MODBUS REGISTER MAP

Multi-functional Energy Meters

EN75XX Series



SL No.	Address	Data type	Parameters	EN 7500	EN 7520
1	40101	float	Watts Total	~	~
2	40103	float	Watts R phase	✓	✓
3	40105	float	Watts Y phase	✓	✓
4	40107	float	Watts B phase	✓	~
5	40109	float	VAR Total	✓	✓
6	40111	float	VAR R phase	✓	✓
7	40113	float	VAR Y phase	✓	✓
8	40115	float	VAR B phase	~	✓
9	40117	float	PF Ave. (Displacement)	✓	✓
10	40119	float	PF R phase (Displacement)	✓	✓
11	40121	float	PF Y phase(Displacement)	✓	✓
12	40123	float	PF B phase (Displacement)	✓	✓
13	40125	float	VA total	✓	✓
14	40127	float	VA R phase	✓	V
15	40129	float	VA Y phase	✓	✓
16	40131	float	VA B phase	✓	V
17	40133	float	VLL average	✓	✓
18	40135	float	Vry phase	✓	✓
19	40137	float	Vyb phase	✓	✓
20	40139	float	Vbr phase	✓	✓
21	40141	float	VLN average	✓	✓
22	40143	float	V R phase	✓	✓
23	40145	float	V Y phase	✓	✓
24	40147	float	V B phase	✓	✓
25	40149	float	Current Total	✓	✓
26	40151	float	Current R phase	✓	✓

27	40153	float	Current Y phase	✓	✓
28	40155	float	Current B phase	✓	✓
29	40157	float	Frequency	✓	✓
30	40159	float	Wh received	✓	V
31	40161	float	VAh received	✓	✓
32	40163	float	VARh Ind. Received	✓	✓
33	40165	float	VARh Cap. received	✓	✓
34	40167	float	Wh Delivered	✓	
35	40169	float	VAh Delivered	✓	
36	40171	float	VARh Ind. Delivered	✓	
37	40173	float	VARh Cap. Delivered	✓	
38	40175	float	Reserved		
39	40177	float	Reserved		
40	40179	float	Reserved		
41	40181	float	Neutral Ampere measured	V	
42	40183	float	Neutral Ampere Calculated	✓	✓
43	40185	float	Voltage R THD	V	✓
44	40187	float	Voltage Y THD	✓	✓
45	40189	float	Voltage B THD	✓	✓
46	40191	float	Current R THD	✓	✓
47	40193	float	Current Y THD	✓	✓
48	40195	float	Current B THD	✓	✓
49	40197	float	W demand	✓	✓
50	40199	float	VA demand	V	✓
51	40201	float	VAR demand	✓	✓
52	40203	float	W Forecast demand	✓	✓
53	40205	float	VA Forecast demand	✓	~
54	40207	float	VAR Forecast demand	✓	✓
55	40209	float	W Maximum demand	✓	✓
56	40211	float	VA maximum demand	✓	✓
57	40213	float	VAR maximum demand	✓	✓

58	40215	float	RPM	✓	✓
59	40217	Long Inverse	Load Hours Received	V	✓
60	40219	Long Inverse	Load Hours Delivered	V	
61	40221	Long Inverse	No of interruptions	V	✓
62	40223	float	Reserved		
63	40225	float	Reserved		
64	40227	Long Inverse	On hours	V	✓
65	40229	Long Inverse	RTC (in timestamp format in communication)	~	
66	40231	float	Wh DG		✓
67	40233	float	VAh DG		✓
68	40235	float	VARh Ind. DG		✓
69	40237	float	VARh Cap. DG		✓
70	40239	Long Inverse	Load Hrs DG		✓
71	40241	float	Reserved		
72	40243	float	Wh received – R Phase	V	✓
73	40245	float	Wh received – Y Phase	✓	✓
74	40247	float	Wh received – B Phase	✓	✓
75	40249	Float	VAh received – R Phase	✓	✓
76	40251	float	VAh received – Y phase	✓	✓
77	40253	float	VAh received – B phase	✓	✓
78	40255	float	VArh inductive received – R phase	~	V
79	40257	float	VArh inductive received – Y phase	V	V
80	40259	float	VArh inductive received – B phase	V	V
81	40261	float	VArh capacitive received – R phases	V	V

