EMMXX Register table

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

		START ADDRESS	FINISH ADDRESS	REGISTER COUNTS
1	MEASUREMENTS	0	0149	150
4	MIN_MAX_MAXDEMAND_DEMAND	800	1335	536
6	ALARM STATUS	20000	20025	26
7	ALARM DYNAMIC	20500	20531	32
18	NETWORK_SETTINGS	16384	16415	32
19	SETUP	17000	17373	374
23	RELAYS_COIL_CONTROLS	17966	17973	8
27	DEVICE IDENTIFICATION	60416	60455	40
28	RESET REGISTER	19968	19968	1

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	EMM-04S	EMM-04CS
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 = IL1+IL2+IL3	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	Apperant 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 apperant power	1	R			
0068	0044	float	2	VA	Total export apperant 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	-	∑Cos 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 Resetable)	1	R		✓	✓
0132	0084	uint	2	h/1000	Working 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			

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	EMM-04S	EMM-04CS
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		✓	✓
1014	03F6	uint	2	Time	L2-L3 Min Voltage Time	Unix Time Stamp	R			
1016	03F8	float	2	V	L3-L1 Min Voltage	1	R		✓	✓
1018	03FA	uint	2	Time	L3-L1 Min Voltage Time	Unix Time Stamp	R			
1020	03FC	float	2	A	L1 Phase Min Current	1	R		✓	✓
1022	03FE	uint	2	Time	L1 Phase Min Current Time	Unix Time Stamp	R			
1024	0400	float	2	A	L2 Phase Min Current	1	R		✓	✓
1026	0402	uint	2	Time	L2 Phase Min Current Time	Unix Time Stamp	R			
1028	0404	float	2	A	L3 Phase Min Current	1	R		✓	✓
1030	0406	uint	2	Time	L3 Phase Min Current Time	Unix Time Stamp	R			
1032	0408	uint	2	-	N / A	1	R			
1034	040A	uint	2	-	N / A	Unix Time Stamp	R			
1036	040C	float	2	A	L4 Phase Min Current	1	R		✓	✓
1038	040E	uint	2	Time	L4 Phase Min Current Time	Unix Time Stamp	R			
1040	0410	float	2	W	L1 Phase Min Active Power	1	R			
1042	0412	uint	2	Time	L1 Phase Min Active Power Time	Unix Time Stamp	R			
1044	0414	float	2	W	L2 Phase Min Active Power	1	R			
1046	0416	uint	2	Time	L2 Phase Min Active Power Time	Unix Time Stamp	R			
1048	0418	float	2	W	L3 Phase Min Active Power	1	R			
1050	041A	uint	2	Time	L3 Phase Min Active Power Time	Unix Time Stamp	R			
1052	041C	uint	2	-	N / A	1	R			
1054	041E	uint	2	-	N / A	Unix Time Stamp	R			
1056	0420	float	2	W	Min Total Import Active Power	1	R			
1058	0422	uint	2	Time	Min Total Import Active Power Time	Unix Time Stamp	R			
1060	0424	float	2	W	Min Total Export Active Power	1	R			
1062	0426	uint	2	Time	Min Total Export Active Power Time	Unix Time Stamp	R			
1064	0428	float	2	W	Min Total Active Power	1	R			
1066	042A	uint	2	Time	Min Total Active Power Time	Unix Time Stamp	R			
1068	042C	float	2	VAR	L1 Phase Min Reactive Power	1	R			
1070	042E	uint	2	Time	L1 Phase Min Reactive Power Time	Unix Time Stamp	R			
1072	0430	float	2	VAR	L2 Phase Min Reactive Power	1	R			
1074	0432	uint	2	Time	L2 Phase Min Reactive Power Time	Unix Time Stamp	R			
1076	0434	float	2	VAR	L3 Phase Min Reactive Power	1	R			
1078	0436	uint	2	Time	L3 Phase Min Reactive Power Time	Unix Time Stamp	R			
1080	0438	uint	2	-	N / A	1	R			
1082	043A	uint	2	-	N / A	Unix Time Stamp	R			
1084	043C	float	2	VAR	Quadrant 1 Min Reactive Power	1	R			
1086	043E	uint	2	Time	Quadrant 1 Min Reactive Power Time	Unix Time Stamp	R			
1088	0440	float	2	VAR	Quadrant 2 Min Reactive Power	1	R			
1090	0442	uint	2	Time	Quadrant 2 Min Reactive Power Time	Unix Time Stamp	R			

