Alarm 1 Bit 25 : Custom Alarm 2 Bit 26 : Custom Alarm 3							
YANLIŞ	4E22	uint	2	-	Custom Alarm Status: Bit 0 : User Alarm 1 High Trip Bit 1 : User Alarm 2 High Trip Bit 2 : User Alarm 3 High Trip Bit 3 : User Alarm 4 High Trip Bit 4 : User Alarm 5 High Trip Bit 5 : User Alarm 6 High Trip Bit 6 : User Alarm 7 High Trip Bit 7 : User Alarm 8 High Trip Bit 8 : User Alarm 1 Low Trip Bit 9 : User Alarm 2 Low Trip Bit 10 : User Alarm 3 Low Trip Bit 11 : User Alarm 4 Low Trip Bit 12 : User Alarm 5 Low Trip Bit 13 : User Alarm 6 Low Trip Bit 14 : User Alarm 7 Low Trip Bit 15 : User Alarm 8 Low Trip Bit 16 : User Alarm 1 High Peak Bit 17 : User Alarm 2 High Peak Bit 18 : User Alarm 3 High Peak Bit 19 : User Alarm 4 High Peak Bit 20 : User Alarm 5 High Peak Bit 21 : User Alarm 6 High Peak Bit 22 : User Alarm 7 High Peak Bit 23 : User Alarm 8 High Peak Bit 24 : User Alarm 1 Low Peak Bit 25 : User Alarm 2 Low Peak Bit 26 : User Alarm 3 Low Peak Bit 27 : User Alarm 4 Low Peak Bit 28 : User Alarm 5 Low Peak Bit 29 : User Alarm 6 Low Peak Bit 30 : User Alarm 7 Low Peak		R		✓	✓	✓	✓
0002	4E24	uint	2	-	N/A							
0004	4E26	uint	2	-	N/A		R					
0006	4E28	uint	2	-	N/A		R					
0008	4E2A	uint	2	-	N/A		R					
0010	4E2C	uint	2	-	N/A		R					
0012	4E2E	uint	2	-	N/A		R					
0014	4E30	uint	2	-	N/A		R					
0016	4E32	uint	2	-	N/A		R					
0018	4E34	uint	2	-	N/A		R					
0020	4E36	uint	2	-	N/A		R					
0022	4E38	uint	2	-	N/A		R					

ALARMS

Supported Functions	Start Address	Register Counts
Read holding registers	20500	32

Address (Dec)	Address (Hex)	Format	Words count	Birm	Description	Multiplier	R/W	Range	EMR-53CS	EMR-53S	EMR-07S	EMR-04S
20500	5014	uint	2	-	Null Alarm Source	1	R		✓	✓	✓	✓
20502	5016	ushort	1	-	Null Alarm Type	1	R		✓	✓	✓	✓
20503	5017	ushort	1	-	Modbus Alarm Dynamic Status	1	R		✓	✓	✓	✓
20504	5018	uint	2	-	L1 Voltage Loss Alarm Source	1	R		✓	✓	✓	✓
20506	501A	ushort	1	-	L1 Voltage Loss Alarm Type	1	R		✓	✓	✓	✓
20507	501B	ushort	1	-	Modbus Alarm Dynamic Status	1	R		✓	✓	✓	✓
20508	501C	uint	2	-	L2 Voltage Loss Alarm Source	1	R		✓	✓	✓	✓
20510	501E	ushort	1	-	L2 Voltage Loss Alarm Type	1	R		✓	✓	✓	✓
20511	501F	ushort	1	-	Modbus Alarm Dynamic Status	1	R		✓	✓	✓	✓
20512	5020	uint	2	-	L3 Voltage Loss Alarm Source	1	R		✓	✓	✓	✓
20514	5022	ushort	1	-	L3 Voltage Loss Alarm Type	1	R		✓	✓	✓	✓
20515	5023	ushort	1	-	Modbus Alarm Dynamic Status	1	R		✓	✓	✓	✓
20516	5024	uint	2	-	LN Voltage Loss Alarm Source	1	R		✓	✓	✓	✓
20518	5026	ushort	1	-	LN Voltage Loss Alarm Type	1	R		✓	✓	✓	✓

20519	5027	ushort	1		Modbus Alarm Dynamic Status	1	R		✓	✓	✓	✓
20520	5028	uint	2		Wrong Phase Angle Alarm Source	1	R		✓	✓	✓	✓
20522	502A	ushort	1		Wrong Phase Angle Alarm Type	1	R		✓	✓	✓	✓
20523	502B	uint	2		Modbus Alarm Dynamic Status	1	R		✓	✓	✓	✓
20524	502C	uint	2		Wrong Phase Sequence Alarm Source	1	R		✓	✓	✓	✓
20526	502E	ushort	1		Wrong Phase Sequence Alarm Type	1	R		✓	✓	✓	✓
20527	502F	ushort	1		Modbus Alarm Dynamic Status	1	R		✓	✓	✓	✓
20528	5030	uint	2		L1 Current Connection Loss Source	1	R		✓	✓	✓	✓
20530	5032	ushort	1		L1 Current Connection Loss Alarm Type	1	R		✓	✓	✓	✓
20531	5033	ushort	1		Modbus Alarm Dynamic Status	1	R		✓	✓	✓	✓

NETWORK SETTINGS

Supported Functions		Start Address	Register Counts										
Read holding registers		16384	32										
Address (Dec)	Address (Hex)	Format	Words count	Birim	Description	Multiplier	R/W	Range	EMR-53CS	EMR-53S	EMR-07S	EMR-04S	
16384	4000	uint	2		Network Type: 0: 3PAW 1: 3P3W 2: 3PAW Balanced 3: 3P3W Balanced 4: ARON	1	R		✓	✓	✓	✓	
16386	4002	uint	2		Current Transformer Secondary: 0: 1A 1: 5A	1	R		✓	✓	✓	✓	
16388	4004	float	2		Current Transformer Primary: 5 - 9999	1	R		✓	✓	✓	✓	
16390	4006	uint	2		Voltage Transformer Present: 0: None 1: Present	1	R		✓	✓	✓	✓	
16392	4008	float	2		Voltage Transformer Secondary: 50 - 300	1	R		✓	✓	✓	✓	
16394	400A	float	2		Voltage Transformer Primary: 100-999900	1	R		✓	✓	✓	✓	
16396	400C	uint	2		Demand Time: 0: 60 seconds 1: 120 seconds 2: 300 seconds 3: 600 seconds 4: 1200 seconds 5: 1800 seconds 6: 3600 seconds	1	R		✓	✓	✓	✓	
16398	400E	uint	2		N/A	1	R						
16400	4010	uint	2		N/A	1	R						
16402	4012	uint	2		System Frequency: 0: 50 Hz 1: 60 Hz	1	R		✓	✓	✓	✓	
16404	4014	uint	2		N/A	1	R						
16406	4016	uint	2		N/A	1	R						
16408	4018	uint	2		N/A	1	R						
16410	401A	uint	2		N/A	1	R						
16412	401C	uint	2		N/A	1	R						
16414	401E	uint	2		N/A	1	R						

Setup

Supported Functions		Start Address	Register Counts										
Read holding registers		17000	374										
Address (Dec)	Address (Hex)	Format	Words count	Birim	Description	Multiplier	R/W	Range	EMR-53CS	EMR-53S	EMR-07S	EMR-07S	
17000	4268	uint	2	-	Network Type 0: 3PAW 1: 3P3W 2: 3PAW Balanced 3: 3P3W Balanced 4: ARON	1	R/W	0-4	✓	✓	✓	✓	
17002	426A	uint	2	A	Current Transformer Secondary 0: 1A 1: 5A	1	R/W	0-1	✓	✓	✓	✓	
17004	426C	float	2	-	Current Transformer Primary 5.0 - 9999.0	1	R/W	5.0 - 9999.0	✓	✓	✓	✓	
17006	426E	uint	2	-	Voltage Transformer Present 0: None 1: Present	1	R/W	0-1	✓	✓	✓	✓	
17008	4270	float	2	V	Voltage Transformer Secondary 50.0 - 300.0	1	R/W	50.0 - 300.0	✓	✓	✓	✓	
17010	4272	float	2	V	Voltage Transformer Primary 100 - 999900.0	1	R/W	100.0 - 999900.0	✓	✓	✓	✓	
17012	4274	uint	2	Seconds	Demand Time 0: 60 seconds 1: 120 seconds 2: 300 seconds 3: 600 seconds 4: 1200 seconds 5: 1800 seconds 6: 3600 seconds	1	R/W	0-6	✓	✓	✓	✓	
17014	4276	uint	2	-	N/A	1	R/W	-					
17016	4278	uint	2	-	N/A	1	R/W	-					
17018	427A	uint	2	V	System Nominal Frequency Value 0: 50 Hz 1: 60 Hz	1	R/W	0-1	✓	✓	✓	✓	
17020	427C	uint	2	-	N/A	1	R/W	-					
17022	427E	uint	2	-	N/A	1	R/W	-					
17024	4280	uint	2	-	N/A	1	R/W	-					
17026	4282	uint	2	-	N/A	1	R/W	-					
17028	4284	uint	2	-	N/A	1	R/W	-					
17030	4286	uint	2	-	N/A	1	R/W	-					
17032	4288	uint	2	-	Digital Output 1 Type 0: Digital Output 1: Pulse 2: RS-485	1	R/W	0-2	✓	✓	✓	✓	
17034	428A	uint	2	-	Digital Output 2 Type 0: Digital Output 1: Pulse 2: RS-485	1	R/W	0-2	✓	✓	✓	✓	
17036	428C	uint	2	-	N/A	1	R/W	-					
17038	428E	uint	2	-	N/A	1	R/W	-					
17040	4290	uint	2	-	N/A	1	R/W	-					
17042	4292	uint	2	-	N/A	1	R/W	-					
17044	4294	uint	2	-	N/A	1	R/W	-					
17046	4296	uint	2	-	N/A	1	R/W	-					
17048	4298	uint	2	-	Relay 1 Type 0: Relay 2: RS-485	1	R/W	0/2	✓				
17050	429A	uint	2	-	Relay 2 Type 0: Relay 2: RS-485	1	R/W	0/2	✓				
17052	429C	uint	2	-	N/A	1	R/W	-					
17054	429E	uint	2	-	N/A	1	R/W	-					
17056	42A0	float	2	-	N/A	1	R/W	-					
17058	42A2	float	2	-	N/A	1	R/W	-					
17060	42A4	float	2	-	N/A	1	R/W	-					
17062	42A6	uint	2	-	N/A	1	R/W	-					
17064	42A8	uint	2	-	Digital Input 1 Type 0: Digital Input 1: Pulse 2: Jenerator	1	R/W	0-2	✓	✓	✓	✓	
17066	42AA	uint	2	-	Digital Input 2 Type 0: Digital Input 1: Pulse 2: Jenerator	1	R/W	0-2	✓	✓	✓	✓	
17068	42AC	uint	2	-	N/A	1	R/W	-					
17070	42AE	uint	2	-	N/A	1	R/W	-					
17072	42B0	float	2	-	N/A	1	R/W	-					
17074	42B2	float	2	-	N/A	1	R/W	-					
17076	42B4	float	2	-	N/A	1	R/W	-					

