

2.7) TABLE OF NQM REGISTERS

The following table shown all the NQM registers.

MEASURED VALUES (Function code \$ 03)

Register HEX	Word	Reg. (IEEE) HEX	Word	Description	M.U.	Type
\$1000	4	\$2000	2	3-PHASE SYSTEM VOLTAGE	[mV]	(Uns.) MSB=0
\$1004	4	\$2002	2	PHASE VOLTAGE L _{1-N}	[mV]	(Unsigned)
\$1008	4	\$2004	2	PHASE VOLTAGE L _{2-N}	[mV]	(Unsigned)
\$100C	4	\$2006	2	PHASE VOLTAGE L _{3-N}	[mV]	(Unsigned)
\$1010	4	\$2008	2	LINE VOLTAGE L ₁₋₂	[mV]	(Unsigned)
\$1014	4	\$200A	2	LINE VOLTAGE L ₂₋₃	[mV]	(Unsigned)
\$1018	4	\$200C	2	LINE VOLTAGE L ₃₋₁	[mV]	(Unsigned)
\$101C	4	\$200E	2	3-PHASE SYSTEM CURRENT	[mA]	(Signed) MSB=1
\$1020	4	\$2010	2	LINE CURRENT L ₁	[mA]	(Signed)
\$1024	4	\$2012	2	LINE CURRENT L ₂	[mA]	(Signed)
\$1028	4	\$2014	2	LINE CURRENT L ₃	[mA]	(Signed)
\$102C	4	\$2016	2	3-PHASE SYS. POWER FACTOR	[-]	(Signed)
\$1030	4	\$2018	2	POWER FACTOR L ₁	[-]	(Signed)
\$1034	4	\$201A	2	POWER FACTOR L ₂	[-]	(Signed)
\$1038	4	\$201C	2	POWER FACTOR L ₃	[-]	(Signed)
\$103C	4	\$201E	2	3-PHASE SYSTEM COS ϕ	[-]	(Signed)
\$1040	4	\$2020	2	PHASE COS ϕ ₁	[-]	(Signed)
\$1044	4	\$2022	2	PHASE COS ϕ ₂	[-]	(Signed)
\$1048	4	\$2024	2	PHASE COS ϕ ₃	[-]	(Signed)
\$104C	4	\$2026	2	3-PHASE S. APPARENT POWER	[mVA]	(Signed)
\$1050	4	\$2028	2	APPARENT POWER L ₁	[mVA]	(Signed)
\$1054	4	\$202A	2	APPARENT POWER L ₂	[mVA]	(Signed)
\$1058	4	\$202C	2	APPARENT POWER L ₃	[mVA]	(Signed)
\$105C	4	\$202E	2	3-PHASE SYS. ACTIVE POWER	[mW]	(Signed)
\$1060	4	\$2030	2	ACTIVE POWER L ₁	[mW]	(Signed)
\$1064	4	\$2032	2	ACTIVE POWER L ₂	[mW]	(Signed)
\$1068	4	\$2034	2	ACTIVE POWER L ₃	[mW]	(Signed)
\$106C	4	\$2036	2	3-PHASE S. REACTIVE POWER	[mVAR]	(Signed)
\$1070	4	\$2038	2	REACTIVE POWER L ₁	[mVAR]	(Signed)
\$1074	4	\$203A	2	REACTIVE POWER L ₂	[mVAR]	(Signed)
\$1078	4	\$203C	2	REACTIVE POWER L ₃	[mVAR]	(Signed)
\$107C	4	\$203E	2	3-PHASE SYS. ACTIVE ENERGY+	[mWh]	(Unsigned)
\$1080	4	\$2040	2	3-PHASE S. REACTIVE ENERGY+	[mVARh]	(Unsigned)
\$1084	4	\$2042	2	3-PHASE SYS.ACTIVE EN.	[mWh]	(Unsigned)
\$1088	4	\$2044	2	3-PHASE SYS.REACT.EN.	[mVARh]	(Unsigned)
\$108C	4	\$2046	2	FREQUENCY	[mHz]	(Unsigned)
\$1090	4	\$2048	2	THD VOLTAGE L ₁	[m%]	(Unsigned)
\$1094	4	\$204 ^o	2	THD VOLTAGE L ₂	[m%]	(Unsigned)
\$1098	4	\$204C	2	THD VOLTAGE L ₃	[m%]	(Unsigned)
\$109C	4	\$204E	2	THD CURRENT L ₁	[m%]	(Unsigned)
\$10A0	4	\$2050	2	THD CURRENT L ₂	[m%]	(Unsigned)
\$10A4	4	\$2052	2	THD CURRENT L ₃	[m%]	(Unsigned)
\$10A8	4	\$2054	2	3-PHASE AVG. ACTIVE POWER	[mW]	(Unsigned)
\$10AC	4	\$2056	2	3-PHASE AVERAGE CURRENT	[mA]	(Unsigned)
N. A.		\$2A3A	2	NEUTRAL CURRENT	[-]	[-]
N. A.		\$2A3C	2	3 PHASE AVG. REACTIVE POWER	[-]	[-]
N. A.		\$2A40	2	AVERAGE LINE CURRENT L ₁	[-]	[-]
N. A.		\$2A42	2	AVERAGE LINE CURRENT L ₂	[-]	[-]
N. A.		\$2A44	2	AVERAGE LINE CURRENT L ₃	[-]	[-]

NOTE: WHEN THE INSTRUMENT CAN'T MEASURE IT SEND 0000 AS VALUE.

MIN/MAX VALUES (Function code \$ 03)

Register HEX	Word	Reg. (IEEE) HEX	Word	Description	M.U.	Type
\$10B0	3	\$20B0	3	YY MM DD	[-]	(Unsigned)
\$10B3	3	\$20B3	3	HH MM SS	[-]	(Unsigned)
\$10B6	4	\$20B6	2	MIN 3-PHASE SYSTEM VOLTAGE	[mV]	(Unsigned)
\$10BA	3	\$20B8	3	YY MM DD	[-]	(Unsigned)
\$10BD	3	\$20BB	3	HH MM SS	[-]	(Unsigned)
\$10C0	4	\$20BE	2	MAX 3-PHASE SYSTEM VOLTAGE	[mV]	(Unsigned)
\$10C4	3	\$20C0	3	YY MM DD	[-]	(Unsigned)
\$10C7	3	\$20C3	3	HH MM SS	[-]	(Unsigned)
\$10CA	4	\$20C6	2	MIN 1-PHASE VOLTAGE L _{1-N}	[mV]	(Unsigned)
\$10CE	3	\$20C8	3	YY MM DD	[-]	(Unsigned)
\$10D1	3	\$20CB	3	HH MM SS	[-]	(Unsigned)
\$10D4	4	\$20CE	2	MAX 1-PHASE VOLTAGE L _{1-N}	[mV]	(Unsigned)
\$10D8	3	\$20D0	3	YY MM DD	[-]	(Unsigned)
\$10DB	3	\$20D3	3	HH MM SS	[-]	(Unsigned)
\$10DE	4	\$20D6	2	MIN 1-PHASE VOLTAGE L _{2-N}	[mV]	(Unsigned)
\$10E2	3	\$20D8	3	YY MM DD	[-]	(Unsigned)
\$10E5	3	\$20DB	3	HH MM SS	[-]	(Unsigned)
\$10E8	4	\$20DE	2	MAX 1-PHASE VOLTAGE L _{2-N}	[mV]	(Unsigned)
\$10EC	3	\$20E0	3	YY MM DD	[-]	(Unsigned)
\$10EF	3	\$20E3	3	HH MM SS	[-]	(Unsigned)
\$10F2	4	\$20E6	2	MINIMUM 1-PHASE VOLTAGE L _{3-N}	[mV]	(Unsigned)
\$10F6	3	\$20E8	3	YY MM DD	[-]	(Unsigned)
\$10F9	3	\$20EB	3	HH MM SS	[-]	(Unsigned)
\$10FC	4	\$20EE	2	MAXIMUM 1-PHASE VOLTAGE L _{3-N}	[mV]	(Unsigned)
\$1100	3	\$20F0	3	YY MM DD	[-]	(Unsigned)
\$1103	3	\$20F3	3	HH MM SS	[-]	(Unsigned)
\$1106	4	\$20F6	2	MIN 3-PHASE SYSTEM CURRENT	[mA]	(Signed)
\$110A	3	\$20F8	3	YY MM DD	[-]	(Unsigned)
\$110D	3	\$20FB	3	HH MM SS	[-]	(Unsigned)
\$1110	4	\$20FE	2	MAX 3-PHASE SYSTEM CURRENT	[mA]	(Signed)
\$1114	3	\$2100	3	YY MM DD	[-]	(Unsigned)
\$1117	3	\$2103	3	HH MM SS	[-]	(Unsigned)
\$111A	4	\$2106	2	MINIMUM LINE CURRENT L ₁	[mA]	(Signed)
\$111E	3	\$2108	3	YY MM DD	[-]	(Unsigned)
\$1121	3	\$210B	3	HH MM SS	[-]	(Unsigned)
\$1124	4	\$210E	2	MAXIMUM LINE CURRENT L ₁	[mA]	(Signed)
\$1128	3	\$2110	3	YY MM DD	[-]	(Unsigned)
\$112B	3	\$2113	3	HH MM SS	[-]	(Unsigned)
\$112E	4	\$2116	2	MINIMUM LINE CURRENT L ₂	[mA]	(Signed)
\$1132	3	\$2118	3	YY MM DD	[-]	(Unsigned)
\$1135	3	\$211B	3	HH MM SS	[-]	(Unsigned)
\$1138	4	\$211E	2	MAXIMUM LINE CURRENT L ₂	[mA]	(Signed)
\$113C	3	\$2120	3	YY MM DD	[-]	(Unsigned)
\$113F	3	\$2123	3	HH MM SS	[-]	(Unsigned)
\$1142	4	\$2126	2	MINIMUM LINE CURRENT L ₃	[mA]	(Signed)
\$1146	3	\$2128	3	YY MM DD	[-]	(Unsigned)
\$1149	3	\$212B	3	HH MM SS	[-]	(Unsigned)
\$114C	4	\$212E	2	MAXIMUM LINE CURRENT L ₃	[mA]	(Signed)
\$1150	3	\$2130	3	YY MM DD	[-]	(Unsigned)
\$1153	3	\$2133	3	HH MM SS	[-]	(Unsigned)
\$1156	4	\$2136	2	MIN.3 PHASE SYS. ACTIVE POWER	[mW]	(Signed)
\$115A	3	\$2138	3	YY MM DD	[-]	(Unsigned)
\$115D	3	\$213B	3	HH MM SS	[-]	(Unsigned)
\$1160	4	\$213E	2	MAX.3 PHASE SYS.ACTIVE POWER	[mW]	(Signed)
\$1164	3	\$2140	3	YY MM DD	[-]	(Unsigned)
\$1167	3	\$2143	3	HH MM SS	[-]	(Unsigned)
\$116A	4	\$2146	2	MIN.3 PHASE S.APPARENT POWER	[mVA]	(Signed)