1092	0444	float	2	VAR	Quadrant 3 Min Reactive Power	1	R			
1094	0446	uint	2	Time	Quadrant 3 Min Reactive Power Time	Unix Time Stamp	R			
1096	0448	float	2	VAR	Quadrant 4 Min Reactive Power	1	R			
1098	044A	uint	2	Time	Quadrant 4 Min Reactive Power Time	Unix Time Stamp	R			
1100	044C	float	2	VAR	Quadrant Total Min Reactive Power	1	R			
1102	044E	uint	2	Time	Quadrant Total Min Reactive Power Time	Unix Time Stamp	R			
1104	0450	float	2	VA	L1 Phase Min Apperant Power	1	R			
1106	0452	uint	2	Time	L1 Phase Min Apperant Power Time	Unix Time Stamp	R			
1108	0454	float	2	VA	L2 Phase Min Apperant Power	1	R			
1110	0456	uint	2	Time	L2 Phase Min Apperant Power Time	Unix Time Stamp	R			
1112	0458	float	2	VA	L3 Phase Min Apperant Power	1	R			
1114	045A	uint	2	Time	L3 Phase Min Apperant Power Time	Unix Time Stamp	R			
1116	045C	uint	2	-	N / A	1	R			
1118	045E	uint	2	-	N / A	Unix Time Stamp	R			
1120	0460	float	2	VA	Min Total Import Apperant Power	1	R			
1122	0462	uint	2	Time	Min Total Import Apperant Power Time	Unix Time Stamp	R			
1124	0464	float	2	VA	Min Total Export Apperant Power	1	R			
1126	0466	uint	2	Time	Min Total Export Apperant Power Time	Unix Time Stamp	R			
1128	0468	float	2	VA	Min Total Apperant Power	1	R			
1130	046A	uint	2	Time	Min Total Apperant Power Time	Unix Time Stamp	R			
1132	046C	float	2	Hz	Min System Frequency	1	R		✓	✓
1134	046E	uint	2	Time	Min System Frequency Time	Unix Time Stamp	R			
1136	0470	float	2	%	Min. Unbalance	1	R			
1138	0472	uint	2	Time	Min. Unbalance Time	Unix Time Stamp	R			
1140	0474	uint	2	-	N / A	1	R			
1142	0476	uint	2	-	N / A	Unix Time Stamp	R			
1144	0478	uint	2	-	N / A	1	R			
1146	047A	uint	2	-	N / A	Unix Time Stamp	R			
1148	047C	uint	2	-	N / A	1	R			
1150	047E	uint	2	-	N / A	Unix Time Stamp	R			
1152	0480	uint	2	-	N / A	1	R			
1154	0482	uint	2	-	N / A	Unix Time Stamp	R			
1156	0484	uint	2	-	N / A	1	R			
1158	0486	uint	2	-	N / A	Unix Time Stamp	R			
1160	0488	uint	2	-	N / A	1	R			
1162	048A	uint	2	-	N / A	Unix Time Stamp	R			
1164	048C	uint	2	-	N / A	1	R			
1166	048E	uint	2	-	N / A	Unix Time Stamp	R			
1168	0490	uint	2	-	N / A	1	R			
1170	0492	uint	2	-	N / A	Unix Time Stamp	R			
1172	0494	uint	2	-	N / A	1	R			
1174	0496	uint	2	-	N / A	Unix Time Stamp	R			
1176	0498	uint	2	-	N / A	1	R			
1178	049A	uint	2	-	N / A	Unix Time Stamp	R			
1180	049C	uint	2	-	N / A	1	R			
1182	049E	uint	2	-	N / A	Unix Time Stamp	R			
1184	04A0	float	2	A	L1 Phase Current Demand	1	R		✓	✓
1186	04A2	float	2	A	L2 Phase Current Demand	1	R		✓	✓
1188	04A4	float	2	A	L3 Phase Current Demend	1	R		✓	✓
1190	04A6	uint	2	-	N / A	1	R			
1192	04A8	float	2	A	IN Current Demand	1	R			
1194	04AA	float	2	W	L1 Phase Active Power Demand	1	R			
1196	04AC	float	2	W	L2 Phase Active Power Demand	1	R			
1198	04AE	float	2	W	L3 Phase Active Power Demand	1	R			
1200	04B0	uint	2	-	N / A	1	R			
1202	04B2	float	2	W	Total Import Active Power Demand	1	R			
1204	04B4	float	2	W	Total Export Active Power Demand	1	R			
1206	04B6	float	2	W	Total Active Power Demand	1	R			
1208	04B8	float	2	VAr	L1 Phase Reactive Power Demand	1	R			
1210	04BA	float	2	VAr	L2 Phase Reactive Power Demand	1	R			
1212	04BC	float	2	VAr	L3 Phase Reactive Power Demand	1	R			
1214	04BE	uint	2	-	N / A	1	R			