17078	4286	uint	2	-	N/A	1	R/W	-							
17080	4288	uint	2	-	N/A	1	R/W	-							
17082	428A	uint	2	-	N/A	1	R/W	-							
17084	428C	uint	2	-	N/A	1	R/W	-							
17086	428E	uint	2	-	N/A	1	R/W	-							
17088	42C0	uint	2	-	N/A	1	R/W	-							
17090	42C2	float	2	-	Pulse Input 1 Ratio 1.0 - 9999.0	1	R/W	1.0 - 9999.0	✓	✓	✓	✓	✓		
17092	42C4	uint	2	-	Pulse Input 1 Parameter Unit 0: kWh 1: kVAh 2: kVAh	1	R/W	0 - 2	✓	✓	✓	✓	✓		
17094	42C6	uint	2	-	Pulse Input 1 Width 20 - 1000	1	R/W	20 - 1000	✓	✓	✓	✓	✓		
17096	42C8	float	2	-	Pulse Input 2 Ratio 1 - 9999	1	R/W	1.0 - 9999.0	✓	✓	✓	✓	✓		
17098	42CA	uint	2	-	Pulse Input 2 Parameter Unit 0: kWh 1: kVAh 2: kVAh	1	R/W	0 - 2	✓	✓	✓	✓	✓		
17100	42CC	uint	2	-	Pulse Input 2 Width 20 - 1000	1	R/W	20 - 1000	✓	✓	✓	✓	✓		
17102	42CE	uint	2	-	N/A	1	R/W	-							
17104	42D0	uint	2	-	N/A	1	R/W	-							
17106	42D2	uint	2	-	N/A	1	R/W	-							
17108	42D4	uint	2	-	N/A	1	R/W	-							
17110	42D6	uint	2	-	N/A	1	R/W	-							
17112	42D8	uint	2	-	N/A	1	R/W	-							
17114	42DA	uint	2	-	N/A	1	R/W	-							
17116	42DC	uint	2	-	N/A	1	R/W	-							
17118	42DE	uint	2	-	N/A	1	R/W	-							
17120	42E0	uint	2	-	N/A	1	R/W	-							
17122	42E2	uint	2	-	N/A	1	R/W	-							
17124	42E4	uint	2	-	N/A	1	R/W	-							
17126	42E6	uint	2	-	N/A	1	R/W	-							
17128	42E8	uint	2	-	N/A	1	R/W	-							
17130	42EA	uint	2	-	N/A	1	R/W	-							
17132	42EC	uint	2	-	N/A	1	R/W	-							
17134	42EE	uint	2	-	N/A	1	R/W	-							
17136	42F0	uint	2	-	N/A	1	R/W	-							
17138	42F2	uint	2	-	Pulse Output 1 Parameter 0: Active Import Energy (AI) 1: Active Export Energy (AE) 2: Inductive Reactive Energy (rL) 3: Capacitive Reactive Energy (rC) 4: Apparent Import Energy (SI) 5: Generator Active Import (JAI) 6: Generator Apparent Import (JSI)	1	R/W	0-6	✓	✓	✓	✓	✓		
17140	42F4	uint	2	Wh	Pulse Output 1 Ratio: 0: 1 1: 10 2: 100 3: 1000 4: 10000 5: 100000 6: 1000000 7: 10000000 8: 100000000	1	R/W	0-8	✓	✓	✓	✓	✓		
17142	42F6	uint	2	ms	Pulse Output 1 Width: 20 - 1000	1	R/W	20 - 1000	✓	✓	✓	✓	✓		
17144	42F8	uint	2	ms	Pulse Output 1 Pulse Duty 20 - 1000	1	R/W	20 - 1000	✓	✓	✓	✓	✓		
17146	42FA	uint	2	-	Pulse Output 2 Parameter 0: Active Import Energy (AI) 1: Active Export Energy (AE) 2: Inductive Reactive Energy (rL) 3: Capacitive Reactive Energy (rC) 4: Apparent Import Energy (SI) 5: Generator Active Import (JAI) 6: Generator Apparent Import (JSI)	1	R/W	0-6	✓	✓	✓	✓	✓		
17148	42FC	uint	2	Wh	Pulse Output 2 Ratio: 0: 1 1: 10 2: 100 3: 1000 4: 10000 5: 100000 6: 1000000 7: 10000000 8: 100000000	1	R/W	0-8	✓	✓	✓	✓	✓		
17150	42FE	uint	2	ms	Pulse Output 2 Width: 20 - 1000	1	R/W	20 - 1000	✓	✓	✓	✓	✓		
17152	4300	uint	2	ms	Pulse Output 2 Pulse Duty 20 - 1000	1	R/W	20 - 1000	✓	✓	✓	✓	✓		
17154	4302	uint	2	-	N/A	1	R/W	-							
17156	4304	uint	2	-	N/A	1	R/W	-							
17158	4306	uint	2	-	N/A	1	R/W	-							
17160	4308	uint	2	-	N/A	1	R/W	-							
17162	430A	uint	2	-	N/A	1	R/W	-							
17164	430C	uint	2	-	N/A	1	R/W	-							
17166	430E	uint	2	-	N/A	1	R/W	-							
17168	4310	uint	2	-	N/A	1	R/W	-							
17170	4312	uint	2	-	N/A	1	R/W	-							
17172	4314	uint	2	-	N/A	1	R/W	-							
17174	4316	uint	2	-	N/A	1	R/W	-							
17176	4318	uint	2	-	N/A	1	R/W	-							
17178	431A	uint	2	-	N/A	1	R/W	-							
17180	431C	uint	2	-	N/A	1	R/W	-							
17182	431E	uint	2	-	N/A	1	R/W	-							
17184	4320	uint	2	-	N/A	1	R/W	-							
17186	4322	uint	2	-	N/A	1	R/W	-							
17188	4324	uint	2	-	N/A	1	R/W	-							
17190	4326	uint	2	-	N/A	1	R/W	-							
17192	4328	uint	2	-	N/A	1	R/W	-							
17194	432A	uint	2	-	N/A	1	R/W	-							
17196	432C	uint	2	-	N/A	1	R/W	-							
17198	432E	uint	2	-	N/A	1	R/W	-							
17200	4330	uint	2	-	N/A	1	R/W	-							
17202	4332	uint	2	-	N/A	1	R/W	-							
17204	4334	uint	2	-	0: OFF 1: VLN 2: VLL 3: I 4: I neutral 5: I-demand 6: I-neutral demand 7: Frequency 8: Cos 9: Total Cos 10: Active Power 11: Reactive Power 12: Apparent Power 13: Total Active Power 14: Total Reactive Power 15: Total Apparent Power 16: Active Power Demand 17: Null 18: Apparent Power Demand 19: Total Active Power Demand 20: Null 21: Total Apparent Power Demand 22: THD V 23: THD I 24: THD I 25: Total Operating Hour 26: Working Hour	1	R/W	0-28	✓	✓	✓	✓	✓	Parameter: 0: OFF 1: VLN 2: VLL 3: I 4: I neutral 5: I-demand 6: I-neutral demand 7: Frequency 8: Cos 9: Total Cos 10: Active Power 11: Reactive Power 12: Apparent Power 13: Total Active Power 14: Total Reactive Power 15: Total Apparent Power 16: Active Power Demand 17: Null 18: Apparent Power Demand 19: Total Active Power Demand 20: Null 21: Total Apparent Power Demand 22: THD V 23: THD I 24: THD I 25: Total Operating Hour 26: Working Hour	9: Total Cos 10: Active Power 11: Reactive Power 12: Apparent Power 13: Total Active Power 14: Total Reactive Power 15: Total Apparent Power 16: Active Power Demand 17: Null 18: Apparent Power Demand 19: Total Active Power Demand 20: Null 21: Total Apparent Power Demand 22: THD V 23: THD I 24: Total Reactive Power
17206	4336	uint	2	-	Alarm 1 Operand 0: Less 1: Greater	1	R/W	0-1	✓	✓	✓	✓	✓		
17208	4338	float	2	-	Alarm 1 On Time 0.0 - 999.9	1	R/W	0.0-9999.0	✓	✓	✓	✓	✓		
17210	433A	float	2	-	Alarm 1 Off Time 0.0 - 999.9	1	R/W	0.0-9999.0	✓	✓	✓	✓	✓		