\$116E	3	\$2148	3	YY MM DD	[-]	(Unsigned)
\$1171	3	\$214B	3	HH MM SS	[-]	(Unsigned)
\$1174	4	\$214E	2	MAX.3 PHASE S.APPARENT POWER	[mVA]	(Signed)
\$1178	3	\$2150	3	YY MM DD	[-]	(Unsigned)
\$117B	3	\$2153	3	HH MM SS	[-]	(Unsigned)
\$117E	4	\$2156	2	MIN.3 PHASE S..POWER FACTOR	[-]	(Signed)
\$1182	3	\$2158	3	YY MM DD	[-]	(Unsigned)
\$1185	3	\$215B	3	HH MM SS	[-]	(Unsigned)
\$1188	4	\$215E	2	MAX.3 PHASE S..POWER FACTOR	[-]	(Signed)
\$118C	3	\$2160	3	YY MM DD	[-]	(Unsigned)
\$118F	3	\$2163	3	HH MM SS	[-]	(Unsigned)
\$1192	4	\$2166	2	MIN.3 PHASE AVERAGE POWER	[mW]	(Unsigned)
\$1196	3	\$2168	3	YY MM DD	[-]	(Unsigned)
\$1199	3	\$216B	3	HH MM SS	[-]	(Unsigned)
\$119C	4	\$216E	2	MAX 3 PHASE AVERAGE POWER	[mW]	(Unsigned)

HARMONICS VALUES (Function code \$03)

Register HEX	Word	Reg. (IEEE) HEX	Word	Description	M.U.	Type
\$1200	4	\$2200	2	1 ST VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1204	4	\$2202	2	2 ND VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1208	4	\$2204	2	3 RD VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$120C	4	\$2206	2	4 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1210	4	\$2208	2	5 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1214	4	\$220A	2	6 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1218	4	\$220C	2	7 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$121C	4	\$220E	2	8 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1220	4	\$2210	2	9 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1224	4	\$2212	2	10 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1228	4	\$2214	2	11 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$122C	4	\$2216	2	12 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1230	4	\$2218	2	13 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1234	4	\$221A	2	14 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1238	4	\$221C	2	15 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$123C	4	\$221E	2	16 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1240	4	\$2220	2	17 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1244	4	\$2222	2	18 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1248	4	\$2224	2	19 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$124C	4	\$2226	2	20 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1250	4	\$2228	2	21 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1254	4	\$222A	2	22 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1258	4	\$222C	2	23 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$125C	4	\$222E	2	24 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1260	4	\$2230	2	25 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1460	4	\$2400	2	26 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1464	4	\$2402	2	27 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1468	4	\$2404	2	28 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$146C	4	\$2406	2	29 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1470	4	\$2408	2	30 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1474	4	\$240A	2	31 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)

\$1264	4	\$2232	2	1 ST VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1268	4	\$2234	2	2 ND VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$126C	4	\$2236	2	3 RD VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1270	4	\$2238	2	4 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1274	4	\$223A	2	5 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1278	4	\$223C	2	6 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$127C	4	\$223E	2	7 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1280	4	\$2240	2	8 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1284	4	\$2242	2	9 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1288	4	\$2244	2	10 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$128C	4	\$2246	2	11 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1290	4	\$2248	2	12 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1294	4	\$224A	2	13 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1298	4	\$224C	2	14 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$129C	4	\$224E	2	15 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$12A0	4	\$2250	2	16 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$12A4	4	\$2252	2	17 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$12A8	4	\$2254	2	18 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$12AC	4	\$2256	2	19 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$12B0	4	\$2258	2	20 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$12B4	4	\$225A	2	21 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$12B8	4	\$225C	2	22 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$12BC	4	\$225E	2	23 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$12C0	4	\$2260	2	24 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$12C4	4	\$2262	2	25 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1478	4	\$240C	2	26 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$147C	4	\$240E	2	27 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1480	4	\$2410	2	28 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1484	4	\$2412	2	29 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1488	4	\$2414	2	30 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$148C	4	\$2416	2	31 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)

\$12C8	4	\$2264	2	1 ST VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$12CC	4	\$2266	2	2 ND VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$12D0	4	\$2268	2	3 RD VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$12D4	4	\$226A	2	4 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$12D8	4	\$226C	2	5 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$12DC	4	\$226E	2	6 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$12E0	4	\$2270	2	7 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$12E4	4	\$2272	2	8 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$12E8	4	\$2274	2	9 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$12EC	4	\$2276	2	10 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$12F0	4	\$2278	2	11 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$12F4	4	\$227A	2	12 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$12F8	4	\$227C	2	13 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$12FC	4	\$227E	2	14 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1300	4	\$2280	2	15 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1304	4	\$2282	2	16 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1308	4	\$2284	2	17 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$130C	4	\$2286	2	18 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1310	4	\$2288	2	19 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1314	4	\$228A	2	20 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1318	4	\$228C	2	21 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$131C	4	\$228E	2	22 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1320	4	\$2290	2	23 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1324	4	\$2292	2	24 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1328	4	\$2294	2	25 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1490	4	\$2418	2	26 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1494	4	\$241A	2	27 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1498	4	\$241C	2	28 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$149C	4	\$241E	2	29 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$14A0	4	\$2420	2	30 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$14A4	4	\$2422	2	31 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)

\$132C	4	\$2296	2	1 ST CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1330	4	\$2298	2	2 ND CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1334	4	\$229A	2	3 RD CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1338	4	\$229C	2	4 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$133C	4	\$229E	2	5 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1340	4	\$22A0	2	6 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1344	4	\$22A2	2	7 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1348	4	\$22A4	2	8 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$134C	4	\$22A6	2	9 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1350	4	\$22A8	2	10 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1354	4	\$22AA	2	11 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1358	4	\$22AC	2	12 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$135C	4	\$22AE	2	13 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1360	4	\$22B0	2	14 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1364	4	\$22B2	2	15 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1368	4	\$22B4	2	16 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$136C	4	\$22B6	2	17 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1370	4	\$22B8	2	18 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1374	4	\$22BA	2	19 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1378	4	\$22BC	2	20 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$137C	4	\$22BE	2	21 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1380	4	\$22C0	2	22 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1384	4	\$22C2	2	23 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1388	4	\$22C4	2	24 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$138C	4	\$22C6	2	25 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$14A8	4	\$2424	2	26 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$14AC	4	\$2426	2	27 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$14B0	4	\$2428	2	28 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$14B4	4	\$242A	2	29 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$14B8	4	\$242C	2	30 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$14BC	4	\$242E	2	31 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)

\$1390	4	\$22C8	2	1 ST CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1394	4	\$22CA	2	2 ND CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1398	4	\$22CC	2	3 RD CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$139C	4	\$22CE	2	4 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$13A0	4	\$22D0	2	5 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$13A4	4	\$22D2	2	6 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$13A8	4	\$22D4	2	7 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$13AC	4	\$22D6	2	8 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$13B0	4	\$22D8	2	9 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$13B4	4	\$22DA	2	10 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$13B8	4	\$22DC	2	11 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$13BC	4	\$22DE	2	12 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$13C0	4	\$22E0	2	13 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$13C4	4	\$22E2	2	14 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$13C8	4	\$22E4	2	15 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$13CC	4	\$22E6	2	16 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$13D0	4	\$22E8	2	17 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$13D4	4	\$22EA	2	18 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$13D8	4	\$22EC	2	19 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$13DC	4	\$22EE	2	20 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$13E0	4	\$22F0	2	21 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$13E4	4	\$22F2	2	22 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$13E8	4	\$22F4	2	23 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$13EC	4	\$22F6	2	24 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1400	4	\$22F8	2	25 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$14C0	4	\$2430	2	26 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$14C4	4	\$2432	2	27 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$14C8	4	\$2434	2	28 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$14CC	4	\$2436	2	29 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$14D0	4	\$2438	2	30 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$14D4	4	\$243A	2	31 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)

\$13F4	4	\$22FA	2	1 ST CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$13F8	4	\$22FC	2	2 ND CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$13FC	4	\$22FE	2	3 RD CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$13F0	4	\$2300	2	4 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1404	4	\$2302	2	5 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1408	4	\$2304	2	6 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$140C	4	\$2306	2	7 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1410	4	\$2308	2	8 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1414	4	\$230A	2	9 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1418	4	\$230C	2	10 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$141C	4	\$230E	2	11 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1420	4	\$2310	2	12 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1424	4	\$2312	2	13 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1428	4	\$2314	2	14 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$142C	4	\$2316	2	15 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1430	4	\$2318	2	16 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1434	4	\$231A	2	17 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1438	4	\$231C	2	18 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$143C	4	\$231E	2	19 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1440	4	\$2320	2	20 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1444	4	\$2322	2	21 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1448	4	\$2324	2	22 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$144C	4	\$2326	2	23 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1450	4	\$2328	2	24 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1454	4	\$232A	2	25 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$14D8	4	\$243C	2	26 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$14DC	4	\$243E	2	27 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$14E0	4	\$2440	2	28 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$14E4	4	\$2442	2	29 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$14E8	4	\$2444	2	30 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$14EC	4	\$2446	2	31 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)

TIME BAND ENERGY COUNTER (FUNCTION CODE \$03)