82	40263	float	VArh capacitive received – Y phases	V	~
83	40265	float	VArh capacitive received – B phases	~	V
84	40267	float	Reserved		
85	40269	float	Reserved		
86	40271	float	Reserved		
87	40273	float	Reserved		
88	40275	float	Reserved		
89	40277	float	Reserved		
90	40279	float	Wh Delivered – R Phase	✓	
91	40281	float	Wh Delivered – Y Phase	✓	
92	40283	float	Wh Delivered – B Phase	✓	
93	40285	float	VAh Delivered – R phases	v	
94	40287	float	VAh Delivered – Y phases		
95	40289	float	VAh Delivered – B phases	✓	
96	40291	float	VArh inductive Delivered – R phases	V	
97	40293	float	VArh inductive Delivered – Y phases	•	
98	40295	float	VArh inductive Delivered – B phases	V	
99	40297	float	VArh capacitive Delivered – R phases	V	
100	40299	float	VArh capacitive Delivered – Y phases	~	
101	40301	float	VArh capacitive Delivered – B phases	V	
102	40303	float	Reserved		
103	40305	float	Reserved		
104	40307	float	Reserved		

105	40309	float	Reserved		
106	40311	float	Reserved		
107	40313	float	Reserved		
108	40315	Long Inverse	Load hours received – R phases	~	✓
109	40317	Long Inverse	Load hours received – Y phases	~	V
110	40319	Long Inverse	Load hours received – B phases	~	V
111	40321	Long Inverse	Load hours Delivered – R phases	~	
112	40323	Long Inverse	Load hours Delivered – Y phases	•	
113	40325	Long Inverse	Load hours Delivered – B phases	~	
114	40327	float	Voltage VR_Unbalance	✓	✓
115	40329	float	Voltage VY_Unbalance	✓	✓
116	40331	float	Voltage VB_Unbalance	✓	✓
117	40333	float	Current AR_Unbalance	✓	✓
118	40335	float	Current AY_Unbalance	✓	✓
119	40337	float	Current AB_Unbalance	✓	✓
				✓	✓
120	40339	float	Voltage R phase angle	✓	✓
121	40341	float	Voltage Y phase angle	✓	✓
122	40343	float	Voltage B phase angle	✓	✓
123	40345	float	Current R phase angle	✓	✓
124	40347	float	Current Y phase angle	✓	✓
125	40349	float	Current B phase angle	✓	✓
126	40351	float	CO2	✓	✓
127	40353	float	True PF	✓	✓
128	40355	float	PF R phase (True)	✓	✓
129	40357	float	PF Y phase(True)	v	✓
130	40359	float	PF B phase (True)	v	✓

131	40361	float	Unbalance A max	✓	✓
132	40363	float	Unbalance V max	✓	✓
133	40365	float	Wh DG – R Phase		✓
134	40367	float	Wh DG – Y Phase		✓
135	40369	float	Wh DG – B Phase		✓
136	40371	float	VAh DG – R Phase		✓
137	40373	float	VAh DG – Y phase		✓
138	40375	float	VAh DG – B phase		✓
139	40377	float	VArh inductive DG – R phase	•	✓
140	40379	float	VArh inductive DG – Y phase		✓
141	40381	float	VArh inductive DG – B phase		✓
142	40383	float	VArh capacitive DG – R phases		✓
143	40385	float	VArh capacitive DG – Y phases		✓
144	40387	float	VArh capacitive DG – B phases		✓
145	40389	Long Inverse	Load Hrs DG - R phase		•
146	40391	Long Inverse	Load Hrs DG - Y phase		V
147	40393	Long Inverse	Load Hrs DG - B phase		V
148	40395	float	W demand- DG		✓
149	40397	float	VA demand - DG		✓
150	40399	float	VAR demand - DG		✓
151	40401	float	W Forecast demand -DG		✓
152	40403	float	VA Forecast demand - DG		✓
153	40405	float	VAR Forecast demand - DG		✓
154	40407	float	W Maximum demand -DG		✓
155	40409	float	VA maximum demand -DG		✓
156	40411	float	VAR maximum demand -DG		✓
157	40413	Long Inverse	Max demand Occurrence time W	•	V
158	40415	Long Inverse	Max demand Occurrence time VA	V	V