17212	433C	uint	2	-	Alarm 1 Output: 0: None 1: Digital Output 1 2: Digital Output 2 3: Null 4: Null 5: Null 6: Null 7: Null 8: Null 9: Relay 1 10: Relay 2 11: Null 12: Null 13: Null 14: Null 15: Null 16: Null	1	R/W	0-16	✓	✓	Alarm 1 Output: 0: None 1: Digital Output 1 2: Digital Output 2 3: Null 4: Null 5: Null 6: Null 7: Null 8: Null 9: Null 10: Null 11: Null 12: Null 13: Null 14: Null 15: Null 16: Null	Alarm 1 Output: 0: None 1: Digital Output 1 2: Digital Output 2 3: Null 4: Null 5: Null 6: Null 7: Null 8: Null 9: Null 10: Null 11: Null 12: Null 13: Null 14: Null 15: Null 16: Null
17214	433E	float	2	-	Alarm 1 Limit Value	1	R/W	Depends on parameter	✓	✓	✓	✓
17216	4340	uint	2	-	Alarm 1 Output Function 0: Standart 1: Inverse 2: Latch	1	R/W	0-2	✓	✓	✓	✓
17218	4342	float	2	-	Alarm 1 Hysteresis 0.0-90.0	1	R/W	0.0-90.0	✓	✓	✓	✓
17220	4344	uint	2	-	N/A	1	R/W	-	✓	✓	✓	✓
17222	4346	uint	2	-	0: OFF 1: VLN 2: VLL 3: I 4: I-neutral 5: I-demand 6: I-neutral demand 7: Frequency 8: Cos 9: Total Cos 10: Active Power 11: Reactive Power 12: Apparent Power 13: Total Active Power 14: Total Reactive Power 15: Total Apparent Power 16: Active Power Demand 17: Null 18: Apparent Power Demand 19: Total Active Power Demand 20: Null 21: Total Apparent Power Demand 22: THD V 23: THD U 24: THD I 25: Total Operating Hour 26: Working Hour	1	R/W	0-28	✓	✓	0: OFF 1: VLN 2: VLL 3: I 4: I-neutral 5: I-demand 6: I-neutral demand 7: Frequency 8: Cos 9: Total Cos 10: Active Power 11: Reactive Power 12: Apparent Power 13: Total Active Power 14: Total Reactive Power 15: Total Apparent Power 16: Active Power Demand 17: Null 18: Apparent Power Demand 19: Total Active Power Demand 20: Null 21: Total Apparent Power Demand 22: Null 23: Null	Paramete r: 0: OFF 1: Null 2: Null 3: Null 4: Null 5: Null 6: Null 7: Null 8: Cos 9: Total Cos 10: Active Power 11: Reactive Power 12: Apparent Power 13: Total Active Power 14: Total Reactive Power 15: Total Apparent Power 16: Active Power Demand 17: Null 18: Apparent Power Demand 19: Total Active Power Demand 20: Null 21: Total Apparent Power Demand 22: Null 23: Null
17224	4348	uint	2	-	Alarm 2 Operand 0: Less 1: Greater	1	R/W	0-1	✓	✓	✓	✓
17226	434A	float	2	-	Alarm 2 On Time 0.0-999.9	1	R/W	0.0-9999.0	✓	✓	✓	✓
17228	434C	float	2	-	Alarm 2 Off Time 0.0-999.9	1	R/W	0.0-9999.0	✓	✓	✓	✓
17230	434E	uint	2	-	Alarm 2 Output: 0: None 1: Digital Output 1 2: Digital Output 2 3: Null 4: Null 5: Null 6: Null 7: Null 8: Null 9: Relay 1 10: Relay 2 11: Null 12: Null 13: Null 14: Null 15: Null 16: Null	1	R/W	0-16	✓	✓	Alarm 2 Output: 0: None 1: Digital Output 1 2: Digital Output 2 3: Null 4: Null 5: Null 6: Null 7: Null 8: Null 9: Null 10: Null 11: Null 12: Null 13: Null 14: Null 15: Null 16: Null	Alarm 2 Output: 0: None 1: Digital Output 1 2: Digital Output 2 3: Null 4: Null 5: Null 6: Null 7: Null 8: Null 9: Null 10: Null 11: Null 12: Null 13: Null 14: Null 15: Null 16: Null
17232	4350	float	2	-	Alarm 2 Limit Value	1	R/W	Depends on parameter	✓	✓	✓	✓
17234	4352	uint	2	-	Alarm 2 Output Function 0: Standart 1: Inverse 2: Latch	1	R/W	0-2	✓	✓	✓	✓
17236	4354	float	2	-	Alarm 2 Hysteresis 0.0-90.0	1	R/W	0.0-90.0	✓	✓	✓	✓
17238	4356	uint	2	-	N/A	1	R/W	-	✓	✓	✓	✓
17240	4358	uint	2	-	0: OFF 1: VLN 2: VLL 3: I 4: I-neutral 5: I-demand 6: I-neutral demand 7: Frequency 8: Cos 9: Total Cos 10: Active Power 11: Reactive Power 12: Apparent Power 13: Total Active Power 14: Total Reactive Power 15: Total Apparent Power 16: Active Power Demand 17: Null 18: Apparent Power Demand 19: Total Active Power Demand 20: Null 21: Total Apparent Power Demand 22: THD V 23: THD U 24: THD I 25: Total Operating Hour 26: Working Hour	1	R/W	0-28	✓	✓	0: OFF 1: VLN 2: VLL 3: I 4: I-neutral 5: I-demand 6: I-neutral demand 7: Frequency 8: Cos 9: Total Cos 10: Active Power 11: Reactive Power 12: Apparent Power 13: Total Active Power 14: Total Reactive Power 15: Total Apparent Power 16: Active Power Demand 17: Null 18: Apparent Power Demand 19: Total Active Power Demand 20: Null 21: Total Apparent Power Demand 22: Null 23: Null	Paramete r: 0: OFF 1: Null 2: Null 3: Null 4: Null 5: Null 6: Null 7: Null 8: Cos 9: Total Cos 10: Active Power 11: Reactive Power 12: Apparent Power 13: Total Active Power 14: Total Reactive Power 15: Total Apparent Power 16: Active Power Demand 17: Null 18: Apparent Power Demand 19: Total Active Power Demand 20: Null 21: Total Apparent Power Demand 22: Null 23: Null
17242	435A	uint	2	-	Alarm 3 Operand 0: Less 1: Greater	1	R/W	0-1	✓	✓	✓	✓
17244	435C	float	2	-	Alarm 3 On Time 0.0-999.9	1	R/W	0.0-9999.0	✓	✓	✓	✓
17246	435E	float	2	-	Alarm 3 Off Time 0.0-999.9	1	R/W	0.0-9999.0	✓	✓	✓	✓
17248	4360	uint	2	-	Alarm 3 Output: 0: None 1: Digital Output 1 2: Digital Output 2 3: Null 4: Null 5: Null 6: Null 7: Null 8: Null 9: Relay 1 10: Relay 2 11: Null 12: Null 13: Null 14: Null 15: Null 16: Null	1	R/W	0-16	✓	✓	Alarm 3 Output: 0: None 1: Digital Output 1 2: Digital Output 2 3: Null 4: Null 5: Null 6: Null 7: Null 8: Null 9: Null 10: Null 11: Null 12: Null 13: Null 14: Null 15: Null 16: Null	Alarm 3 Output: 0: None 1: Digital Output 1 2: Digital Output 2 3: Null 4: Null 5: Null 6: Null 7: Null 8: Null 9: Null 10: Null 11: Null 12: Null 13: Null 14: Null 15: Null 16: Null

17250	4362	float	2	-	Alarm 3 Limit Value	1	R/W	Depends on parameter	✓	✓	✓	✓	
17252	4364	uint	2	-	Alarm 3 Output Function 0: Standart 1: Inverse 2: Latch	1	R/W	0-2	✓	✓	✓	✓	
17254	4366	float	2	-	Alarm 3 Hysteresis 0.0 - 90.0	1	R/W	0.0-90.0	✓	✓	✓	✓	
17256	4368	uint	2	-	N / A	1	R/W	-					
17258	436A	uint	2	-	0: OFF 1: VLN 2: VLL 3: I 4: I-neutral 5: I-demand 6: I-neutral demand 7: Frequency 8: Cos 9: Total Cos 10: Active Power 11: Reactive Power 12: Apparent Power 13: Total Active Power 14: Total Reactive Power 15: Total Apparent Power 16: Active Power Demand 17: Null 18: Apparent Power Demand 19: Total Active Power Demand 20: Null 21: Total Apparent Power Demand 22: THD V 23: THD U 24: THD I 25: Total Operating Hour 26: Working Hour	1	R/W	0-28	✓	✓	0: OFF 1: VLN 2: VLL 3: I 4: I-neutral 5: I-demand 6: I-neutral demand 7: Frequency 8: Cos 9: Total Cos 10: Active Power 11: Reactive Power 12: Apparent Power 13: Total Active Power 14: Total Reactive Power 15: Total Apparent Power 16: Active Power Demand 17: Null 18: Apparent Power Demand 19: Total Active Power Demand 20: Null 21: Total Apparent Power Demand 22: THD V 23: THD U 24: THD I 25: Total Operating Hour 26: Working Hour	0: OFF 1: VLN 2: VLL 3: I 4: I-neutral 5: I-demand 6: I-neutral demand 7: Frequency 8: Cos 9: Total Cos 10: Active Power 11: Reactive Power 12: Apparent Power 13: Total Active Power 14: Total Reactive Power 15: Total Apparent Power 16: Active Power Demand 17: Null 18: Apparent Power Demand 19: Total Active Power Demand 20: Null 21: Total Apparent Power Demand 22: THD V 23: THD U 24: THD I 25: Total Operating Hour 26: Working Hour	Paramete r: 0: OFF 1: Null 2: Null 3: Null 4: Null 5: Null 6: Null 7: Null 8: Cos 9: Total Cos 10: Active Power 11: Reactive Power 12: Apparent Power 13: Total Active Power 14: Total Reactive Power 15: Total Apparent Power 16: Total Active Power 17: Total Reactive Power 18: Total Apparent Power 19: Total Active Power 20: Total Reactive Power 21: Total Apparent Power 22: Total Active Power 23: Total Reactive Power
17260	436C	uint	2	-	Alarm 4 Operand 0: Less 1: Greater	1	R/W	0-1	✓	✓	✓	✓	
17262	436E	float	2	-	Alarm 4 On Time 0.0 - 999.9	1	R/W	0.0-999.9	✓	✓	✓	✓	
17264	4370	float	2	-	Alarm 4 Off Time 0.0 - 999.9	1	R/W	0.0-999.9	✓	✓	✓	✓	
17266	4372	uint	2	-	Alarm 4 Output: 0: None 1: Digital Output 1 2: Digital Output 2 3: Null 4: Null 5: Null 6: Null 7: Null 8: Null 9: Relay 1 10: Relay 2 11: Null 12: Null 13: Null 14: Null 15: Null 16: Null	1	R/W	0-16	✓	✓	0: None 1: Digital Output 1 2: Digital Output 2 3: Null 4: Null 5: Null 6: Null 7: Null 8: Null 9: Null 10: Null 11: Null 12: Null 13: Null 14: Null 15: Null 16: Null	Alarm 4 Output: 0: None 1: Digital Output 1 2: Digital Output 2 3: Null 4: Null 5: Null 6: Null 7: Null 8: Null 9: Null 10: Null 11: Null 12: Null 13: Null 14: Null 15: Null 16: Null	
17268	4374	float	2	-	Alarm 4 Limit Value	1	R/W	Depends on parameter	✓	✓	✓	✓	
17270	4376	uint	2	-	Alarm 4 Output Function 0: Standart 1: Inverse 2: Latch	1	R/W	0-2	✓	✓	✓	✓	
17272	4378	float	2	-	Alarm 4 Hysteresis 0.0 - 90.0	1	R/W	0.0-90.0	✓	✓	✓	✓	
17274	437A	uint	2	-	N / A	1	R/W	-					
17276	437C	uint	2	-	0: OFF 1: VLN 2: VLL 3: I 4: I-neutral 5: I-demand 6: I-neutral demand 7: Frequency 8: Cos 9: Total Cos 10: Active Power 11: Reactive Power 12: Apparent Power 13: Total Active Power 14: Total Reactive Power 15: Total Apparent Power 16: Active Power Demand 17: Null 18: Apparent Power Demand 19: Total Active Power Demand 20: Null 21: Total Apparent Power Demand 22: THD V 23: THD U 24: THD I 25: Total Operating Hour 26: Working Hour	1	R/W	0-28	✓	✓	0: OFF 1: VLN 2: VLL 3: I 4: I-neutral 5: I-demand 6: I-neutral demand 7: Frequency 8: Cos 9: Total Cos 10: Active Power 11: Reactive Power 12: Apparent Power 13: Total Active Power 14: Total Reactive Power 15: Total Apparent Power 16: Active Power Demand 17: Null 18: Apparent Power Demand 19: Total Active Power Demand 20: Null 21: Total Apparent Power Demand 22: THD V 23: THD U 24: THD I 25: Total Operating Hour 26: Working Hour	0: OFF 1: VLN 2: VLL 3: I 4: I-neutral 5: I-demand 6: I-neutral demand 7: Frequency 8: Cos 9: Total Cos 10: Active Power 11: Reactive Power 12: Apparent Power 13: Total Active Power 14: Total Reactive Power 15: Total Apparent Power 16: Total Active Power 17: Total Reactive Power 18: Total Apparent Power 19: Total Active Power 20: Total Reactive Power 21: Total Apparent Power 22: Total Active Power 23: Total Reactive Power	
17278	437E	uint	2	-	Alarm 5 Operand 0: Less 1: Greater	1	R/W	0-1	✓	✓	✓	✓	
17280	4380	float	2	-	Alarm 5 On Time 0.0 - 999.9	1	R/W	0.0-999.9	✓	✓	✓	✓	
17282	4382	float	2	-	Alarm 5 Off Time 0.0 - 999.9	1	R/W	0.0-999.9	✓	✓	✓	✓	
17284	4384	uint	2	-	Alarm 5 Output: 0: None 1: Digital Output 1 2: Digital Output 2 3: Null 4: Null 5: Null 6: Null 7: Null 8: Null 9: Relay 1 10: Relay 2 11: Null 12: Null 13: Null 14: Null 15: Null 16: Null	1	R/W	0-16	✓	✓	0: None 1: Digital Output 1 2: Digital Output 2 3: Null 4: Null 5: Null 6: Null 7: Null 8: Null 9: Null 10: Null 11: Null 12: Null 13: Null 14: Null 15: Null 16: Null	Alarm 5 Output: 0: None 1: Digital Output 1 2: Digital Output 2 3: Null 4: Null 5: Null 6: Null 7: Null 8: Null 9: Null 10: Null 11: Null 12: Null 13: Null 14: Null 15: Null 16: Null	
17286	4386	float	2	-	Alarm 5 Limit Value	1	R/W	Depends on parameter	✓	✓	✓	✓	
17288	4388	uint	2	-	Alarm 5 Output Function 0: Standart 1: Inverse 2: Latch	1	R/W	0-2	✓	✓	✓	✓	
17290	438A	float	2	-	Alarm 5 Hysteresis 0.0 - 90.0	1	R/W	0.0-90.0	✓	✓	✓	✓	
17292	438C	uint	2	-	N / A	1	R/W	-					