Register HEX	Word	Reg. (IEEE) HEX	Word	Description	M.U.	Type
\$1500	4	\$2500	2	Acquired active energy previous month band 1	[mWh]	(Unsigned)
\$1504	4	\$2502	2	Inductive reactive energy previous month band 1	[mVArh]	(Unsigned)
\$1508	4	\$2504	2	Transferred active energy previous month band 1	[mWh]	(Unsigned)
\$150C	4	\$2506	2	Capacitive reactive energy previous month band 1	[mVArh]	(Unsigned)
\$1510	4	\$2508	2	Acquired active energy previous month band 2	[mWh]	(Unsigned)
\$1514	4	\$250A	2	Inductive reactive energy previous month band 2	[mVArh]	(Unsigned)
\$1518	4	\$250C	2	Transferred active energy previous month band 2	[mWh]	(Unsigned)
\$151C	4	\$250E	2	Capacitive reactive energy previous month band 2	[mVArh]	(Unsigned)
\$1520	4	\$2510	2	Acquired active energy previous month band 3	[mWh]	(Unsigned)
\$1524	4	\$2512	2	Inductive reactive energy previous month band 3	[mVArh]	(Unsigned)
\$1528	4	\$2514	2	Transferred active energy previous month band 3	[mWh]	(Unsigned)
\$152C	4	\$2516	2	Capacitive reactive energy previous month band 3	[mVArh]	(Unsigned)
\$15C0	4	\$2560	2	Acquired active energy previous month band 4	[mWh]	(Unsigned)
\$15C4	4	\$2562	2	Inductive reactive energy previous month band 4	[mVArh]	(Unsigned)
\$15C8	4	\$2564	2	Transferred active energy previous month band 4	[mWh]	(Unsigned)
\$15CC	4	\$2566	2	Capacitive reactive energy previous month band 4	[mVArh]	(Unsigned)
\$1530	4	\$2518	2	Acquired active energy current month band 1	[mWh]	(Unsigned)
\$1534	4	\$251A	2	Inductive reactive energy current month band 1	[mVArh]	(Unsigned)
\$1538	4	\$251C	2	Transferred active energy current month band 1	[mWh]	(Unsigned)
\$153C	4	\$251E	2	Capacitive reactive energy current month band 1	[mVArh]	(Unsigned)
\$1540	4	\$2520	2	Acquired active energy current month band 2	[mWh]	(Unsigned)
\$1544	4	\$2522	2	Inductive reactive energy current month band 2	[mVArh]	(Unsigned)
\$1548	4	\$2524	2	Transferred active energy current month band 2	[mWh]	(Unsigned)
\$154C	4	\$2526	2	Capacitive reactive energy current month band 2	[mVArh]	(Unsigned)
\$1550	4	\$2528	2	Acquired active energy current month band 3	[mWh]	(Unsigned)
\$1554	4	\$252A	2	Inductive reactive energy current month band 3	[mVArh]	(Unsigned)
\$1558	4	\$252C	2	Transferred active energy current month band 3	[mWh]	(Unsigned)
\$155C	4	\$252E	2	Capacitive reactive energy current month band 3	[mVArh]	(Unsigned)
\$15D0	4	\$2568	2	Acquired active energy current month band 4	[mWh]	(Unsigned)
\$15D4	4	\$256A	2	Inductive reactive energy current month band 4	[mVArh]	(Unsigned)
\$15D8	4	\$256C	2	Transferred active energy current month band 4	[mWh]	(Unsigned)
\$15DC	4	\$256E	2	Capacitive reactive energy current month band 4	[mVArh]	(Unsigned)
\$1560	4	\$2530	2	Acquired active energy previous day band 1	[mWh]	(Unsigned)
\$1564	4	\$2532	2	Inductive reactive energy previous day band 1	[mVArh]	(Unsigned)
\$1568	4	\$2534	2	Transferred active energy previous day band 1	[mWh]	(Unsigned)
\$156C	4	\$2536	2	Capacitive reactive energy previous day band 1	[mVArh]	(Unsigned)
\$1570	4	\$2538	2	Acquired active energy previous day band 2	[mWh]	(Unsigned)
\$1574	4	\$253A	2	Inductive reactive energy previous day band 2	[mVArh]	(Unsigned)
\$1578	4	\$253C	2	Transferred active energy previous day band 2	[mWh]	(Unsigned)
\$157C	4	\$253E	2	Capacitive reactive energy previous day band 2	[mVArh]	(Unsigned)
\$1580	4	\$2540	2	Acquired active energy previous day band 3	[mWh]	(Unsigned)
\$1584	4	\$2542	2	Inductive reactive energy previous day band 3	[mVArh]	(Unsigned)
\$1588	4	\$2544	2	Transferred active energy previous day band 3	[mWh]	(Unsigned)
\$158C	4	\$2546	2	Capacitive reactive energy previous day band 3	[mVArh]	(Unsigned)
\$15E0	4	\$2570	2	Acquired active energy previous day band 4	[mWh]	(Unsigned)
\$15E4	4	\$2572	2	Inductive reactive energy previous day band 4	[mVArh]	(Unsigned)
\$15E8	4	\$2574	2	Transferred active energy previous day band 4	[mWh]	(Unsigned)
\$15EC	4	\$2576	2	Capacitive reactive energy previous day band 4	[mVArh]	(Unsigned)
\$1590	4	\$2548	2	Acquired active energy current day band 1	[mWh]	(Unsigned)
\$1594	4	\$254A	2	Inductive reactive energy current day band 1	[mVArh]	(Unsigned)
\$1598	4	\$254C	2	Transferred active energy current day band 1	[mWh]	(Unsigned)
\$159C	4	\$254E	2	Capacitive reactive energy current day band 1	[mVArh]	(Unsigned)
\$15A0	4	\$2550	2	Acquired active energy current day band 2	[mWh]	(Unsigned)
\$15A4	4	\$2552	2	Inductive reactive energy current day band 2	[mVArh]	(Unsigned)
\$15A8	4	\$2554	2	Transferred active energy current day band 2	[mWh]	(Unsigned)

\$15AC	4	\$2556	2	Capacitive reactive energy current day band 2	[mVArh]	(Unsigned)
\$15B0	4	\$2558	2	Acquired active energy current day band 3	[mWh]	(Unsigned)
\$15B4	4	\$255A	2	Inductive reactive energy current day band 3	[mVArh]	(Unsigned)
\$15B8	4	\$255C	2	Transferred active energy current day band 3	[mWh]	(Unsigned)
\$15BC	4	\$255E	2	Capacitive reactive energy current day band 3	[mVArh]	(Unsigned)
\$15F0	4	\$2570	2	Acquired active energy current day band 4	[mWh]	(Unsigned)
\$15F4	4	\$2572	2	Inductive reactive energy current day band 4	[mVArh]	(Unsigned)
\$15F8	4	\$2574	2	Transferred active energy current day band 4	[mWh]	(Unsigned)
\$15FC	4	\$2576	2	Capacitive reactive energy current day band 4	[mVArh]	(Unsigned)

\$1F80	4	\$2FA0	2	Acquired active energy previous year band 1	[mWh]	(Unsigned)
\$1F84	4	\$2FA2	2	Inductive reactive energy previous year band 1	[mVArh]	(Unsigned)
\$1F88	4	\$2FA4	2	Transferred active energy previous year band 1	[mWh]	(Unsigned)
\$1F8C	4	\$2FA6	2	Capacitive reactive energy previous year band 1	[mVArh]	(Unsigned)
\$1F90	4	\$2FA8	2	Acquired active energy previous year band 2	[mWh]	(Unsigned)
\$1F94	4	\$2FAA	2	Inductive reactive energy previous year band 2	[mVArh]	(Unsigned)
\$1F98	4	\$2FAC	2	Transferred active energy previous year band 2	[mWh]	(Unsigned)
\$1F9C	4	\$2FAE	2	Capacitive reactive energy previous year band 2	[mVArh]	(Unsigned)
\$1FA0	4	\$2FB0	2	Acquired active energy previous year band 3	[mWh]	(Unsigned)
\$1FA4	4	\$2FB2	2	Inductive reactive energy previous year band 3	[mVArh]	(Unsigned)
\$1FA8	4	\$2FB4	2	Transferred active energy previous year band 3	[mWh]	(Unsigned)
\$1FAC	4	\$2FB6	2	Capacitive reactive energy previous year band 3	[mVArh]	(Unsigned)
\$1FB0	4	\$2FB8	2	Acquired active energy previous year band 4	[mWh]	(Unsigned)
\$1FB4	4	\$2FBA	2	Inductive reactive energy previous year band 4	[mVArh]	(Unsigned)
\$1FB8	4	\$2FBC	2	Transferred active energy previous year band 4	[mWh]	(Unsigned)
\$1FBC	4	\$2FBE	2	Capacitive reactive energy previous year band 4	[mVArh]	(Unsigned)

\$1FC0	4	\$2FC0	2	Acquired active energy current year band 1	[mWh]	(Unsigned)
\$1FC4	4	\$2FC2	2	Inductive reactive energy current year band 1	[mVArh]	(Unsigned)
\$1FC8	4	\$2FC4	2	Transferred active energy current year band 1	[mWh]	(Unsigned)
\$1FCC	4	\$2FC6	2	Capacitive reactive energy current year band 1	[mVArh]	(Unsigned)
\$1FD0	4	\$2FC8	2	Acquired active energy current year band 2	[mWh]	(Unsigned)
\$1FD4	4	\$2FCA	2	Inductive reactive energy current year band 2	[mVArh]	(Unsigned)
\$1FD8	4	\$2FCC	2	Transferred active energy current year band 2	[mWh]	(Unsigned)
\$1FDC	4	\$2FCE	2	Capacitive reactive energy current year band 2	[mVArh]	(Unsigned)
\$1FE0	4	\$2FD0	2	Acquired active energy current year band 3	[mWh]	(Unsigned)
\$1FE4	4	\$2FD2	2	Inductive reactive energy current year band 3	[mVArh]	(Unsigned)
\$1FE8	4	\$2FD4	2	Transferred active energy current year band 3	[mWh]	(Unsigned)
\$1FEC	4	\$2FD6	2	Capacitive reactive energy current year band 3	[mVArh]	(Unsigned)
\$1FF0	4	\$2FD8	2	Acquired active energy current year band 4	[mWh]	(Unsigned)
\$1FF4	4	\$2FDA	2	Inductive reactive energy current year band 4	[mVArh]	(Unsigned)
\$1FF8	4	\$2FDC	2	Transferred active energy current year band 4	[mWh]	(Unsigned)
\$1FFC	4	\$2FDE	2	Capacitive reactive energy current year band 4	[mVArh]	(Unsigned)

TOTAL TIME BAND ENERGY COUNTER- Double format (Function code \$03)