1216	04C0	float	2	VAr	Quadrant 1 Total Reactive Power Demand	1	R			
1218	04C2	float	2	VAr	Quadrant 2 Total Reactive Power Demand	1	R			
1220	04C4	float	2	VAr	Quadrant 3 Total Reactive Power Demand	1	R			
1222	04C6	float	2	VAr	Quadrant 4 Total Reactive Power Demand	1	R			
1224	04C8	float	2	VAr	Total Reactive Power Demand	1	R			
1226	04CA	float	2	VA	L1 Phase Apperant Power Demand	1	R			
1228	04CC	float	2	VA	L2 Phase Apperant Power Demand	1	R			
1230	04CE	float	2	VA	L3 Phase Apperant Power Demand	1	R			
1232	04D0	uint	2	-	N / A	1	R			
1234	04D2	float	2	VA	Total Import Apperant Power Demand	1	R			
1236	04D4	float	2	VA	Total Export Apperant Power Demand	1	R			
1238	04D6	float	2	VA	Total Apperant Power Demand	1	R			
1240	04D8	float	2	A	L1 Phase Max. Current Demand	1	R		✓	✓
1242	04DA	uint	2	Time	L1 Phase Max. Current Demand Time	Unix Time Stamp	R		✓	✓
1244	04DC	float	2	A	L2 Phase Max. Current Demand	1	R		✓	✓
1246	04DE	uint	2	Time	L2 Phase Max. Current Demand Time	Unix Time Stamp	R		✓	✓
1248	04E0	float	2	A	L3 Phase Max. Current Demand	1	R		✓	✓
1250	04E2	uint	2	Time	L3 Phase Max. Current Demand Time	Unix Time Stamp	R		✓	✓
1252	04E4	uint	2	-	N / A	1	R			
1254	04E6	uint	2	-	N / A	1	R			
1256	04E8	float	2	W	PL1 Max Active Power Demand	1	R			
1258	04EA	uint	2	Time	PL1 Max Active Power Demand Time	Unix Time Stamp	R			
1260	04EC	float	2	W	PL2 Max Active Power Demand	1	R			
1262	04EE	uint	2	Time	PL2 Max Active Power Demand Time	Unix Time Stamp	R			
1264	04F0	float	2	W	PL3 Max Active Power Demand	1	R			
1266	04F2	uint	2	Time	PL3 Max Active Power Demand Time	Unix Time Stamp	R			
1268	04F4	float	2	W	Total Active Max Power Demand	1	R			
1270	04F6	uint	2	Time	Total Active Max Power Demand Time	Unix Time Stamp	R			
1272	04F8	float	2	W	Total Active Import Max Power Demand	1	R			
1274	04FA	uint	2	Time	Total Active Import Max Power Demand Time	Unix Time Stamp	R			
1276	04FC	float	2	W	Total Active Export Max Power Demand	1	R			
1278	04FE	uint	2	Time	Total Active Export Max Power Demand Time	Unix Time Stamp	R			
1280	0500	float	2	VA	SL1 Max Active Power Demand	1	R			
1282	0502	uint	2	Time	SL1 Max Active Power Demand Time	Unix Time Stamp	R			
1284	0504	float	2	VA	SL2 Max Active Power Demand	1	R			
1286	0506	uint	2	Time	SL2 Max Active Power Demand Time	Unix Time Stamp	R			
1288	0508	float	2	VA	SL3 Max Active Power Demand	1	R			
1290	050A	uint	2	Time	SL3 Max Active Power Demand Time	Unix Time Stamp	R			
1292	050C	float	2	VA	Total Apperant Max Power Demand	1	R			
1294	050E	uint	2	Time	Total Apperant Max Power Demand Time	Unix Time Stamp	R			
1296	0510	float	2	VA	Total Apperant Import Max Power Demand	1	R			
1298	0512	uint	2	Time	Total Apperant Import Max Power Demand Time	Unix Time Stamp	R			
1300	0514	float	2	VA	Total Apperant Export Max Power Demand	1	R			
1302	0516	uint	2	Time	Total Apperant Export Max Power Demand Time	Unix Time Stamp	R			
1304	0518	float	2	A	L1 Phase Sum Current Demand	1	R		✓	✓
1306	051A	float	2	A	L2 Phase Sum Current Demand	1	R		✓	✓
1308	051C	float	2	A	L3 Phase Sum Current Demand	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 Apperant Sum. Power Demand	1	R			
1332	0534	float	2	VA	Total Apperant Import Sum. Power Demand	1	R			
1334	0536	float	2	VA	Total Apperant Export Sum. Power Demand	1	R			