17294	438E	uint	2	-	0: OFF 1: VLN 2: VLL 3: I 4: I-neutral 5: I-demand 6: I-neutral demand 7: Frequency 8: Cos 9: Total Cos 10: Active Power 11: Reactive Power 12: Apparent Power 13: Total Active Power 14: Total Reactive Power 15: Total Apparent Power 16: Active Power Demand 17: Null 18: Apparent Power Demand 19: Total Active Power Demand 20: Null 21: Total Apparent Power Demand 22: THD V 23: THD U 24: THD I 25: Total Operating Hour 26: Working Hour	1	R/W	0-28	✓	✓	0: OFF 1: VLN 2: VLL 3: I 4: I-neutral 5: I-demand 6: I-neutral demand 7: Frequency 8: Cos 9: Total Cos 10: Active Power 11: Reactive Power 12: Apparent Power 13: Total Active Power 14: Total Reactive Power 15: Total Apparent Power 16: Active Power Demand 17: Null 18: Apparent Power Demand 19: Total Active Power Demand 20: Null 21: Total Apparent Power Demand 22: Null 23: Null	Paramete r: 0: OFF 1: Null 2: Null 3: Null 4: Null 5: Null 6: Null 7: Null 8: Cos 9: Total Cos 10: Active Power 11: Reactive Power 12: Apparent Power 13: Total Active Power 14: Total Reactive Power
17296	4390	uint	2	-	Alarm 6 Operand 0: Less 1: Greater	1	R/W	0-1	✓	✓	✓	✓
17298	4392	float	2	-	Alarm 6 On Time 0.0 - 999.9	1	R/W	0.0-9999.0	✓	✓	✓	✓
17300	4394	float	2	-	Alarm 6 Off Time 0.0 - 999.9	1	R/W	0.0-9999.0	✓	✓	✓	✓
17302	4396	uint	2	-	Alarm 6 Output: 0: None 1: Digital Output 1 2: Digital Output 2 3: Null 4: Null 5: Null 6: Null 7: Null 8: Null 9: Relay 1 10: Relay 2 11: Null 12: Null 13: Null 14: Null 15: Null 16: Null	1	R/W	0-16	✓	✓	Alarm 6 Output: 0: None 1: Digital Output 1 2: Digital Output 2 3: Null 4: Null 5: Null 6: Null 7: Null 8: Null 9: Null 10: Null 11: Null 12: Null 13: Null 14: Null 15: Null 16: Null	Alarm 6 Output: 0: None 1: Digital Output 1 2: Digital Output 2 3: Null 4: Null 5: Null 6: Null 7: Null 8: Null 9: Null 10: Null 11: Null 12: Null 13: Null 14: Null 15: Null 16: Null
17304	4398	float	2	-	Alarm 6 Limit Value	1	R/W	Depends on parameter	✓	✓	✓	✓
17306	439A	uint	2	-	Alarm 6 Output Function 0: Standart 1: Inverse 2: Latch	1	R/W	0-2	✓	✓	✓	✓
17308	439C	float	2	-	Alarm 6 Hysteresis 0.0 - 90.0	1	R/W	0.0-90.0	✓	✓	✓	✓
17310	439E	uint	2	-	N/A	1	R/W	-				
17312	43A0	uint	2	-	0: OFF 1: VLN 2: VLL 3: I 4: I-neutral 5: I-demand 6: I-neutral demand 7: Frequency 8: Cos 9: Total Cos 10: Active Power 11: Reactive Power 12: Apparent Power 13: Total Active Power 14: Total Reactive Power 15: Total Apparent Power 16: Active Power Demand 17: Null 18: Apparent Power Demand 19: Total Active Power Demand 20: Null 21: Total Apparent Power Demand 22: THD V 23: THD U 24: THD I 25: Total Operating Hour 26: Working Hour	1	R/W	0-28	✓	✓	0: OFF 1: VLN 2: VLL 3: I 4: I-neutral 5: I-demand 6: I-neutral demand 7: Frequency 8: Cos 9: Total Cos 10: Active Power 11: Reactive Power 12: Apparent Power 13: Total Active Power 14: Total Reactive Power 15: Total Apparent Power 16: Active Power Demand 17: Null 18: Apparent Power Demand 19: Total Active Power Demand 20: Null 21: Total Apparent Power Demand 22: Null 23: Null	Paramete r: 0: OFF 1: Null 2: Null 3: Null 4: Null 5: Null 6: Null 7: Null 8: Cos 9: Total Cos 10: Active Power 11: Reactive Power 12: Apparent Power 13: Total Active Power 14: Total Reactive Power
17314	43A2	uint	2	-	Alarm 7 Operand 0: Less 1: Greater	1	R/W	0-1	✓	✓	✓	✓
17316	43A4	float	2	-	Alarm 7 On Time 0.0 - 999.9	1	R/W	0.0-9999.0	✓	✓	✓	✓
17318	43A6	float	2	-	Alarm 7 Off Time 0.0 - 999.9	1	R/W	0.0-9999.0	✓	✓	✓	✓
17320	43A8	uint	2	-	Alarm 7 Output: 0: None 1: Digital Output 1 2: Digital Output 2 3: Null 4: Null 5: Null 6: Null 7: Null 8: Null 9: Relay 1 10: Relay 2 11: Null 12: Null 13: Null 14: Null 15: Null 16: Null	1	R/W	0-16	✓	✓	Alarm 7 Output: 0: None 1: Digital Output 1 2: Digital Output 2 3: Null 4: Null 5: Null 6: Null 7: Null 8: Null 9: Null 10: Null 11: Null 12: Null 13: Null 14: Null 15: Null 16: Null	Alarm 7 Output: 0: None 1: Digital Output 1 2: Digital Output 2 3: Null 4: Null 5: Null 6: Null 7: Null 8: Null 9: Null 10: Null 11: Null 12: Null 13: Null 14: Null 15: Null 16: Null
17322	43AA	float	2	-	Alarm 7 Limit Value	1	R/W	Depends on parameter	✓	✓	✓	✓
17324	43AC	uint	2	-	Alarm 7 Output Function 0: Standart 1: Inverse 2: Latch	1	R/W	0-2	✓	✓	✓	✓
17326	43AE	float	2	-	Alarm 7 Hysteresis 0.0 - 90.0	1	R/W	0.0-90.0	✓	✓	✓	✓
17328	43B0	uint	2	-	N/A	1	R/W	-				