N.A.		\$2A60	4	Total Acquired active energy band 1	[-]	(Unsigned)
N.A.		\$2A64	4	Total Transferred active energy band 1	[-]	(Unsigned)
N.A.		\$2A68	4	Total Inductive reactive energy band 1	[-]	(Unsigned)
N.A.		\$2A6C	4	Total Capacitive reactive energy band 1	[-]	(Unsigned)
N.A.		\$2A70	4	Total Acquired active energy band 2	[-]	(Unsigned)
N.A.		\$2A74	4	Total Transferred active energy band 2	[-]	(Unsigned)
N.A.		\$2A78	4	Total Inductive reactive energy band 2	[-]	(Unsigned)
N.A.		\$2A7C	4	Total Capacitive reactive energy band 2	[-]	(Unsigned)
N.A.		\$2A80	4	Total Acquired active energy band 3	[-]	(Unsigned)
N.A.		\$2A84	4	Total Transferred active energy band 3	[-]	(Unsigned)
N.A.		\$2A88	4	Total Inductive reactive energy band 3	[-]	(Unsigned)
N.A.		\$2A8C	4	Total Capacitive reactive energy band 3	[-]	(Unsigned)
N.A.		\$2A90	4	Total Acquired active energy band 4	[-]	(Unsigned)
N.A.		\$2A94	4	Total Transferred active energy band 4	[-]	(Unsigned)
N.A.		\$2A98	4	Total Inductive reactive energy band 4	[-]	(Unsigned)
N.A.		\$2A9C	4	Total Capacitive reactive energy band 4	[-]	(Unsigned)

VALUES STORED IN RAM (Function.code \$03)

Register HEX	Word	Reg. (IEEE) HEX	Word	Description	M.U.	Type
\$1600	1	\$2600	1	LOGICAL NUMBER	[-]	(Unsigned)
\$1601	3	\$2601	3	YYMMDD	[-]	(Unsigned)
\$1604	1	\$2604	1	nn= order no. of 15'energy value stored in a day	[-]	(Unsigned)
\$1605	4	\$2605	2	ACTIVE 15'	[mWh]	(Unsigned)
\$1609	4	\$2607	2	REACTIVE 15'	[mVarh]	(Unsigned)

MIN/MAX VALUES STORED IN RAM (Function.code \$03)

HEADER

Register HEX	Word	Reg. (IEEE) HEX	Word	Description	U.M.	Type
\$1B30	3	\$2B30	3	YY MM DD	[-]	(Unsigned)
\$1B33	3	\$2B33	3	HH MM SS	[-]	(Unsigned)
\$1B36	1	\$2B36	1	time of mem	[min]	(Unsigned)

1st DATA BLOCK

Register HEX	Word	Reg. (IEEE) HEX	Word	Description	U.M.	Type
\$1B47	4	\$2B47	4	Block num.(2 word) + \$0 (1 word) + Block full of 0=NO/1=Yes (1 word)		
\$1B4B	4	\$2B4B	2	MIN 3-PHASE SYSTEM VOLTAGE	[mV]	(Unsigned)
\$1B4F	4	\$2B4D	2	MAX 3-PHASE SYSTEM VOLTAGE	[mV]	(Unsigned)
\$1B53	4	\$2B4F	2	MIN PHASE VOLTAGE L _{1-N}	[mV]	(Unsigned)
\$1B57	4	\$2B51	2	MAX PHASE VOLTAGE L _{1-N}	[mV]	(Unsigned)
\$1B5B	4	\$2B53	2	MIN PHASE VOLTAGE L _{2-N}	[mV]	(Unsigned)
\$1B5F	4	\$2B55	2	MAX PHASE VOLTAGE L _{2-N}	[mV]	(Unsigned)
\$1B63	4	\$2B57	2	MIN PHASE VOLTAGE L _{3-N}	[mV]	(Unsigned)
\$1B67	4	\$2B59	2	MAX PHASE VOLTAGE L _{3-N}	[mV]	(Unsigned)
\$1B6B	4	\$2B5B	2	MIN 3-PHASE SYSTEM CURRENT	[mA]	(Signed)
\$1B6F	4	\$2B5D	2	MAX 3-PHASE SYSTEM CURRENT	[mA]	(Signed)
\$1B73	4	\$2B5F	2	MIN LINE CURRENT L ₁	[mA]	(Signed)
\$1B77	4	\$2B61	2	MAX LINE CURRENT L ₁	[mA]	(Signed)
\$1B7B	4	\$2B63	2	MIN LINE CURRENT L ₂	[mA]	(Signed)
\$1B7F	4	\$2B65	2	MAX LINE CURRENT L ₂	[mA]	(Signed)
\$1B83	4	\$2B67	2	MIN LINE CURRENT L ₃	[mA]	(Signed)
\$1B87	4	\$2B69	2	MAX LINE CURRENT L ₃	[mA]	(Signed)
\$1B8B	4	\$2B6B	2	MIN 3 PHASE SYSTEM ACTIVE POWER	[mW]	(Signed)
\$1B8F	4	\$2B6D	2	MAX 3 PHASE SYSTEM ACTIVE POWER	[mW]	(Signed)
\$1B93	4	\$2B6F	2	MIN 3 PHASE SYSTEM REACTIVE POWER	[mW]	(Signed)
\$1B97	4	\$2B71	2	MAX 3 PHASE SYSTEM REACTIVE POWER	[mW]	(Signed)
\$1B9B	4	\$2B73	2	MIN 3 PHASE SYSTEM POWER FACTOR	[-]	(Signed)
\$1B9F	4	\$2B75	2	MAX 3 PHASE SYSTEM POWER FACTOR	[-]	(Signed)
\$1BA3	4	\$2B77	2	MIN 3 PHASE SYSTEM AVERAGE POWER	[mW]	(Signed)
\$1BA7	4	\$2B79	2	MAX 3 PHASE SYSTEM AVERAGE POWER	[mW]	(Signed)

2ND DATA BLOCK

Register HEX	Word	Reg. (IEEE) HEX	Word	Description	U.M.	Type
\$1BAB	4	\$2B7B	4	Block num.(2 word) + \$0 (1 word) + Block full of 0=NO/1=Yes (1 word)		
\$1BAF	4	\$2B7F	2	MIN 3 PHASE SYSTEM VOLTAGE	[mV]	(Unsigned)
\$1BB3	4	\$2B81	2	MAX 3 PHASE SYSTEM VOLTAGE	[mV]	(Unsigned)
\$1BB7	4	\$2B83	2	MIN PHASE VOLTAGE L _{1-N}	[mV]	(Unsigned)
\$1BBB	4	\$2B85	2	MAX PHASE VOLTAGE L _{1-N}	[mV]	(Unsigned)
\$1BBF	4	\$2B87	2	MIN PHASE VOLTAGE L _{2-N}	[mV]	(Unsigned)
\$1BC3	4	\$2B89	2	MAX PHASE VOLTAGE L _{2-N}	[mV]	(Unsigned)
\$1BC7	4	\$2B8B	2	MIN PHASE VOLTAGE L _{3-N}	[mV]	(Unsigned)
\$1BCB	4	\$2B8D	2	MAX PHASE VOLTAGE L _{3-N}	[mV]	(Unsigned)
\$1BCF	4	\$2B8F	2	MIN 3-PHASE SYSTEM CURRENT	[mA]	(Signed)
\$1BD3	4	\$2B91	2	MAX 3-PHASE SYSTEM CURRENT	[mA]	(Signed)
\$1BD7	4	\$2B93	2	MIN LINE CURRENT L ₁	[mA]	(Signed)
\$1BDB	4	\$2B95	2	MAX LINE CURRENT L ₁	[mA]	(Signed)
\$1BDF	4	\$2B97	2	MIN LINE CURRENT L ₂	[mA]	(Signed)
\$1BE3	4	\$2B99	2	MAX LINE CURRENT L ₂	[mA]	(Signed)
\$1BE7	4	\$2B9B	2	MIN LINE CURRENT L ₃	[mA]	(Signed)
\$1BEB	4	\$2B9D	2	MAX LINE CURRENT L ₃	[mA]	(Signed)
\$1BEF	4	\$2B9F	2	MIN 3-PHASE SYSTEM ACTIVE POWER	[mW]	(Signed)
\$1BF3	4	\$2BA1	2	MAX 3-PHASE SYSTEM ACTIVE POWER	[mW]	(Signed)
\$1BF7	4	\$2BA3	2	MIN 3-PHASE SYSTEM REACTIVE POWER	[mW]	(Signed)
\$1BFB	4	\$2BA5	2	MAX 3-PHASE SYSTEM REACTIVE POWER	[mW]	(Signed)
\$1BFF	4	\$2BA7	2	MIN 3-PHASE SYSTEM POWER FACTOR	[-]	(Signed)
\$1C03	4	\$2BA9	2	MAX 3-PHASE SYSTEM POWER FACTOR	[-]	(Signed)
\$1C07	4	\$2BAB	2	MIN 3-PHASE SYSTEM AVERAGE POWER	[mW]	(Signed)
\$1C0B	4	\$2BAD	2	MAX 3-PHASE SYSTEM AVERAGE POWER	[mW]	(Signed)

3RD10TH DATA BLOCK

(3RD DATA BLOCK)

Register HEX	Word	Reg. (IEEE) HEX	Word	Description	U.M.	Type
\$1C0F	4	\$2BAF	4	Block num.(2 word) + \$0 (1 word) + Block full of 0=NO/1=Yes (1 word)		
.....
\$1C6F	4	\$2BE1	2	MAX 3-PHASE SYSTEM AVERAGE POWER	[mW]	(Signed)

(4TH DATA BLOCK)

Register HEX	Word	Reg. (IEEE) HEX	Word	Description	U.M.	Type
\$1C73	4	\$2BE3	4	Block num.(2 word) + \$0 (1 word) + Block full of 0=NO/1=Yes (1 word)		
.....
\$1CD3	4	\$2C15	2	MAX 3-PHASE SYSTEM AVERAGE POWER	[mW]	(Signed)

(5TH DATA BLOCK)

Register HEX	Word	Reg. (IEEE) HEX	Word	Description	U.M.	Type
\$1CD7	4	\$2C17	4	Block num.(2 word) + \$0 (1 word) + Block full of 0=NO/1=Yes (1 word)		
.....
.....
\$1D37	4	\$2C49	2	MAX 3-PHASE SYSTEM AVERAGE POWER	[mW]	(Signed)