159	40417	Long Inverse	Max demand Occurrence time VAR		V
160	40419	Long Inverse	Max demand Occurrence time W_DG		✓
161	40421	Long Inverse	Max demand Occurrence time VA_DG		V
162	40423	Long Inverse	Max demand Occurrence time VAR_DG		V
163	40425	Long Inverse	Max demand Occur W_DATE	•	V
164	40427	Long Inverse	Max demand Occur W_TIME	V	V
165	40429	Long Inverse	Max demand Occur VA_DATE	V	V
166	40431	Long Inverse	Max demand Occur VA_TIME	V	V
167	40433	Long Inverse	Max demand Occur VAR_DATE	V	V
168	40435	Long Inverse	Max demand Occur VAR_TIME	•	V
169	40437	Long Inverse	Max demand Occur W_DG_DATE	V	V
170	40439	Long Inverse	Max demand Occur W_DG_TIME	•	V
171	40441	Long Inverse	Max demand Occur VA_DG_DATE	•	V
172	40443	Long Inverse	Max demand Occur VA_DG_TIME	~	V
173	40445	Long Inverse	Max demand Occur VAR_DG_DATE	~	V
174	40447	Long Inverse	Max demand Occur VAR_DG_TIME	•	V
175	40449	float	Wh_Old Energy Import	✓	✓
176	40451	float	VAh_Old Energy Import	✓	✓
177	40453	float	VArh.L_Old Energy Import	✓	✓
178	40455	float	VARh.C_Old Energy Import	~	✓

179	40457	Long Inverse	Ld.hrs_Old Energy Import	•	V
180	40459	float	Wh_Old Energy Export	v	
181	40461	float	VAh_Old Energy Export	✓	
182	40463	float	Varh.L_Old Energy Export	✓	
183	40465	float	VARh.C_Old Energy Export	v	
184	40467	Long Inverse	Ld.hrs_Old Energy Export	•	
185	40469	float	Wh_Old Energy DG		✓
186	40471	float	VAh_Old Energy DG		✓
187	40473	float	Varh.L_Old Energy DG		✓
188	40475	float	VARh.C_Old Energy DG		✓
189	40477	Long Inverse	Ld.hrs_Old Energy DG		~
190	40751	Float	Voltage THD R Phase	✓	✓
191	40753	Float	Voltage THD Y Phase	✓	✓
192	40755	Float	Voltage THD B Phase	✓	✓
193	40757	Float	Current THD R Phase	✓	✓
194	40759	Float	Current THD Y Phase	✓	✓
195	40761	Float	Current THD B Phase	✓	✓
196	40763	Float	Reserved		
197	40765	Float	Reserved		
198	40767	Float	Reserved		
199	40769	Float	Reserved		
200	40771	Float	Reserved		
201	40773	Float	Fundamental Harmonics R Phase Voltage	~	~
202	40775	Float	Fundamental Harmonics Y Phase Voltage	~	✓
203	40777	Float	Fundamental Harmonics B Phase Voltage	~	✓
204	40779	Float	Fundamental Harmonics R Phase Current	V	V

205	40781	Float	Fundamental Harmonics Y Phase Current	V	✓
206	40783	Float	Fundamental Harmonics B Phase Current	✓	✓
207	40785	Float	2nd Harmonics Voltage R Phase	✓	✓
208	40787	Float	2nd Harmonics Voltage Y Phase	✓	✓
209	40789	Float	2nd Harmonics Voltage B Phase	✓	✓
210	40791	Float	2nd Harmonics Current R Phase	✓	✓
211	40793	Float	2nd Harmonics Current Y Phase	✓	✓
212	40795	Float	2nd Harmonics Current B Phase	✓	✓
213	40797	Float	3rd Harmonics Voltage R Phase	✓	✓
214	40799	Float	3rd Harmonics Voltage Y Phase	✓	✓
215	40801	Float	3rd Harmonics Voltage B Phase	✓	✓
216	40803	Float	3rd Harmonics Current R Phase	✓	✓
217	40805	Float	3rd Harmonics Current Y Phase	✓	✓
218	40807	Float	3rd Harmonics Current B Phase	✓	✓
219	40809	Float	4th Harmonics Voltage R Phase	✓	✓
220	40811	Float	4th Harmonics Voltage Y Phase	✓	✓
221	40813	Float	4th Harmonics Voltage B Phase	✓	✓
222	40815	Float	4th Harmonics Current- R Phase	✓	✓
223	40817	Float	4th Harmonics Current Y Phase	✓	✓
224	40819	Float	4th Harmonics Current B Phase	✓	✓
225	40821	Float	5th Harmonics Voltage R Phase	✓	✓
226	40823	Float	5th Harmonics Voltage Y Phase	✓	✓
227	40825	Float	5th Harmonics Voltage B Phase	✓	✓
228	40827	Float	5th Harmonics Current R Phase	✓	✓
229	40829	Float	5th Harmonics Current Y Phase	✓	✓
230	40831	Float	5th Harmonics Current B Phase	✓	✓
231	40833	Float	6th Harmonics Voltage R Phase	✓	✓
232	40835	Float	6th Harmonics Voltage Y Phase	✓	✓
233	40837	Float	6th Harmonics Voltage B Phase	✓	✓
234	40839	Float	6th Harmonics Current R Phase	✓	~