17330	43B2	uint	2	-	0: OFF 1: VLN 2: VLL 3: I 4: I-neutral 5: I-demand 6: I-neutral demand 7: Frequency 8: Cos 9: Total Cos 10: Active Power 11: Reactive Power 12: Apparent Power 13: Total Active Power 14: Total Reactive Power 15: Total Apparent Power 16: Active Power Demand 17: Null 18: Apparent Power Demand 19: Total Active Power Demand 20: Null 21: Total Apparent Power Demand 22: THD V 23: THD U 24: THD I 25: Total Operating Hour 26: Working Hour	1	R/W	0-28	✓	✓	0: OFF 1: VLN 2: VLL 3: I 4: I-neutral 5: I-demand 6: I-neutral demand 7: Frequency 8: Cos 9: Total Cos 10: Active Power 11: Reactive Power 12: Apparent Power 13: Total Active Power 14: Total Reactive Power 15: Total Apparent Power 16: Active Power Demand 17: Null 18: Apparent Power Demand 19: Total Active Power Demand 20: Null 21: Total Apparent Power Demand 22: Null 23: Null	Parameter: r: 0: OFF 1: Null 2: Null 3: Null 4: Null 5: Null 6: Null 7: Null 8: Cos 9: Total 10: Active Power 11: Reactive Power 12: Apparent Power 13: Total Active Power Demand 14: Total Reactive Power 15: Total Apparent Power Demand 16: Active Power Demand 17: Null 18: Apparent Power Demand 19: Total Active Power Demand 20: Null 21: Total Apparent Power Demand 22: Null 23: Null
17332	43B4	uint	2	-	Alarm 8 Operand 0: Less 1: Greater	1	R/W	0-1	✓	✓	✓	✓
17334	43B6	float	2	-	Alarm 8 On Time 0.0 - 999.9	1	R/W	0.0-9999.0	✓	✓	✓	✓
17336	43B8	float	2	-	Alarm 8 Off Time 0.0 - 999.9	1	R/W	0.0-9999.0	✓	✓	✓	✓
17338	43BA	uint	2	-	Alarm 8 Output: 0: None 1: Digital Output 1 2: Digital Output 2 3: Null 4: Null 5: Null 6: Null 7: Null 8: Null 9: Relay 1 10: Relay 2 11: Null 12: Null 13: Null 14: Null 15: Null 16: Null	1	R/W	0-16	✓	✓	Alarm 8 Output: 0: None 1: Digital Output 1 2: Digital Output 2 3: Null 4: Null 5: Null 6: Null 7: Null 8: Null 9: Null 10: Null 11: Null 12: Null 13: Null 14: Null 15: Null 16: Null	Alarm 8 Output: 0: None 1: Digital Output 1 2: Digital Output 2 3: Null 4: Null 5: Null 6: Null 7: Null 8: Null 9: Null 10: Null 11: Null 12: Null 13: Null 14: Null 15: Null 16: Null
17340	43BC	float	2	-	Alarm 8 Limit Value Alarm 8 Output Function 0: Standart 1: Inverse 2: Latch	1	R/W	Depends on parameter	✓	✓	✓	✓
17342	43BE	uint	2	-	Alarm 8 Hysteresis 0.0 - 90.0	1	R/W	0.0-90.0	✓	✓	✓	✓
17344	43C0	float	2	-	N/A	1	R/W	-	✓	✓	✓	✓
17346	43C2	uint	2	-	N/A	1	R/W	-	✓	✓	✓	✓
17348	43C4	uint	2	-	N/A	1	R/W	-	✓	✓	✓	✓
17350	43C6	uint	2	-	N/A	1	R/W	-	✓	✓	✓	✓
17352	43C8	uint	2	-	N/A	1	R/W	-	✓	✓	✓	✓
17354	43CA	uint	2	-	Modbus Protocol 0: Modbus 1: ENTBUS	1	R/W	0-1	✓	✓	✓	✓
17356	43CC	uint	2	-	Modbus Slave Address 1 - 247	1	R/W	0-247	✓	✓	✓	✓
17358	43CE	uint	2	-	Modbus Baud Rate: 0: 2400 1: 4800 2: 9600 3: 19200 4: 38400 5: 57600 6: 115200	1	R/W	0-6	✓	✓	✓	✓
17360	43D0	uint	2	-	Modbus Parity: 0: None 1: Odd 2: Even	1	R/W	0-2	✓	✓	✓	✓
17362	43D2	uint	2	-	Password Activate: 0: Passive 1: Active	1	R/W	0-1	✓	✓	✓	✓
17364	43D4	uint	2	-	Password: 0000-9999	1	R/W	0-9999	✓	✓	✓	✓
17366	43D6	uint	2	-	N/A	1	R/W	-	✓	✓	✓	✓
17368	43D8	uint	2	-	N/A	1	R/W	-	✓	✓	✓	✓
17370	43DA	uint	2	-	Language Setting: 0: Turkish 1: English 2: German 3: French	1	R/W	0-3	✓	✓	✓	✓
17372	43DC	uint	2	-	Notification Snooze Time 0: 1 Hour 1: 8 Hour 2: 24 Hour 3: 72 Hour 4: 7 Day 5: 30 Day	1	R/W	0-6	✓	✓	✓	✓

CALENDER SETUPS

Supported Functions	Start Address	Register Counts
Read holding registers	6000	36
Write holding registers		
Write Multiple registers		

Address (Dec)	Address (Hex)	Format	Words count	Bitm	Description	Multiplier	R/W	Range	EMR-53CS	EMR-53S	EMR-07S	EMR-04S
6000	1770	uint	2	second	Unix Time Date and Hour can be setted via this register as unix time	1	R/W		✓	✓	✓	✓
6002	1772	uint	2	DAY	DAY 1-31	1	R/W	1-31	✓	✓	✓	✓
6004	1774	uint	2	month	MONTH 1-12	1	R/W	1-12	✓	✓	✓	✓
6006	1776	uint	2	Yr	YEAR 2000-2099	1	R/W	2000-2099	✓	✓	✓	✓
6008	1778	uint	2	hour	HOUR 0-23	1	R/W	0-23	✓	✓	✓	✓
6010	177A	uint	2	MINUTE	MINUTES 0-59	1	R/W	0-59	✓	✓	✓	✓
6012	177C	uint	2	Second	SECONDS 0-59	1	R/W	0-59	✓	✓	✓	✓
6014	177E	uint	2	DAY	1: MONDAY 2: TUESDAY 3: WEDNESDAY 4: THURSDAY 5: FRIDAY 6: SATURDAY 7: SUNDAY	1	R	1-7	✓	✓	✓	✓
6016	1780	uint	2	-	TIME_ZONE 0 - 36	1	R/W	0 - 36	✓	✓	✓	✓
6018	1782	uint	2	-	Daylight Saving 0: Off 1: Europe 2: USA 3: Custom	1	R/W	0-3	✓	✓	✓	✓

21006	520E	uint	2	Minute	Current Profile Log Record interval Enum 1 minute 2 minute 5 minute 10 minute 15 minute 20 minute 30 minute 60 minute	1	R/W	-	✓	✓	✓	
21008	5210	uint	2	-	Voltage Profile Log Record Enable 0: Disable 1: Enable	1	R/W	0 - 1	✓	✓	✓	
21010	5212	uint	2	Minute	Voltage Profile Log Record interval Enum 1 minute 2 minute 5 minute 10 minute 15 minute 20 minute 30 minute 60 minute	1	R/W	-	✓	✓	✓	
21012	5214	uint	2	-	Power Profile Log Record Enable 0: Disable 1: Enable	1	R/W	0 - 1	✓	✓	✓	✓
21014	5216	uint	2	Minute	Power Profile Log Record interval Enum 1 minute 2 minute 5 minute 10 minute 15 minute 20 minute 30 minute 60 minute	1	R/W	-	✓	✓	✓	✓
21016	5218	uint	2	-	THD Profile Log Record Enable 0: Disable 1: Enable	1	R/W	0 - 1	✓	✓		
21018	521A	uint	2	Minute	THD Profile Log Record interval Enum 1 minute 2 minute 5 minute 10 minute 15 minute 20 minute 30 minute 60 minute	1	R/W	-	✓	✓		
21020	521C	uint	2	-	Analog Temperature Log Record Enable 0: Disable 1: Enable	1	R/W	0 - 1				
21022	521E	uint	2	Minute	Analog Temperature Log Record interval Enum 1 minute 2 minute 5 minute 10 minute 15 minute 20 minute 30 minute 60 minute	1	R/W	-				

Log Index Setup

Supported Functions	Start Address	Register Counts
Read holding registers	21200	22
Write Multiple registers		

Address (Dec)	Address (Hex)	Format	Words count	Birm	Description	Multiplier	R/W	Range	EMR-53CS	EMR-53S	EMR-07S	EMR-04S
21200	5200	uint	2	-	Load Profile Log Index	1	R/W	0 - 4294967295	✓	✓	✓	✓
21202	5202	uint	2	-	Voltage Log Index	1	R/W	0 - 4294967295	✓	✓	✓	✓
21204	5204	uint	2	-	Current Log Index	1	R/W	0 - 4294967295	✓	✓	✓	✓
21206	5206	uint	2	-	Power Log Index	1	R/W	0 - 4294967295	✓	✓	✓	✓
21208	5208	uint	2	-	THD Log Index	1	R/W	0 - 4294967295	✓	✓		
21210	520A	uint	2	-	Analog Temperature Log Index	1	R/W	0 - 4294967295				
21212	520C	uint	2	-	Energy 15 Minute Log Index	1	R/W	0 - 4294967295	✓	✓	✓	✓
21214	520E	uint	2	-	Energy 1 Hour Log Index	1	R/W	0 - 4294967295	✓	✓	✓	✓
21216	5210	uint	2	-	Energy 1 Day Log Index	1	R/W	0 - 4294967295	✓	✓	✓	✓
21218	5212	uint	2	-	Event Log Index	1	R/W	0 - 4294967295	✓	✓	✓	✓
21220	5214	uint	2	-	System Log Index	1	R/W	0 - 4294967295	✓	✓	✓	✓

Log Time Stamp Setup

Supported Functions	Start Address	Register Counts
Read holding registers	21400	22
Write Multiple registers		

Address (Dec)	Address (Hex)	Format	Words count	Birm	Description	Multiplier	R/W	Range	EMR-53CS	EMR-53S	EMR-07S	EMR-04S
21400	5398	uint	2	-	Load Profile Log Time Stamp	1	R/W		✓	✓	✓	✓
21402	539A	uint	2	-	Voltage Log Time Stamp	1	R/W		✓	✓	✓	✓
21404	539C	uint	2	-	Current Log Time Stamp	1	R/W		✓	✓	✓	✓
21406	539E	uint	2	-	Power Log Time Stamp	1	R/W		✓	✓	✓	✓
21408	53A0	uint	2	-	THD Log Time Stamp	1	R/W		✓	✓		
21410	53A2	uint	2	-	Analog Temperature Log Time Stamp	1	R/W					
21412	53A4	uint	2	-	Energy 15 Minute Log Time Stamp	1	R/W		✓	✓	✓	✓
21414	53A6	uint	2	-	Energy 1 Hour Log Time Stamp	1	R/W		✓	✓	✓	✓
21416	53A8	uint	2	-	Energy 1 Day Log Time Stamp	1	R/W		✓	✓	✓	✓
21418	53AA	uint	2	-	Event Log Time Stamp	1	R/W		✓	✓	✓	✓
21420	53AC	uint	2	-	System Log Time Stamp	1	R/W		✓	✓	✓	✓