(6TH DATA BLOCK)

Register HEX	Word	Reg. (IEEE) HEX	Word	Description	U.M.	Type
\$1D3B	4	\$2C4B	4	Block num.(2 word) + \$0 (1 word) + Block full of 0=NO/1=Yes (1 word)		
.....
.....
\$1D9B	4	\$2C7D	2	MAX 3-PHASE SYSTEM AVERAGE POWER	[mW]	(Signed)

(7TH DATA BLOCK)

Register HEX	Word	Reg. (IEEE) HEX	Word	Description	U.M.	Type
\$1D9F	4	\$2C7F	4	Block num.(2 word) + \$0 (1 word) + Block full of 0=NO/1=Yes (1 word)		
.....
.....
\$1DFF	4	\$2CB1	2	MAX 3-PHASE SYSTEM AVERAGE POWER	[mW]	(Signed)

(8TH DATA BLOCK)

Register HEX	Word	Reg. (IEEE) HEX	Word	Description	U.M.	Type
\$1E03	4	\$2CB3	4	Block num.(2 word) + \$0 (1 word) + Block full of 0=NO/1=Yes (1 word)		
.....
.....
\$1E63	4	\$2CE5	2	MAX 3-PHASE SYSTEM AVERAGE POWER	[mW]	(Signed)

(9TH DATA BLOCK)

Register HEX	Word	Reg. (IEEE) HEX	Word	Description	U.M.	Type
\$1E67	4	\$2CE7	4	Block num.(2 word) + \$0 (1 word) + Block full of 0=NO/1=Yes (1 word)		
.....
.....
\$1EC7	4	\$2D19	2	MAX 3-PHASE SYSTEM AVERAGE POWER	[mW]	(Signed)

(10TH DATA BLOCK)

Register HEX	Word	Reg. (IEEE) HEX	Word	Description	U.M.	Type
\$1ECB	4	\$2D1B	4	Block num.(2 word) + \$0 (1 word) + Block full of 0=NO/1=Yes (1 word)		
.....
.....
\$1F2B	4	\$2D4D	2	MAX 3-PHASE SYSTEM AVERAGE POWER	[mW]	(Signed)

HARMONICS VALUES STORED IN RAM (Function code \$03)

Register HEX	Word	Reg. (IEEE) HEX	Word	Description	M.U.	Type
\$1660	1	\$2660	1	LOGICAL NUMBER	[-]	(Unsigned)
\$1661	3	\$2661	3	YY MM DD	[-]	(Unsigned)
\$1664	1	\$2664	1	nn=order number of 15' in a day	[-]	(Unsigned)
\$1665	4	\$2665	2	1 ST VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1669	4	\$2667	2	2 ND VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$166D	4	\$2669	2	3 RD VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1671	4	\$266B	2	4 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1675	4	\$266D	2	5 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1679	4	\$266F	2	6 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$167D	4	\$2671	2	7 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1681	4	\$2673	2	8 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1685	4	\$2675	2	9 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1689	4	\$2677	2	10 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$168D	4	\$2679	2	11 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1691	4	\$267B	2	12 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1695	4	\$267D	2	13 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1699	4	\$267F	2	14 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$169D	4	\$2681	2	15 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$16A1	4	\$2683	2	16 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$16A5	4	\$2685	2	17 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$16A9	4	\$2687	2	18 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$16AD	4	\$2689	2	19 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$16B1	4	\$268B	2	20 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$16B5	4	\$268D	2	21 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$16B9	4	\$268F	2	22 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$16BD	4	\$2691	2	23 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$16C1	4	\$2693	2	24 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$16C5	4	\$2695	2	25 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1900	4	\$2800	2	26 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1904	4	\$2802	2	27 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1908	4	\$2804	2	28 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$190C	4	\$2806	2	29 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1910	4	\$2808	2	30 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1914	4	\$280A	2	31 TH VOLTAGE HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$16C9	4	\$2697	2	1 ST VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$16CD	4	\$2699	2	2 ND VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$16D1	4	\$269B	2	3 RD VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$16D5	4	\$269D	2	4 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$16D9	4	\$269F	2	5 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$16DD	4	\$26A1	2	6 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$16E1	4	\$26A3	2	7 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$16E5	4	\$26A5	2	8 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$16E9	4	\$26A7	2	9 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$16ED	4	\$26A9	2	10 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$16F1	4	\$26AB	2	11 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$16F5	4	\$26AD	2	12 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$16F9	4	\$26AF	2	13 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$16FD	4	\$26B1	2	14 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1701	4	\$26B3	2	15 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1705	4	\$26B5	2	16 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1709	4	\$26B7	2	17 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$170D	4	\$26B9	2	18 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1711	4	\$26BB	2	19 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1715	4	\$26BD	2	20 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1719	4	\$26BF	2	21 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$171D	4	\$26C1	2	22 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1711	4	\$26C3	2	23 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)

\$1725	4	\$26C5	2	24 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1729	4	\$26C7	2	25 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1918	4	\$280C	2	26 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$191C	4	\$280E	2	27 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1920	4	\$2810	2	28 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1924	4	\$2812	2	29 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1928	4	\$2814	2	30 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$192C	4	\$2816	2	31 TH VOLTAGE HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)

\$172D	4	\$26C9	2	1 ST VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1731	4	\$26CB	2	2 ND VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1735	4	\$26CD	2	3 RD VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1739	4	\$26CF	2	4 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$173D	4	\$26D1	2	5 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1741	4	\$26D3	2	6 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1745	4	\$26D5	2	7 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1749	4	\$26D7	2	8 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$174D	4	\$26D9	2	9 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1751	4	\$26DB	2	10 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1755	4	\$26DD	2	11 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1759	4	\$26DF	2	12 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$175D	4	\$26E1	2	13 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1761	4	\$26E3	2	14 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1765	4	\$26E5	2	15 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1769	4	\$26E7	2	16 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$176D	4	\$26E9	2	17 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1771	4	\$26EB	2	18 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1775	4	\$26ED	2	19 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1779	4	\$26EF	2	20 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$177D	4	\$26F1	2	21 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1781	4	\$26F3	2	22 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1785	4	\$26F5	2	23 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1789	4	\$26F7	2	24 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$178D	4	\$26F9	2	25 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1930	4	\$2818	2	26 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1934	4	\$281A	2	27 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1938	4	\$281C	2	28 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$193C	4	\$281E	2	29 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1940	4	\$2820	2	30 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1944	4	\$2822	2	31 TH VOLTAGE HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)

\$1791	4	\$26FB	2	1 ST CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1795	4	\$26FD	2	2 ND CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1799	4	\$26FF	2	3 RD CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$179D	4	\$2701	2	4 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$17A1	4	\$2703	2	5 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$17A5	4	\$2705	2	6 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$17A9	4	\$2707	2	7 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$17AD	4	\$2709	2	8 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$17B1	4	\$270B	2	9 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$17B5	4	\$270D	2	10 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$17B9	4	\$270F	2	11 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$17BD	4	\$2711	2	12 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$17C1	4	\$2713	2	13 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$17C5	4	\$2715	2	14 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$17C9	4	\$2717	2	15 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$17CD	4	\$2719	2	16 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$17D1	4	\$271B	2	17 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$17D5	4	\$271D	2	18 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$17D9	4	\$271F	2	19 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$17DD	4	\$2721	2	20 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$17E1	4	\$2723	2	21 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$17E5	4	\$2725	2	22 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)

\$17E9	4	\$2727	2	23 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$17ED	4	\$2729	2	24 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$17F1	4	\$272B	2	25 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1948	4	\$2824	2	26 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$194C	4	\$2826	2	27 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1950	4	\$2828	2	28 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1954	4	\$282A	2	29 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$1958	4	\$282C	2	30 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)
\$195C	4	\$282E	2	31 TH CURRENT HARMONIC OF THE L ₁ PHASE	[%]	(Unsigned)

\$17F5	4	\$272D	2	1 ST CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$17F9	4	\$272F	2	2 ND CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$17FD	4	\$2731	2	3 RD CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1801	4	\$2733	2	4 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1805	4	\$2735	2	5 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1809	4	\$2737	2	6 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$180D	4	\$2739	2	7 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1811	4	\$273B	2	8 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1815	4	\$273D	2	9 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1819	4	\$273F	2	10 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$181D	4	\$2741	2	11 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1821	4	\$2743	2	12 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1825	4	\$2745	2	13 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1829	4	\$2747	2	14 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$182D	4	\$2749	2	15 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1831	4	\$274B	2	16 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1835	4	\$274D	2	17 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1839	4	\$274F	2	18 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$183D	4	\$2751	2	19 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1841	4	\$2753	2	20 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1845	4	\$2755	2	21 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1849	4	\$2757	2	22 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$184D	4	\$2759	2	23 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1851	4	\$275B	2	24 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1855	4	\$275D	2	25 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1960	4	\$2830	2	26 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1964	4	\$2832	2	27 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1968	4	\$2834	2	28 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$196C	4	\$2836	2	29 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1970	4	\$2838	2	30 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)
\$1974	4	\$283A	2	31 TH CURRENT HARMONIC OF THE L ₂ PHASE	[%]	(Unsigned)

\$1859	4	\$275F	2	1 ST CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$185D	4	\$2761	2	2 ND CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1861	4	\$2763	2	3 RD CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1865	4	\$2765	2	4 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1869	4	\$2767	2	5 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$186D	4	\$2769	2	6 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1871	4	\$276B	2	7 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1875	4	\$276D	2	8 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1879	4	\$276F	2	9 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$187D	4	\$2771	2	10 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1881	4	\$2773	2	11 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1885	4	\$2775	2	12 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1889	4	\$2777	2	13 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$188D	4	\$2779	2	14 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1891	4	\$277B	2	15 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1895	4	\$277D	2	16 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1899	4	\$277F	2	17 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$189D	4	\$2781	2	18 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$18A1	4	\$2783	2	19 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$18A5	4	\$2785	2	20 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$18A9	4	\$2787	2	21 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)

\$18AD	4	\$2789	2	22 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$18B1	4	\$278B	2	23 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$18B5	4	\$278D	2	24 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$18B9	4	\$278F	2	25 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1978	4	\$283C	2	26 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$197C	4	\$283E	2	27 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1980	4	\$2840	2	28 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1984	4	\$2842	2	29 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$1988	4	\$2844	2	30 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)
\$198C	4	\$2846	2	31 TH CURRENT HARMONIC OF THE L ₃ PHASE	[%]	(Unsigned)