ALARM STATUS

Supported Functions	Start Address	Register Counts

Read holding registers	20000	26

Address (Dec)	Address (Hex)	Format	Words count	Birim	Description	Multiplier	R/W	Range	EMM-04S	EMM-04CS
20000	4E20	uint	2	-	N/A	1	R			✓
20002	4E22	uint	2	-	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	1	R			✓
20004	4E24	uint	2	-	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 Bit 31 : User Alarm 8 Low Peak	1	R			✓
20006	4E26	uint	2	-	N/A		R			
20008	4E28	uint	2	-	N/A		R			
20010	4E2A	uint	2	-	N/A		R			
20012	4E2C	uint	2	-	N/A		R			
20014	4E2E	uint	2	-	N/A		R			
20016	4E30	uint	2	-	N/A		R			
20018	4E32	uint	2	-	N/A		R			
20020	4E34	uint	2	-	N/A		R			
20022	4E36	uint	2	-	N/A		R			
20024	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	Birim	Description	Multiplier	R/W	Range	EMM-04S	EMM-04CS
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	ushort	1		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 Alarm 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	EMM-04S	EMM-04CS
16384	4000	uint	2		Network Type: 0: 3P4W 1: 3P3W 2: 3P4W 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	EMM-04S	EMM-04CS
17000	4268	uint	2	-	Network Type 0: 3P4W 1: 3P3W 2: 3P4W Balanced 3: 3P3W Balanced 4: ARON	1	R/W	0-4	✓	✓
17002	426A	uint	2	A	Current Transofmer 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 - 9999900	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: Palse 2: RS-485	1	R/W	0-2	✓	✓
17034	428A	uint	2	-	Digital Output 2 Type 0: Digital Output 1: Palse 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: Palse 2: Jenerator	1	R/W	0 - 2		
17066	42AA	uint	2	-	Digital Input 2 Type 0: Digital Input 1: Palse 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	42B6	uint	2	-	N / A	1	R/W	-		
17080	42B8	uint	2	-	N / A	1	R/W	-		
17082	42BA	uint	2	-	N / A	1	R/W	-		
17084	42BC	uint	2	-	N / A	1	R/W	-		
17086	42BE	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: kVArh 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: kVArh 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: Jenerator Active Import (JAI) 6: Jenerator Apparent Import (JSI)	1	R/W	0-6		
17140	42F4	uint	2	Wh	Pulse Output 1Ratio: 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: Jenerator Active Import (JAI) 6: Jenerator 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 U 24: THD I 25: Total Operating Hour 26: Working Hour	1	R/W	0-28		✓
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		✓
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		✓
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		✓
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		✓
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		✓
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		✓
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	0.0-9999.0		✓
17264	4370	float	2	-	Alarm 4 Off Time 0.0 -- 999.9	1	R/W	0.0-9999.0		✓
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		✓
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		✓
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	0.0-9999.0		✓
17282	4382	float	2	-	Alarm 5 Off Time 0.0 -- 999.9	1	R/W	0.0-9999.0		✓

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		✓
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		✓
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		✓
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		✓
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		✓
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		✓
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		✓
17340	43BC	float	2	-	Alarm 8 Limit Value	1	R/W	Depends on parameter		✓
17342	43BE	uint	2	-	Alarm 8 Output Function 0: Standart 1: Inverse 2: Latch	1	R/W	0-2		✓
17344	43C0	float	2		Alarm 8 Hysteresis 0.0 -- 90.0	1	R/W	0.0-90.0		✓
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	✓	✓

Relays Coil Controls

Supported Functions	Start Address	Register Counts
Read Coil registers	17966	8

Address (Dec)	Address (Hex)	Format	Words count	Birim	Description	Multiplier	R/W	Range	EMM-04S	EMM-04CS
17966	462E	coil	1	-	Relay 1	1	R			✓
17967	462F	coil	1	-	Relay 2	1	R			✓
17968	4630	coil	1	-	Relay 3	1	R			
17969	4631	coil	1	-	Relay 4	1	R			
17970	4632	coil	1	-	Relay 5	1	R			
17971	4633	coil	1	-	Relay 6	1	R			
17972	4634	coil	1	-	Relay 7	1	R			
17973	4635	coil	1	-	Relay 8	1	R			

Reset Register

Supported Functions	Start Address	Register Counts
Write Single registers	19968	1

Address (Dec)	Address (Hex)	Format	Words count	Birim	Description	Multiplier	R/W	Range	EMM-04S	EMM-04CS
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: Apperant 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 0x0015: Pulse Counter 1 Reset 0x0016: Pulse Counter 2 Reset 0x0018: User Image Reset	1	W	0 - 0x0019	✓	✓

Device Identification

Supported Functions	Start Address	Register Counts
Read holding registers	60416	40

Address (Dec)	Address (Hex)	Format	Words count	Birim	Description	Multiplier	R/W	Range	EMM-04S	EMM-04CS
60416	EC00	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	unix time	2	unix time	Fabrication Date	1	R		✓	✓
60430	EC0E	unix time	2	unix time	Calibration Date	1	R		✓	✓
60432	EC10	uint	2	-	Bağlantı Test Sonucu	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			