Reset Register

Supported Functions	Start Address	Register Counts
Write Single registers	19968	1

Address (Dec)	Address (Hex)	Format	Words count	Birm	Description	Multiplier	R/W	Range	EMR-53CS	EMR-53S	EMR-07S	EMR-04S
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19968	4E00	-	1		0x0001: Voltage Log Reset 0x0002: Current Log Reset 0x0003: Power Log Reset 0x0004: THD Log Reset 0x0005: Load Profile Log Reset 0x0006: All Log Records Reset 0x0007: Active Energy Reset 0x0008: Reactive Energy Reset 0x0009: Apparent Energy Reset 0x000A: Generator Energy Reset 0x000B: Alarm and Event Log Reset 0x000C: Max Values Reset 0x000D: Min Values Reset 0x000E: Demand Reset 0x000F: Max Demand Reset 0x0010: Working Hour Reset 0x0011: Tariff Index Reset 0x0012: N / A 0x0013: Alarm Reset 0x0014: Factory Reset (Kullaniclara kapali) 0x0015: Pulse Counter 1 Reset 0x0016: Pulse Counter 2 Reset 0x0017: Total Hour Records Reset (Kullaniclar Kapali) 0x0018: User Image Reset 0x0019: Factory Image Reset (Kullaniclara kapali) 0x002A: Full Memory Reset (Kullaniclara kapali) 0x002B: Full Records Reset (Kullaniclara kapali)	1	W	0 - 0x0019	✓	✓	0x0002: Current Log Reset / A 0x0003: Power Log Reset / A 0x0004: N / A 0x0005: Load Profile Log Reset / A 0x0006: All Log Records Reset / A 0x0007: Active Energy Reset / A 0x0008: Reactive Energy Load Profile Log Reset 0x0009: Apparent Energy Reset 0x000A: Generator Energy All Log Records Reset 0x000B: Alarm and Event Log Reset 0x000C: Max Values Reset Active Energy Reset 0x000D: Demand Reset / A 0x000E: Max Demand / A 0x000F: Max Demand / A 0x0010: Working Hour Apparent Energy Reset 0x0011: Tariff Index Reset / A 0x0012: N / A 0x0013: Alarm Reset
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Load Profile Record

Supported Functions	Start Address	Register Counts
Read Holding registers	23000	62

Address (Dec)	Address (Hex)	Format	Words count	Birim	Description	Multiplier	R/W	Range	EMR-53CS	EMR-53S	EMR-07S	EMR-04S
23000	59D8	uint	2	unix time	Record End Time	1	R		✓	✓	✓	✓
23002	59DA	uint	2	unix time	Record Start Time	1	R		✓	✓	✓	✓
23004	59DC	uint	2	-	Record Index	1	R		✓	✓	✓	✓
23006	59DE	ulong	4	Wh	Import Active Energy	1	R		✓	✓	✓	✓
23010	59E2	ulong	4	Wh	Export Active Energy	1	R		✓	✓	✓	✓
23014	59E6	ulong	4	VARh	Import Inductive Reactive Energy	1	R		✓	✓	✓	✓
23018	59EA	ulong	4	VARh	Export Inductive Reactive Energy	1	R		✓	✓	✓	✓
23022	59EE	ulong	4	VARh	Export Capacitive Reactive Energy	1	R		✓	✓	✓	✓
23026	59F2	ulong	4	VARh	Import Capacitive Reactive Energy	1	R		✓	✓	✓	✓
23030	59F6	ulong	4	VAh	Import Apparent Energy	1	R		✓	✓	✓	✓
23034	59FA	ulong	4	VAh	Export Apparent Energy	1	R		✓	✓	✓	✓
23038	59FE	ulong	4	Wh	Generator Import Active Energy	1	R		✓	✓	✓	✓
23042	5A02	ulong	4	Wh	Generator Export Active Energy	1	R		✓	✓	✓	✓
23046	5A06	uint	2	-	Pulse Counter 1	1	R		✓	✓	✓	✓
23048	5A08	uint	2	-	Pulse Counter 2	1	R		✓	✓	✓	✓
23050	5A0A	uint	2	-	Pulse Counter 3	1	R					
23052	5A0C	uint	2	-	Pulse Counter 4	1	R					
23054	5A0E	uint	2	-	Pulse Counter 5	1	R					
23056	5A10	uint	2	-	Pulse Counter 6	1	R					
23058	5A12	uint	2	-	Pulse Counter 7	1	R					
23060	5A14	uint	2	-	Pulse Counter 8	1	R					

15 Minute Energy Record

Supported Functions	Start Address	Register Counts
Read Holding registers	23200	62

Address (Dec)	Address (Hex)	Format	Words count	Birim	Description	Multiplier	R/W	Range	EMR-53CS	EMR-53S	EMR-07S	EMR-04S
23200	5AA0	uint	2	unix time	Record End Time	1	R		✓	✓	✓	✓
23202	5AA2	uint	2	unix time	Record Start Time	1	R		✓	✓	✓	✓
23204	5AA4	uint	2	-	Record Index	1	R		✓	✓	✓	✓
23206	5AA6	ulong	4	Wh	Import Active Energy	1	R		✓	✓	✓	✓
23210	5AAA	ulong	4	Wh	Export Active Energy	1	R		✓	✓	✓	✓
23214	5AAE	ulong	4	VARh	Import Inductive Reactive Energy	1	R		✓	✓	✓	✓
23218	5AB2	ulong	4	VARh	Export Inductive Reactive Energy	1	R		✓	✓	✓	✓
23222	5AB6	ulong	4	VARh	Export Capacitive Reactive Energy	1	R		✓	✓	✓	✓
23226	5ABA	ulong	4	VARh	Import Capacitive Reactive Energy	1	R		✓	✓	✓	✓
23230	5ABE	ulong	4	VAh	Import Apparent Energy	1	R		✓	✓	✓	✓
23234	5AC2	ulong	4	VAh	Export Apparent Energy	1	R		✓	✓	✓	✓
23238	5AC6	ulong	4	Wh	Generator Import Active Energy	1	R		✓	✓	✓	✓
23242	5ACA	ulong	4	Wh	Generator Export Active Energy	1	R		✓	✓	✓	✓
23246	5ACE	uint	2	-	Pulse Counter 1	1	R		✓	✓	✓	✓
23248	5AD0	uint	2	-	Pulse Counter 2	1	R		✓	✓	✓	✓
23250	5AD2	uint	2	-	Pulse Counter 3	1	R					
23252	5AD4	uint	2	-	Pulse Counter 4	1	R					
23254	5AD6	uint	2	-	Pulse Counter 5	1	R					
23256	5AD8	uint	2	-	Pulse Counter 6	1	R					
23258	5ADA	uint	2	-	Pulse Counter 7	1	R					
23260	5ADC	uint	2	-	Pulse Counter 8	1	R					

1 Hour Energy Record

Supported Functions	Start Address	Register Counts
Read Holding registers	23400	62

Address (Dec)	Address (Hex)	Format	Words count	Birim	Description	Multiplier	R/W	Range	EMR-53CS	EMR-53S	EMR-07S	EMR-04S
23400	5B68	uint	2	unix time	Record End Time	1	R		✓	✓	✓	✓
23402	5B6A	uint	2	unix time	Record Start Time	1	R		✓	✓	✓	✓
23404	5B6C	uint	2	-	Record Index	1	R		✓	✓	✓	✓
23406	5B6E	ulong	4	Wh	Import Active Energy	1	R		✓	✓	✓	✓
23410	5B72	ulong	4	Wh	Export Active Energy	1	R		✓	✓	✓	✓
23414	5B76	ulong	4	VARh	Import Inductive Reactive Energy	1	R		✓	✓	✓	✓
23418	5B7A	ulong	4	VARh	Export Inductive Reactive Energy	1	R		✓	✓	✓	✓
23422	5B7E	ulong	4	VARh	Export Capacitive Reactive Energy	1	R		✓	✓	✓	✓
23426	5B82	ulong	4	VARh	Import Capacitive Reactive Energy	1	R		✓	✓	✓	✓
23430	5B86	ulong	4	VAh	Import Apparent Energy	1	R		✓	✓	✓	✓
23434	5B8A	ulong	4	VAh	Export Apparent Energy	1	R		✓	✓	✓	✓
23438	5B8E	ulong	4	Wh	Generator Import Active Energy	1	R		✓	✓	✓	✓
23442	5B92	ulong	4	Wh	Generator Export Active Energy	1	R		✓	✓	✓	✓
23446	5B96	uint	2	-	Pulse Counter 1	1	R		✓	✓	✓	✓
23448	5B98	uint	2	-	Pulse Counter 2	1	R		✓	✓	✓	✓
23450	5B9A	uint	2	-	Pulse Counter 3	1	R					
23452	5B9C	uint	2	-	Pulse Counter 4	1	R					
23454	5B9E	uint	2	-	Pulse Counter 5	1	R					
23456	5BA0	uint	2	-	Pulse Counter 6	1	R					
23458	5BA2	uint	2	-	Pulse Counter 7	1	R					
23460	5BA4	uint	2	-	Pulse Counter 8	1	R					

1 Day Energy Record

Supported Functions	Start Address	Register Counts
Read Holding registers	23600	62

Address (Dec)	Address (Hex)	Format	Words count	Birim	Description	Multiplier	R/W	Range	EMR-53CS	EMR-53S	EMR-07S	EMR-04S
23600	5C30	uint	2	unix time	Record End Time	1	R		✓	✓	✓	✓
23602	5C32	uint	2	unix time	Record Start Time	1	R		✓	✓	✓	✓
23604	5C34	uint	2	-	Record Index	1	R		✓	✓	✓	✓
23606	5C36	ulong	4	Wh	Import Active Energy	1	R		✓	✓	✓	✓

23610	5C3A	ulong	4	Wh	Export Active Energy	1	R		✓	✓	✓	✓
23614	5C3E	ulong	4	VARh	Import Inductive Reactive Energy	1	R		✓	✓	✓	✓
23618	5C42	ulong	4	VARh	Export Inductive Reactive Energy	1	R		✓	✓	✓	✓
23622	5C46	ulong	4	VARh	Export Capacitive Reactive Energy	1	R		✓	✓	✓	✓
23626	5C4A	ulong	4	VARh	Import Capacitive Reactive Energy	1	R		✓	✓	✓	✓
23630	5C4E	ulong	4	VAh	Import Apparent Energy	1	R		✓	✓	✓	✓
23634	5C52	ulong	4	VAh	Export Apparent Energy	1	R		✓	✓	✓	✓
23638	5C56	ulong	4	Wh	Generator Import Active Energy	1	R		✓	✓	✓	✓
23642	5C5A	ulong	4	Wh	Generator Export Active Energy	1	R		✓	✓	✓	✓
23646	5C5E	uint	2	-	Pulse Counter 1	1	R		✓	✓	✓	✓
23648	5C60	uint	2	-	Pulse Counter 2	1	R		✓	✓	✓	✓
23650	5C62	uint	2	-	Pulse Counter 3	1	R		✓	✓	✓	✓
23652	5C64	uint	2	-	Pulse Counter 4	1	R					
23654	5C66	uint	2	-	Pulse Counter 5	1	R					
23656	5C68	uint	2	-	Pulse Counter 6	1	R					
23658	5C6A	uint	2	-	Pulse Counter 7	1	R					
23660	5C6C	uint	2	-	Pulse Counter 8	1	R					

Voltage Record

Supported Functions	Start Address	Register Counts
Read Holding registers	25000	60