ENERGY COUNTERS - Double format (Function code \$03)

Register HEX	Word	Reg. (IEEE) HEX	Word	Description	M.U.	Type
N.A.		\$2A50	4	3-PHASE SYS. ACTIVE ENERGY+	[-]	[-]
N.A.		\$2A54	4	3-PHASE SYS. ACTIVE ENERGY-	[-]	[-]
N.A.		\$2A58	4	3-PHASE SYS. REACTIVE EN.+	[-]	[-]
N.A.		\$2A5C	4	3-PHASE SYS. REACTIVE.EN.-	[-]	[-]

ANALOG OUTPUT PWM VALUES (Function code \$03)

(Returned values: 0=0mA ÷ 255=20mA)

Register HEX	Word	Reg. (IEEE) HEX	Word	Description	M.U.	Type
\$1A1A	2	N.A.	[-]	PWM ANALOG OUTPUT 1	[-]	[-]
\$1A1B	2	N.A.	[-]	PWM ANALOG OUTPUT 2	[-]	[-]
\$1A1C	2	N.A.	[-]	PWM ANALOG OUTPUT 3	[-]	[-]
\$1A1D	2	N.A.	[-]	PWM ANALOG OUTPUT 4	[-]	[-]

WAVEFORM'S SAMPLES (Function code \$03)

(64 x integer value)

Register HEX	Word	Reg. (IEEE) HEX	Word	Description	M.U.	Type
\$1F30	64	N.A.	[-]	64 SAMPLES OF LINE VOLTAGE L ₁	[-]	[-]
\$1F32	64	N.A.	[-]	64 SAMPLES OF LINE VOLTAGE L ₂	[-]	[-]
\$1F34	64	N.A.	[-]	64 SAMPLES OF LINE VOLTAGE L ₃	[-]	[-]
\$1F36	64	N.A.	[-]	64 SAMPLES OF LINE CURRENT L ₁	[-]	[-]
\$1F38	64	N.A.	[-]	64 SAMPLES OF LINE CURRENT L ₂	[-]	[-]
\$1F3A	64	N.A.	[-]	64 SAMPLES OF LINE CURRENT L ₃	[-]	[-]

ONLY READ NQM PARAMETERS (Function code \$03)

Register HEX	Word	Description	Range
\$1A00	7	SERIAL NUMBER	XXXXXXXXXX
\$1A05	5	VERSION NUMBER	XXX.XXXX
\$1A0D	1	TYPE OF RAM	1=32 kB 2=128 kB 3=256 kB 4=512 kB 5=1024 Kb
\$1A0E	1	BI/MO DIRECTIONAL	1=mono 2=bidir.
\$1A0F	1	NUMBER OF DIGITAL OUTPUTS	0=none 1=1 ecc.=ecc.
\$1A10	1	NUMBER OF ANALOG OUTPUTS	0=none 1=1 ecc.=ecc.
\$1A11	1	NUMBER OF DIGITAL INPUTS	0=none 1=1 ecc.=ecc.
\$1A12	9	INFO STORAGE AVG.POWERS	bit1+2: status (0=OFF; 1= ON) (int) bit3+6: number of records (long) bit7+10: memory reserved (KB) (float) bit11+14: memory used (KB) (float) bit15+18: memory free (KB) (float)
\$1A13	9	INFO STORAGE MIN./MAX	as before
\$1A14	9	INFO STORAGE HARMONICS	as before
\$1A15	9	INFO STORAGE SAMPLES	as before
\$1A18	2	HARDWARE & OPTIONS INFO	bit0: harmonics (0=dis.; 1=en.) bit1: time bands (0=dis.; 1=en.) bit2+3: N.A. bit4+7: number of Dig.Inp (0+15) bit8+11: number of Dig.Out (0+15) bit12+15: number of An.Out (0+15) bit16+31: N.A.
\$1A19	1	SUB-VERSION FIRMWARE	XX
\$1A28	1	BAUD RATE	2=1200 baud 3=2400 baud 4=4800 baud 5=9600 baud 6=19200 baud
\$1A29	1	PARITY	0=none 1=even parity 2=odd parity
\$1A2A	1	BIT	7=7 bit 8=8 bit
\$1ADB	1	DIGITAL INPUT STATUS	bit(n)=DI(n+1) n=0..5 (0=OFF; 1=ON)
\$1ADC	1	DIGITAL OUTPUT STATUS	bit(n)=DI(n+1) n=0..5 (0=OFF; 1=ON)

READ & WRITE NQM PARAMETERS (Function code \$03 & \$10)

NOTE: the variable indicated by yes resets the instrument. Wait 1 second before sending another command

Register HEX	Word	Description	Range	Reset
\$1A16	1	ENERGY TYPE	0=normal(kWh-kVArh) 1=heavy (MWh-MVArh)	YES
\$1A20	1	LOGICAL NUMBER	01-255	YES
\$1A21	3	DATE	YY MMDD	YES
\$1A24	1	DAY OF WEEK	1=monday 2=tuesday 3=wednesday 4=thursday 5=friday 6=saturday 7=sunday	NO
\$1A25	3	TIME	HH MM SS	NO
\$1A2B	1	TRANSFORM RATIO KCT	1+2500	YES
\$1A2C	1	TRANSFORM RATIO KVT	1+3000	YES
\$1A2D	1	SYNCHRO TYPE	0=internal 1=external	NO
\$1A2E	1	FREQUENCY	5+500	NO
\$1A2F	1	TIME FOR AVERAGE	1+99	YES
\$1A30	1	BACKLIGHT ON TIME (sec)	0+360	NO
\$1A40	1	MIN/MAX TIME TO STORE IN RAM	1-9999	NO
\$1A41	1	MIN/MAX 3-PH.VOLTAGE STORE	0=do not store 1=store	NO
\$1A42	1	MIN/MAX VOLTAGE L _{1-N} STORE	0=do not store 1=store	NO
\$1A43	1	MIN/MAX VOLTAGE L _{2-N} STORE	0=do not store 1=store	NO
\$1A44	1	MIN/MAX VOLTAGE L _{3-N} STORE	0=do not store 1=store	NO
\$1A45	1	MIN/MAX 3PH.CURRENT STORE	0=do not store 1=store	NO
\$1A46	1	MIN/MAX CURRENT L ₁ STORE	0=do not store 1=store	NO
\$1A47	1	MIN/MAX CURRENT L ₂ STORE	0=do not store 1=store	NO
\$1A48	1	MIN/MAX CURRENT L ₃ STORE	0=do not store 1=store	NO
\$1A49	1	MIN/MAX ACTIVE POWER STORE	0=do not store 1=store	NO
\$1A4A	1	MIN/MAX APP.POWER STORE	0=do not store 1=store	NO
\$1A4B	1	MIN/MAX POWER FACT.STORE	0=do not store 1=store	NO
\$1A4C	1	MIN/MAX AV.POWER STORE	0=do not store 1=store	NO
\$1ADA	1	DIGITAL INPUT TYPE	0=not used 1=sync rtc 2=periods 3=generic counters 4=GMC 5=GME 6=ELKO	YES
\$1ADD	1	WIRING MODE	0=4 wire 1=3 wire 2=Aron	YES
\$2A32	2	TRANFORM CT RATIO floating point	0.01+9999.99	YES
\$2A34	2	TRANFORM VT RATIO floating point	0.01+9999.99	YES
\$2A36	2	FORCED FREQUENCY floating point	5.00+500.00	(readonly)

TIMEBANDS- TARIFF PERIOD 1

Register HEX	Word	Description	Range	Reset
\$3100	3	Hours and Minutes and band of begin the 1 st tariff band	(1)	NO
\$3103	3	Hours and Minutes and band of begin the 2 nd tariff band	(1)	NO
\$3106	3	Hours and Minutes and band of begin the 3 rd tariff band	(1)	NO
\$3109	3	Hours and Minutes and band of begin the 4 th tariff band	(1)	NO
\$310C	3	Hours and Minutes and band of begin the 5 th tariff band	(1)	NO
\$310F	3	Hours and Minutes and band of begin the 6 th tariff band	(1)	NO
\$3112	3	Hours and Minutes and band of begin the 7 th tariff band	(1)	NO
\$3115	3	Hours and Minutes and band of begin the 8 th tariff band	(1)	NO
\$3118	1	DAY selecting	(2)	NO
\$3119	1	MONTH selecting	(3)	NO

(1) it defines the beginning (hours and minutes) of each tariff band during the day.
 it is possible to input up to 8 changes during the day.
 it is possible to set four different bands (0,1,2,3).
 i.e.: to program the start of 2st tariff band (1) at 06:00 send \$0006,\$0000,\$0001

(2) DAY: Programming: put to 1 the Bit relative to the day which are selected.

X	X	X	X	X	X	X	0	0	0	0	0	0	0	0	0
Mo	Tu	We	Th	Fr	Sa	Su									

i.e.:to program all day from Monday to Friday send \$F800

(3) MONTH Programming: put to 1 the Bit relative to the month which are selected.

X	X	X	X	X	X	X	X	X	X	X	X	0	0	0	0
Ja	Fe	Ma	Ap	Ma	Ju	Ju	Au	Se	Oc	No	De				

i.e.:to programming the month of November,December,January,February and March send \$E030

TIMEBANDS-TARIFF PERIOD 2

Register HEX	Word	Description	Range	Reset
\$311A	3	Hours and Minutes and band of begin the 1 st tariff band	(1)	NO
\$311D	3	Hours and Minutes and band of begin the 2 nd tariff band	(1)	NO
\$3120	3	Hours and Minutes and band of begin the 3 rd tariff band	(1)	NO
\$3123	3	Hours and Minutes and band of begin the 4 th tariff band	(1)	NO
\$3126	3	Hours and Minutes and band of begin the 5 th tariff band	(1)	NO
\$3129	3	Hours and Minutes and band of begin the 6 th tariff band	(1)	NO
\$312C	3	Hours and Minutes and band of begin the 7 th tariff band	(1)	NO
\$312F	3	Hours and Minutes and band of begin the 8 th tariff band	(1)	NO
\$3132	1	DAY selecting	(2)	NO
\$3133	1	MONTH selecting	(3)	NO

TIMEBANDS-TARIFF PERIOD 3

Register HEX	Word	Description	Range	Reset
\$3134	3	Hours and Minutes and band of begin the 1 st tariff band	(1)	NO
\$3137	3	Hours and Minutes and band of begin the 2 nd tariff band	(1)	NO
\$313A	3	Hours and Minutes and band of begin the 3 rd tariff band	(1)	NO
\$313D	3	Hours and Minutes and band of begin the 4 th tariff band	(1)	NO
\$3140	3	Hours and Minutes and band of begin the 5 th tariff band	(1)	NO
\$3143	3	Hours and Minutes and band of begin the 6 th tariff band	(1)	NO
\$3146	3	Hours and Minutes and band of begin the 7 th tariff band	(1)	NO
\$3149	3	Hours and Minutes and band of begin the 8 th tariff band	(1)	NO
\$314C	1	DAY selecting	(2)	NO
\$314D	1	MONTH selecting	(3)	NO

TIMEBANDS-TARIFF PERIOD 4

Register HEX	Word	Description	Range	Reset
\$314E	3	Hours and Minutes and band of begin the 1 st tariff band	(1)	NO
\$3151	3	Hours and Minutes and band of begin the 2 nd tariff band	(1)	NO
\$3154	3	Hours and Minutes and band of begin the 3 rd tariff band	(1)	NO
\$3157	3	Hours and Minutes and band of begin the 4 th tariff band	(1)	NO
\$315A	3	Hours and Minutes and band of begin the 5 th tariff band	(1)	NO
\$315D	3	Hours and Minutes and band of begin the 6 th tariff band	(1)	NO
\$3160	3	Hours and Minutes and band of begin the 7 th tariff band	(1)	NO
\$3163	3	Hours and Minutes and band of begin the 8 th tariff band	(1)	NO
\$3166	1	DAY selecting	(2)	NO
\$3167	1	MONTH selecting	(3)	NO

TIMEBANDS-TARIFF PERIOD 5

Register HEX	Word	Description	Range	Reset
\$3168	3	Hours and Minutes and band of begin the 1 st tariff band	(1)	NO
\$316B	3	Hours and Minutes and band of begin the 2 nd tariff band	(1)	NO
\$316E	3	Hours and Minutes and band of begin the 3 rd tariff band	(1)	NO
\$3171	3	Hours and Minutes and band of begin the 4 th tariff band	(1)	NO
\$3174	3	Hours and Minutes and band of begin the 5 th tariff band	(1)	NO
\$3177	3	Hours and Minutes and band of begin the 6 th tariff band	(1)	NO
\$317A	3	Hours and Minutes and band of begin the 7 th tariff band	(1)	NO
\$317D	3	Hours and Minutes and band of begin the 8 th tariff band	(1)	NO
\$3180	1	DAY selecting	(2)	NO
\$3181	1	MONTH selecting	(3)	NO

TIMEBANDS-TARIFF PERIOD 6

Register HEX	Word	Description	Range	Reset
\$3182	3	Hours and Minutes and band of begin the 1 st tariff band	(1)	NO
\$3185	3	Hours and Minutes and band of begin the 2 nd tariff band	(1)	NO
\$3188	3	Hours and Minutes and band of begin the 3 rd tariff band	(1)	NO
\$318B	3	Hours and Minutes and band of begin the 4 th tariff band	(1)	NO
\$318E	3	Hours and Minutes and band of begin the 5 th tariff band	(1)	NO
\$3191	3	Hours and Minutes and band of begin the 6 th tariff band	(1)	NO
\$3194	3	Hours and Minutes and band of begin the 7 th tariff band	(1)	NO
\$3197	3	Hours and Minutes and band of begin the 8 th tariff band	(1)	NO
\$319A	1	DAY selecting	(2)	NO
\$319B	1	MONTH selecting	(3)	NO

TIMEBANDS-TARIFF PERIOD 7

Register HEX	Word	Description	Range	Reset
\$319C	3	Hours and Minutes and band of begin the 1 st tariff band	(1)	NO
\$319F	3	Hours and Minutes and band of begin the 2 nd tariff band	(1)	NO
\$31A2	3	Hours and Minutes and band of begin the 3 rd tariff band	(1)	NO
\$31A5	3	Hours and Minutes and band of begin the 4 th tariff band	(1)	NO
\$31A8	3	Hours and Minutes and band of begin the 5 th tariff band	(1)	NO
\$31AB	3	Hours and Minutes and band of begin the 6 th tariff band	(1)	NO
\$31AE	3	Hours and Minutes and band of begin the 7 th tariff band	(1)	NO
\$31B1	3	Hours and Minutes and band of begin the 8 th tariff band	(1)	NO
\$31B4	1	DAY selecting	(2)	NO
\$31B5	1	MONTH selecting	(3)	NO

TIMEBANDS-TARIFF PERIOD 8

Register HEX	Word	Description	Range	Reset
\$31B6	3	Hours and Minutes and band of begin the 1 st tariff band	(1)	NO
\$31B9	3	Hours and Minutes and band of begin the 2 nd tariff band	(1)	NO
\$31BC	3	Hours and Minutes and band of begin the 3 rd tariff band	(1)	NO
\$31BF	3	Hours and Minutes and band of begin the 4 th tariff band	(1)	NO
\$31C2	3	Hours and Minutes and band of begin the 5 th tariff band	(1)	NO
\$31C5	3	Hours and Minutes and band of begin the 6 th tariff band	(1)	NO
\$31C8	3	Hours and Minutes and band of begin the 7 th tariff band	(1)	NO
\$31CB	3	Hours and Minutes and band of begin the 8 th tariff band	(1)	NO
\$31CE	1	DAY selecting	(2)	NO
\$31CF	1	MONTH selecting	(3)	NO

TIMEBANDS-TARIFF PERIOD 9

Register HEX	Word	Description	Range	Reset
\$31D0	3	Hours and Minutes and band of begin the 1 st tariff band	(1)	NO
\$31D3	3	Hours and Minutes and band of begin the 2 nd tariff band	(1)	NO
\$31D6	3	Hours and Minutes and band of begin the 3 rd tariff band	(1)	NO
\$31D9	3	Hours and Minutes and band of begin the 4 th tariff band	(1)	NO
\$31DC	3	Hours and Minutes and band of begin the 5 th tariff band	(1)	NO
\$31DF	3	Hours and Minutes and band of begin the 6 th tariff band	(1)	NO
\$31E2	3	Hours and Minutes and band of begin the 7 th tariff band	(1)	NO
\$31E5	3	Hours and Minutes and band of begin the 8 th tariff band	(1)	NO
\$31E8	1	DAY selecting	(2)	NO
\$31E9	1	MONTH selecting	(3)	NO

TIMEBANDS-TARIFF PERIOD 10

Register HEX	Word	Description	Range	Reset
\$31EA	3	Hours and Minutes and band of begin the 1 st tariff band	(1)	NO
\$31ED	3	Hours and Minutes and band of begin the 2 nd tariff band	(1)	NO
\$31F0	3	Hours and Minutes and band of begin the 3 rd tariff band	(1)	NO
\$31F3	3	Hours and Minutes and band of begin the 4 th tariff band	(1)	NO
\$31F6	3	Hours and Minutes and band of begin the 5 th tariff band	(1)	NO
\$31F9	3	Hours and Minutes and band of begin the 6 th tariff band	(1)	NO
\$31FC	3	Hours and Minutes and band of begin the 7 th tariff band	(1)	NO
\$31FF	3	Hours and Minutes and band of begin the 8 th tariff band	(1)	NO
\$3202	1	DAY selecting	(2)	NO
\$3203	1	MONTH selecting	(3)	NO

HOLIDAYS (read only)

Register HEX	Word	Description
\$3400	1	day of holyday no. 1
\$3401	1	month of holyday no. 1
\$3402	1	day of holyday no. 2
\$3403	1	month of holyday no. 2
\$3404	1	day of holyday no. 3
\$3405	1	month of holyday no. 3
\$3406	1	day of holyday no. 4
\$3407	1	month of holyday no. 4
\$3408	1	day of holyday no. 5
\$3409	1	month of holyday no. 5
\$340A	1	day of holyday no. 6
\$340B	1	month of holyday no. 6
\$340C	1	day of holyday no. 7
\$340D	1	month of holyday no. 7
\$340E	1	day of holyday no. 8
\$340F	1	month of holyday no. 8
\$3410	1	day of holyday no. 9
\$3411	1	month of holyday no. 9
\$3412	1	day of holyday no. 10
\$3413	1	month of holyday no. 10
\$3414	1	day of holyday no. 11
\$3415	1	month of holyday no. 11
\$3416	1	day of holyday no. 12
\$3417	1	month of holyday no. 12
\$3418	1	day of holyday no. 13
\$3419	1	month of holyday no. 13
\$341A	1	day of holyday no. 14
\$341B	1	month of holyday no. 14
\$341C	1	day of holyday no. 15
\$341D	1	month of holyday no. 15
\$341E	1	day of holyday no. 16
\$341F	1	month of holyday no. 16
\$3420	1	day of holyday no. 17
\$3421	1	month of holyday no. 17
\$3422	1	day of holyday no. 18
\$3423	1	month of holyday no. 18
\$3424	1	day of holyday no. 19
\$3425	1	month of holyday no. 19
\$3426	1	day of holyday no. 20
\$3427	1	month of holyday no. 20
\$3428	1	day of holyday no. 21
\$3429	1	month of holyday no. 21
\$342A	1	day of holyday no. 22
\$342B	1	month of holyday no. 22
\$342C	1	day of holyday no. 23
\$342D	1	month of holyday no. 23
\$342E	1	day of holyday no. 24
\$342F	1	month of holyday no. 24
\$3430	1	day of holyday no. 25
\$3431	1	month of holyday no. 25
\$3432	1	day of holyday no. 26
\$3433	1	month of holyday no. 26
\$3434	1	day of holyday no. 27
\$3435	1	month of holyday no. 27
\$3436	1	day of holyday no. 28
\$3437	1	month of holyday no. 28
\$3438	1	day of holyday no. 29
\$3439	1	month of holyday no. 29
\$343A	1	day of holyday no. 30