Address (Dec)	Address (Hex)	Format	Words count	Birim	Description	Multiplier	R/W	Range	EMR-53CS	EMR-53S	EMR-07S	EMR-04S
25000	61A8	uint	2	unix time	Record End Time	1	R		✓	✓	✓	✓
25002	61AA	uint	2	unix time	Record Start Time	1	R		✓	✓	✓	✓
25004	61AC	uint	2	-	Record Index	1	R		✓	✓	✓	✓
25005	61AE	float	2	V	L1 Phase Avg voltage	1	R		✓	✓	✓	✓
25008	61B0	float	2	V	L1 Phase Max voltage	1	R		✓	✓	✓	✓
25010	61B2	float	2	V	L1 Phase Min voltage	1	R		✓	✓	✓	✓
25012	61B4	float	2	V	L2 Phase AVg voltage	1	R		✓	✓	✓	✓
25014	61B6	float	2	V	L2 Phase Max voltage	1	R		✓	✓	✓	✓
25016	61B8	float	2	V	L2 Phase Min voltage	1	R		✓	✓	✓	✓
25018	61BA	float	2	V	L3 Phase Avg voltage	1	R		✓	✓	✓	✓
25020	61BC	float	2	V	L3 Phase Max voltage	1	R		✓	✓	✓	✓
25022	61BE	float	2	V	L3 Phase Min voltage	1	R		✓	✓	✓	✓
25024	61C0	float	2	-	N / A	1	R					
25026	61C2	float	2	-	N / A	1	R					
25028	61C4	float	2	-	N / A	1	R					
25030	61C6	float	2	V	Avg Voltage L1-L2	1	R		✓	✓	✓	✓
25032	61C8	float	2	V	Max Voltage L1-L2	1	R		✓	✓	✓	✓
25034	61CA	float	2	V	Min Voltage L1-L2	1	R		✓	✓	✓	✓
25036	61CC	float	2	V	Avg Voltage L2-L3	1	R		✓	✓	✓	✓
25038	61CE	float	2	V	Max Voltage L2-L3	1	R		✓	✓	✓	✓
25040	61D0	float	2	V	Min Voltage L2-L3	1	R		✓	✓	✓	✓
25042	61D2	float	2	V	Avg Voltage L3-L1	1	R		✓	✓	✓	✓
25044	61D4	float	2	V	Max Voltage L3-L1	1	R		✓	✓	✓	✓
25046	61D6	float	2	V	Min Voltage L3-L1	1	R		✓	✓	✓	✓
25048	61D8	float	2	Hz	AVG Freq	1	R		✓	✓	✓	✓
25050	61DA	float	2	Hz	Max Freq	1	R		✓	✓	✓	✓
25052	61DC	float	2	Hz	Min Freq	1	R		✓	✓	✓	✓
25054	61DE	float	2	%	Avg Unbalance	1	R		✓	✓	✓	✓
25056	61E0	float	2	%	Max Unbalance	1	R		✓	✓	✓	✓
25058	61E2	float	2	%	Min Unbalance	1	R		✓	✓	✓	✓

Current Record

Supported Functions	Start Address	Register Counts
Read Holding registers	24000	36

Address (Dec)	Address (Hex)	Format	Words count	Birim	Description	Multiplier	R/W	Range	EMR-53CS	EMR-53S	EMR-07S	EMR-04S
24000	5DC0	uint	2	unix time	Record End Time	1	R		✓	✓	✓	✓
24002	5DC2	uint	2	unix time	Record Start Time	1	R		✓	✓	✓	✓
24004	5DC4	uint	2	-	Record Index	1	R		✓	✓	✓	✓
24006	5DC6	float	2	A	L1 Phase Avg Current	1	R		✓	✓	✓	✓
24008	5DC8	float	2	A	L1 Phase Max Current	1	R		✓	✓	✓	✓
24010	5DCA	float	2	A	L1 Phase Min Current	1	R		✓	✓	✓	✓
24012	5DCC	float	2	A	L2 Phase Avg Current	1	R		✓	✓	✓	✓
24014	5DCE	float	2	A	L2 Phase Max Current	1	R		✓	✓	✓	✓
24016	5DD0	float	2	A	L2 Phase Min Current	1	R		✓	✓	✓	✓
24018	5DD2	float	2	A	L3 Phase Avg Current	1	R		✓	✓	✓	✓
24020	5DD4	float	2	A	L3 Phase Max Current	1	R		✓	✓	✓	✓
24022	5DD6	float	2	A	L3 Phase Min Current	1	R		✓	✓	✓	✓
24024	5DD8	float	2	-	N / A	1	R					
24026	5DDA	float	2	-	N / A	1	R					
24028	5DDC	float	2	-	N / A	1	R					
24030	5DDE	float	2	A	LN Phase Avg Current	1	R		✓	✓	✓	✓
24032	5DE0	float	2	A	LN Phase Max Current	1	R		✓	✓	✓	✓
24034	5DE2	float	2	A	LN Phase Min Current	1	R		✓	✓	✓	✓

Power Record

Supported Functions	Start Address	Register Counts
Read Holding registers	26000	120

Address (Dec)	Address (Hex)	Format	Words count	Birim	Description	Multiplier	R/W	Range	EMR-53CS	EMR-53S	EMR-07S	EMR-04S
26000	6590	uint	2	unix time	Record End Time	1	R		✓	✓	✓	✓
26002	6592	uint	2	unix time	Record Start Time	1	R		✓	✓	✓	✓
26004	6594	uint	2	-	Record Index	1	R		✓	✓	✓	✓
26006	6596	float	2	W	L1 Phase Avg Active Power	1	R		✓	✓	✓	✓
26008	6598	float	2	W	L1 Phase Max Active Power	1	R		✓	✓	✓	✓
26010	659A	float	2	W	L1 Phase Min Active Power	1	R		✓	✓	✓	✓
26012	659C	float	2	W	L2 Phase Avg Active Power	1	R		✓	✓	✓	✓
26014	659E	float	2	W	L2 Phase Max Active Power	1	R		✓	✓	✓	✓
26016	65A0	float	2	W	L2 Phase Min Active Power	1	R		✓	✓	✓	✓
26018	65A2	float	2	W	L3 Phase Avg Active Power	1	R		✓	✓	✓	✓
26020	65A4	float	2	W	L3 Phase Max Active Power	1	R		✓	✓	✓	✓
26022	65A6	float	2	W	L3 Phase Min Active Power	1	R		✓	✓	✓	✓
26024	65A8	float	2	W	Avg Total Active Power	1	R		✓	✓	✓	✓
26026	65AA	float	2	W	Max Total Active Power	1	R		✓	✓	✓	✓
26028	65AC	float	2	W	Min Total Active Power	1	R		✓	✓	✓	✓
26030	65AE	float	2	W	Avg Total Import Active Power	1	R		✓	✓	✓	✓
26032	65B0	float	2	W	Max Total Import Active Power	1	R		✓	✓	✓	✓
26034	65B2	float	2	W	Min Total Import Active Power	1	R		✓	✓	✓	✓
26036	65B4	float	2	W	Avg Total Export Active Power	1	R		✓	✓	✓	✓
26038	65B6	float	2	W	Max Total Export Active Power	1	R		✓	✓	✓	✓
26040	65B8	float	2	W	Min Total Export Active Power	1	R		✓	✓	✓	✓
26042	65BA	float	2	Var	L1 Phase Avg Reactive Power	1	R		✓	✓	✓	✓
26044	65BC	float	2	Var	L1 Phase Max Reactive Power	1	R		✓	✓	✓	✓
26046	65BE	float	2	Var	L1 Phase Min Reactive Power	1	R		✓	✓	✓	✓
26048	65C0	float	2	Var	L2 Phase Avg Reactive Power	1	R		✓	✓	✓	✓
26050	65C2	float	2	Var	L2 Phase Max Reactive Power	1	R		✓	✓	✓	✓
26052	65C4	float	2	Var	L2 Phase Min Reactive Power	1	R		✓	✓	✓	✓
26054	65C6	float	2	Var	L3 Phase Avg Reactive Power	1	R		✓	✓	✓	✓
26056	65C8	float	2	Var	L3 Phase Max Reactive Power	1	R		✓	✓	✓	✓
26058	65CA	float	2	Var	L3 Phase Min Reactive Power	1	R		✓	✓	✓	✓
26060	65CC	float	2	Var	Quadrant Total Avg Reactive Power	1	R		✓	✓	✓	✓
26062	65CE	float	2	Var	Quadrant Total Max Reactive Power	1	R		✓	✓	✓	✓
26064	65D0	float	2	Var	Quadrant Total Min Reactive Power	1	R		✓	✓	✓	✓
26066	65D2	float	2	Var	Quadrant 1 Avg Reactive Power	1	R		✓	✓	✓	✓
26068	65D4	float	2	Var	Quadrant 1 Max Reactive Power	1	R		✓	✓	✓	✓
26070	65D6	float	2	Var	Quadrant 1 Min Reactive Power	1	R		✓	✓	✓	✓
26072	65D8	float	2	Var	Quadrant 2 Avg Reactive Power	1	R		✓	✓	✓	✓
26074	65DA	float	2	Var	Quadrant 2 Max Reactive Power	1	R		✓	✓	✓	✓
26076	65DC	float	2	Var	Quadrant 2 Min Reactive Power	1	R		✓	✓	✓	✓
26078	65DE	float	2	Var	Quadrant 3 Avg Reactive Power	1	R		✓	✓	✓	✓
26080	65E0	float	2	Var	Quadrant 3 Max Reactive Power	1	R		✓	✓	✓	✓
26082	65E2	float	2	Var	Quadrant 3 Min Reactive Power	1	R		✓	✓	✓	✓
26084	65E4	float	2	Var	Quadrant 4 Avg Reactive Power	1	R		✓	✓	✓	✓

26086	65E6	float	2	Var	Quadrant 4 Max Reactive Power	1	R		✓	✓	✓	✓
26088	65E8	float	2	Var	Quadrant 4 Min Reactive Power	1	R		✓	✓	✓	✓
26090	65EA	float	2	VA	L1 Phase Avg Apperant Power	1	R		✓	✓	✓	✓
26092	65EC	float	2	VA	L1 Phase Max Apperant Power	1	R		✓	✓	✓	✓
26094	65EE	float	2	VA	L1 Phase Min Apperant Power	1	R		✓	✓	✓	✓
26096	65F0	float	2	VA	L2 Phase Avg Apperant Power	1	R		✓	✓	✓	✓
26098	65F2	float	2	VA	L2 Phase Max Apperant Power	1	R		✓	✓	✓	✓
26100	65F4	float	2	VA	L2 Phase Min Apperant Power	1	R		✓	✓	✓	✓
26102	65F6	float	2	VA	L3 Phase Avg Apperant Power	1	R		✓	✓	✓	✓
26104	65F8	float	2	VA	L3 Phase Max Apperant Power	1	R		✓	✓	✓	✓
26106	65FA	float	2	VA	L3 Phase Min Apperant Power	1	R		✓	✓	✓	✓
26108	65FC	float	2	VA	Avg Total Import Apperant Power	1	R		✓	✓	✓	✓
26110	65FE	float	2	VA	Max Total Import Apperant Power	1	R		✓	✓	✓	✓
26112	6600	float	2	VA	Min Total Import Apperant Power	1	R		✓	✓	✓	✓
26114	6602	float	2	VA	Avg Total Export Apperant Power	1	R		✓	✓	✓	✓
26116	6604	float	2	VA	Max Total Export Apperant Power	1	R		✓	✓	✓	✓
26118	6606	float	2	VA	Min Total Export Apperant Power	1	R		✓	✓	✓	✓