\$343B	1	month of holyday no. 30
\$343C	1	day of holyday no. 31
\$343D	1	month of holyday no. 31
\$343E	1	day of holyday no. 32
\$343F	1	month of holyday no. 32
\$3440	1	day of holyday no. 33
\$3441	1	month of holyday no. 33
\$3442	1	day of holyday no. 34
\$3443	1	month of holyday no. 34
\$3444	1	day of holyday no. 35
\$3445	1	month of holyday no. 35
\$3446	1	day of holyday no. 36
\$3447	1	month of holyday no. 36
\$3448	1	day of holyday no. 37
\$3449	1	month of holyday no. 37
\$344A	1	day of holyday no. 38
\$344B	1	month of holyday no. 38
\$344C	1	day of holyday no. 39
\$344D	1	month of holyday no. 39
\$344E	1	day of holyday no. 40
\$344F	1	month of holyday no. 40

GENERIC COUNTERS VALUES- Double format

Register HEX	Word	Description	Range	Reset
\$2B00	4	Generic Counter 1 Value	0+99999999.9	NO
\$2B02	4	Generic Counter 2 Value	0+99999999.9	NO
\$2B04	4	Generic Counter 3 Value	0+99999999.9	NO
\$2B06	4	Generic Counter 4 Value	0+99999999.9	NO
\$2B08	4	Generic Counter 5 Value	0+99999999.9	NO
\$2B0A	4	Generic Counter 6 Value	0+99999999.9	NO
\$2B0C	4	Generic Counter 7 Value	0+99999999.9	NO
\$2B0E	4	Generic Counter 8 Value	0+99999999.9	NO

GENERIC COUNTERS SETTINGS

Register HEX	Word	Description	Range	Reset
\$2B10	7	Generic Counter 1 Setting	(*)	NO
\$2B12	7	Generic Counter 2 Setting	(*)	NO
\$2B14	7	Generic Counter 3 Setting	(*)	NO
\$2B16	7	Generic Counter 4 Setting	(*)	NO
\$2B18	7	Generic Counter 5 Setting	(*)	NO
\$2B1A	7	Generic Counter 6 Setting	(*)	NO
\$2B1C	7	Generic Counter 7 Setting	(*)	NO
\$2B1E	7	Generic Counter 8 Setting	(*)	NO

(*)

Description:

Byte(s) Read/Write

1: Counter (i) -> Digital Input association

2: Counter's name type (0=kWh+; 1=kWh-; 2=kVArh+; 3=kVArh-; 4=Water; 5=Gas; 6=User.)

3÷10: Counter's name (ASCII codes)

11÷14: Pulse's weight (0÷1999.99)

ONLY WRITE NQM PARAMETERS (Function code \$10)

Register HEX	Word	Description	Range	Reset
\$1A90	1	DELETING RAM	9=deleting all archives	YES
\$1A91	1	SET RAM STORING	0=nothing 1=15' 2=min/max 3=15'+min/max 4=armonics 5=15'+armonics 6=min/max+armonics 7=15'+min/max+armonics 8=sample 9=15'+sample A=min/max+sample B=15'+min/max+sample C=armonics+sample D=15'+armonics+sample E=min/max+armonics+sample F=15'+min/max+armonics+sample	YES
\$1A92	1	15' STORED IN RAM	0=nothing 1=delete first one	YES
\$1A93	1	MIN/MAX STORED IN RAM	0=nothing 1=sendng the following block 2=deleting all min/max value in RAM	NO
\$1A94	1	HARMONICS STORED IN RAM	0=nothing 1=delete first one	NO
\$1A95	1	SAMPLES STORED IN RAM	0=nothing 1=delete first one	NO
\$1A96	1	CONSUMPTION ENERGY COUNTER	1=reset count B0...B3 2=reset timebands 3=reset all	YES
\$1A97	1	MIN/MAX VALUES	1=reset all	NO

DIGITAL OUT 1

Register HEX	Word	Description	Range	Reset
\$1AA0	1	MODE	0= off 1= upper limit 2= lower limit 3= pulse 4= band 5= always on	YES
\$1AA1	1	VARIABLE	80-BC	YES
\$1AA2	1	PULSE COEFFICIENT	0÷9.999	YES
\$1AA3	1	PULSE DURATION (msec)	50÷999	YES
\$1AA4	1	INTERVENTION VALUE (integer)		YES
\$1AA5	1	HYSTERISIS	0-99	YES
\$1AA6	1	DELAY TIME in sec	0-999	YES
\$2AA8	2	FLOAT INTERVENTION VALUE		YES
\$2AAA	2	FLOAT INF. BAND VALUE		YES
\$2AAC	2	FLOAT SUP.BAND VALUE		YES

DIGITAL OUT 2

Register HEX	Word	Description	Range	Reset
\$1AB0	1	MODE	0= off 1= upper limit 2= lower limit 3= pulse 4= band 5= always on	YES
\$1AB1	1	VARIABLE	80-BC	YES
\$1AB2	1	PULSE COEFFICIENT	0+9.999	YES
\$1AB3	1	PULSE DURATION (msec)	50+999	YES
\$1AB4	1	INTERVENTION VALUE		YES
\$1AB5	1	HYSTERISIS	0-99	YES
\$1AB6	1	DELAY TIME in sec	0-999	YES
\$2AB8	2	FLOAT INTERVENTION VALUE		YES
\$2ABA	2	FLOAT INF. BAND VALUE		YES
\$2ABC	2	FLOAT SUP.BAND VALUE		YES

DIGITAL OUT 3

Register HEX	Word	Description	Range	Reset
\$1AC0	1	MODE	0= off 1= upper limit 2= lower limit 3= pulse 4= band 5= always on	YES
\$1AC1	1	VARIABLE	80-BC	YES
\$1AC2	1	PULSE COEFFICIENT	0+9.999	YES
\$1AC3	1	PULSE DURATION (msec)	50+999	YES
\$1AC4	1	INTERVENTION VALUE		YES
\$1AC5	1	HYSTERISIS	0-99	YES
\$1AC6	1	DELAY TIME in sec	0-999	YES
\$2AC8	2	FLOAT INTERVENTION VALUE		YES
\$2ACA	2	FLOAT INF. BAND VALUE		YES
\$2ACC	2	FLOAT SUP.BAND VALUE		YES

DIGITAL OUT 4

Register HEX	Word	Description	Range	Reset
\$1AD0	1	MODE	0= off 1= upper limit 2= lower limit 3= pulse 4= band 5= always on	YES
\$1AD1	1	VARIABLE	80-BC	YES
\$1AD2	1	PULSE COEFFICIENT	0+9.999	YES
\$1AD3	1	PULSE DURATION (msec)	50+999	YES
\$1AD4	1	INTERVENTION VALUE		YES
\$1AD5	1	HYSTERISIS	0-99	YES
\$1AD6	1	DELAY TIME in sec	0-999	YES
\$2AD8	2	FLOAT INTERVENTION VALUE		YES
\$2ADA	2	FLOAT INF. BAND VALUE		YES
\$2ADC	2	FLOAT SUP.BAND VALUE		YES

DIGITAL OUT 5

Register HEX	Word	Description	Range	Reset
\$1A70	1	MODE	0= off 1= upper limit 2= lower limit 3= pulse 4= band 5= always on	YES
\$1A71	1	VARIABLE	80-BC	YES
\$1A72	1	PULSE COEFFICIENT	0+9.999	YES
\$1A73	1	PULSE DURATION (msec)	50+999	YES
\$1A74	1	INTERVENTION VALUE		YES
\$1A75	1	HYSTERISIS	0-99	YES
\$1A76	1	DELAY TIME in sec	0-999	YES
\$2AE8	2	FLOAT INTERVENTION VALUE		YES
\$2AEA	2	FLOAT INF. BAND VALUE		YES
\$2AEC	2	FLOAT SUP.BAND VALUE		YES

DIGITAL OUT 6

Register HEX	Word	Description	Range	Reset
\$1A80	1	MODE	0= off 1= upper limit 2= lower limit 3= pulse 4= band 5= always on	YES
\$1A81	1	VARIABLE	80-BC	YES
\$1A82	1	PULSE COEFFICIENT	0+9.999	YES
\$1A83	1	PULSE DURATION (msec)	50+999	YES
\$1A84	1	INTERVENTION VALUE		YES
\$1A85	1	HYSTERISIS	0-99	YES
\$1A86	1	DELAY TIME in sec	0-999	YES
\$2AF8	2	FLOAT INTERVENTION VALUE		YES
\$2AFA	2	FLOAT INF. BAND VALUE		YES
\$2AFC	2	FLOAT SUP.BAND VALUE		YES

ANALOG OUT1

Register HEX	Word	Description	Range	Reset
\$1AE0	1	MODE	0=0-20mA mono 1=4-20mA mono	YES
\$1AE1	1	VARIABLE	80..BC	YES
\$1AE2	1	MIN LIMIT VALUE	YES	
\$1AE3	1	MAX.LIMIT VALUE	YES	

ANALOG OUT 2

Register HEX	Word	Description	Range	Reset
\$1AE8	1	MODE	0=0-20mA mono 1=4-20mA mono	YES
\$1AE9	1	VARIABLE	80..BC	YES
\$1AEA	1	MIN LIMIT VALUE	YES	
\$1AEB	1	MAX.LIMIT VALUE	YES	

ANALOG OUT 3

Register HEX	Word	Description	Range	Reset
\$1AF0	1	MODE	0=0-20mA mono 1=4-20mA mono	YES
\$1AF1	1	VARIABLE	80..BC	YES
\$1AF2	1	MIN LIMIT VALUE	YES	
\$1AF3	1	MAX.LIMIT VALUE	YES	

ANALOG OUT 4

Register HEX	Word	Description	Range	Reset
\$1AF8	1	MODE	0=0-20mA mono 1=4-20mA mono	YES
\$1AF9	1	VARIABLE	80..BC	YES
\$1AFA	1	MIN LIMIT VALUE	YES	
\$1AFB	1	MAX.LIMIT VALUE	YES	

DIGITAL IN 1

Register HEX	Word	Description	Range	Reset
\$1ADA	1	MODE	0= off 1= sync. RTC 2= Timeband (with Digital In 2)	YES

DIGITAL IN 2

Register HEX	Word	Description	Range	Reset
\$1ADB	1	MODE	0= off 1= sync. RTC 2= Timeband (with Digital In 2)	YES

ADVICE:PROGRAM OUTPUT PARAMETERS ALL AT THE SAME TIME TO PREVENT THE INSTRUMENT FROM RESETTING REPEATEDLY,THUS AVOIDING TIME WASTE