THD Record

Supported Functions	Start Address	Register Counts
Read Holding registers	27000	66

Address (Dec)	Address (Hex)	Format	Words count	Bitm	Description	Multiplier	R/W	Range	EMR-53CS	EMR-53S	EMR-07S	EMR-04S
27000	6978	uint	2	unix time	Record End Time	1	R		✓	✓		
27002	697A	uint	2	unix time	Record Start Time	1	R		✓	✓		
27064	6988	uint	2	-	Record Index	1	R		✓	✓		
27064	697C	float	2	%	Avg Total Harmonic Distorsion VL1	1	R		✓	✓		
27024	6990	float	2	%	Max Total Harmonic Distorsion VL1	1	R		✓	✓		
27044	69A4	float	2	%	Min Total Harmonic Distorsion VL1	1	R		✓	✓		
27006	697E	float	2	%	Avg Total Harmonic Distorsion VL2	1	R		✓	✓		
27026	6992	float	2	%	Max Total Harmonic Distorsion VL2	1	R		✓	✓		
27046	69A6	float	2	%	Min Total Harmonic Distorsion VL2	1	R		✓	✓		
27008	6980	float	2	%	Avg Total Harmonic Distorsion VL3	1	R		✓	✓		
27028	6994	float	2	%	Max Total Harmonic Distorsion VL3	1	R		✓	✓		
27048	69A8	float	2	%	Min Total Harmonic Distorsion VL3	1	R		✓	✓		
27010	6982	float	2	%	Avg Total Harmonic Distorsion VLL12	1	R		✓	✓		
27030	6996	float	2	%	Max Total Harmonic Distorsion VLL12	1	R		✓	✓		
27050	69AA	float	2	%	Min Total Harmonic Distorsion VLL12	1	R		✓	✓		
27012	6984	float	2	%	Avg Total Harmonic Distorsion VLL23	1	R		✓	✓		
27032	6998	float	2	%	Max Total Harmonic Distorsion VLL23	1	R		✓	✓		
27052	69AC	float	2	%	Min Total Harmonic Distorsion VLL23	1	R		✓	✓		
27014	6986	float	2	%	Avg Total Harmonic Distorsion VLL31	1	R		✓	✓		
27034	699A	float	2	%	Max Total Harmonic Distorsion VLL31	1	R		✓	✓		
27054	69AE	float	2	%	Min Total Harmonic Distorsion VLL31	1	R		✓	✓		
27016	6988	float	2	%	Avg Total Harmonic Distorsion ILL1	1	R		✓	✓		
27036	699C	float	2	%	Max Total Harmonic Distorsion ILL1	1	R		✓	✓		
27056	6980	float	2	%	Min Total Harmonic Distorsion ILL1	1	R		✓	✓		
27018	698A	float	2	%	Avg Total Harmonic Distorsion ILL2	1	R		✓	✓		
27038	699E	float	2	%	Max Total Harmonic Distorsion ILL2	1	R		✓	✓		
27058	6982	float	2	%	Min Total Harmonic Distorsion ILL2	1	R		✓	✓		
27020	698C	float	2	%	Avg Total Harmonic Distorsion ILL3	1	R		✓	✓		
27040	69A0	float	2	%	Max Total Harmonic Distorsion ILL3	1	R		✓	✓		
27060	69B4	float	2	%	Min Total Harmonic Distorsion ILL3	1	R		✓	✓		
27022	698E	float	2	%	Avg Total Harmonic Distorsion ILLN	1	R		✓	✓		
27042	69A2	float	2	%	Max Total Harmonic Distorsion ILLN	1	R		✓	✓		
27062	6986	float	2	%	Min Total Harmonic Distorsion ILLN	1	R		✓	✓		

Analog Temperature Record

Supported Functions	Start Address	Register Counts
Read Holding registers	28000	30

Address (Dec)	Address (Hex)	Format	Words count	Bitm	Description	Multiplier	R/W	Range	EMR-53CS	EMR-53S	EMR-07S	EMR-04S
28000	6D60	uint	2	unix time	Record End Time	1	R					
28002	6D62	uint	2	unix time	Record Start Time	1	R					
28004	6D64	uint	2	-	Record Index	1	R					
28006	6D66	float	2	C	Average Analog Channel 1	1	R					
28008	6D68	float	2	C	Maximum Analog Channel 1	1	R					
28010	6D6A	float	2	C	Minimum Analog Channel 1	1	R					
28012	6D6C	float	2	C	Average Analog Channel 2	1	R					
28014	6D6E	float	2	C	Maximum Analog Channel 2	1	R					
28016	6D70	float	2	C	Minimum Analog Channel 2	1	R					
28018	6D72	float	2	C	Average Analog Channel 3	1	R					
28020	6D74	float	2	C	Maximum Analog Channel 3	1	R					
28022	6D76	float	2	C	Minimum Analog Channel 3	1	R					
28024	6D78	float	2	C	Average Analog Channel 4	1	R					
28026	6D7A	float	2	C	Maximum Analog Channel 4	1	R					
28028	6D7C	float	2	C	Minimum Analog Channel 4	1	R					

Event Record

Supported Functions	Start Address	Register Counts
Read holding registers	8016	26

Address (Dec)	Address (Hex)	Format	Words count	Bitm	Description	Multiplier	R/W	Range	EMR-53CS	EMR-53S	EMR-07S	EMR-04S
8016	1F50	uint	2	-	Event End Time	1	R		✓	✓	✓	✓
8018	1F52	uint	2	-	Event Start Time	1	R		✓	✓	✓	✓
8020	1F54	uint	2	-	Record Index	1	R		✓	✓	✓	✓
8022	1F56	float	2	-	Event Duration	1	R		✓	✓	✓	✓
8024	1F58	short	1	-	Log Type (0=None 1=Alarm Start 2=Alarm End 3=Event Log)	1	R		✓	✓	✓	✓
8025	1F59	short	1	-	Type (Depend on Log Type)	1	R		✓	✓	✓	✓
8026	1F5A	uint	2	-	Source (Depend on Log Type and type)	1	R		✓	✓	✓	✓
8028	1F5C	uint	2	-	Param1 (Depend on Log Type and type)	1	R		✓	✓	✓	✓
8030	1F5E	uint	2	-	Param2 (Depend on Log Type and type)	1	R		✓	✓	✓	✓
8032	1F60	float	2	-	High Threshold value	1	R		✓	✓	✓	✓
8034	1F62	float	2	-	Low threshold value	1	R		✓	✓	✓	✓
8036	1F64	float	2	-	Max. High value	1	R		✓	✓	✓	✓
8038	1F66	float	2	-	Max. Low value	1	R		✓	✓	✓	✓
8040	1F68	uint	2	-	Alarm Index	1	R		✓	✓	✓	✓

Device Identification

Supported Functions	Start Address	Register Counts
Read holding registers	60416	40

Address (Dec)	Address (Hex)	Format	Words count	Bitm	Description	Multiplier	R/W	Range	EMR-53CS	EMR-53S	EMR-07S	EMR-04S
60416	EC0D	ushort	1	-	Device ID	1	R		✓	✓	✓	✓
60417	EC01	ushort	1	-	Device ID && Versiyon No	1	R		✓	✓	✓	✓
60418	EC02	uint	2	-	Serial Number	1	R		✓	✓	✓	✓
60420	EC04	uint	2	-	Software Version	1	R		✓	✓	✓	✓
60422	EC06	uint	2	-	Hardware Version	1	R		✓	✓	✓	✓
60424	EC08	uint	2	-	Modbus Table Version	1	R		✓	✓	✓	✓
60426	EC0A	uint	2	-	Boot loader version	1	R		✓	✓	✓	✓
60428	EC0C	uint	2	unix time	Fabrication Date	1	R		✓	✓	✓	✓
60430	EC0E	uint	2	unix time	Calibration Date	1	R		✓	✓	✓	✓
60432	EC10	uint	2	-	Ballnet Test Summu	1	R					
60434	EC12	ushort	1	-	MAC Address Part 1	1	R					
60435	EC13	ushort	1	-	MAC Address Part 2	1	R					
60436	EC14	ushort	1	-	MAC Address Part 3	1	R					
60437	EC15	uint	2	-	Reserved	1	R					
60439	EC17	uint	2	-	ETH Software Version	1	R					
60441	EC19	uint	2	-	ETH Boot loader version	1	R					
60443	EC1B	uint	2	-	Reserved	1	R					
60445	EC1D	uint	2	-	Ip Address	1	R					

60447	EC1F	uint	2	-	Subnet Mask Address	1	R				
60449	EC21	uint	2	-	Gateway Address	1	R				
60451	EC23	uint	2	-	DNS 1	1	R				
60453	EC25	uint	2	-	DNS Alter	1	R				
60455	EC27	ushort	1	-	Connection Status	1	R				

Entes.Net

Supported Functions	Start Address	Register Counts
Read holding registers	65000	8

Address (Dec)	Address (Hex)	Format	Words count	Birim	Description	Multiplier	R/W	Range	EMR-53CS	EMR-53S	EMR-07S	EMR-04S
65000	FDE8	uint	2	-	Entes.Net Countdown	1	R/W		✓	✓	✓	✓
65002	FDEA	uint	2	-	Current Communication State	1	R		✓	✓	✓	✓
65004	FDEC	uint	2	unix time	Last Device Setup Date	1	R		✓	✓	✓	✓
65006	FDEE	uint	2	unix time	Last Device Boot Date	1	R		✓	✓	✓	✓

Entes ID

Supported Functions	Start Address	Register Counts
Read holding registers	65032	16

Address (Dec)	Address (Hex)	Format	Words count	Birim	Description	Multiplier	R/W	Range	EMR-53CS	EMR-53S	EMR-07S	EMR-04S
65032	FE08	string	4	-	Product Code	1	R/W		✓	✓	✓	✓
65036	FE0C	string	2	-	Revision	1	R/W		✓	✓	✓	✓
65038	FE0E	string	3	-	Fabrication Date	1	R/W		✓	✓	✓	✓
65041	FE11	string	1	-	Fabrication ID	1	R/W		✓	✓	✓	✓
65042	FE12	uint32	1	-	Product Line ID	1	R/W		✓	✓	✓	✓
65043	FE13	uint32	5	-	Serial Number	1	R/W		✓	✓	✓	✓