235	40841	Float	6th Harmonics Current Y Phase	✓	✓
236	40843	Float	6th Harmonics Current B Phase	~	✓
237	40845	Float	7th Harmonics Voltage R Phase	~	✓
238	40847	Float	7th Harmonics Voltage Y Phase	✓	✓
239	40849	Float	7th Harmonics Voltage B Phase	✓	V
240	40851	Float	7th Harmonics Current R Phase	✓	✓
241	40853	Float	7th Harmonics Current Y Phase	✓	V
242	40855	Float	7th Harmonics Current B Phase	✓	✓
243	40857	Float	8th Harmonics Voltage R Phase	✓	V
244	40859	Float	8th Harmonics Voltage Y Phase	✓	✓
245	40861	Float	8th Harmonics Voltage B Phase	✓	V
246	40863	Float	8th Harmonics Current R Phase	✓	✓
247	40865	Float	8th Harmonics Current Y Phase	✓	V
248	40867	Float	8th Harmonics Current B Phase	✓	V
249	40869	Float	9th Harmonics Voltage R Phase	✓	V
250	40871	Float	9th Harmonics Voltage Y Phase	✓	✓
251	40873	Float	9th Harmonics Voltage B Phase	✓	V
252	40875	Float	9th Harmonics Voltage B Phase	✓	✓
253	40877	Float	9th Harmonics Current R Phase	✓	✓
254	40879	Float	9th Harmonics Current Y Phase	✓	✓
255	40881	Float	9th Harmonics Current B Phase	✓	V
256	40883	Float	10th Harmonics Voltage R Phase	✓	✓
257	40885	Float	10th Harmonics Voltage Y Phase	✓	✓
258	40887	Float	10th Harmonics Voltage B Phase	✓	✓
259	40889	Float	10th Harmonics Current R Phase	✓	✓
260	40891	Float	10th Harmonics Current Y Phase	✓	~
261	40893	Float	10th Harmonics Current B Phase	✓	V
262	40895	Float	11th Harmonics Voltage R Phase	✓	✓
263	40897	Float	11th Harmonics Voltage Y Phase	✓	~
264	40899	Float	11th Harmonics Voltage B Phase	✓	✓
265	40901	Float	11th Harmonics Current R Phase	✓	✓
266	40903	Float	11th Harmonics Current Y Phase	✓	~

267	40905	Float	11th Harmonics Current B Phase	✓	✓
268	40907	Float	12th Harmonics Voltage R Phase	✓	✓
269	40909	Float	12th Harmonics Voltage Y Phase	✓	✓
270	40911	Float	12th Harmonics Voltage B Phase	✓	✓
271	40913	Float	12th Harmonics Current R Phase	✓	✓
272	40915	Float	12th Harmonics Current Y Phase	✓	✓
273	40917	Float	12th Harmonics Current B Phase	✓	✓
274	40919	Float	13th Harmonics Voltage R Phase	✓	✓
275	40921	Float	13th Harmonics Voltage Y Phase	✓	✓
276	40923	Float	13th Harmonics Voltage B Phase	✓	✓
277	40925	Float	13th Harmonics Current R Phase	v	✓
278	40927	Float	13th Harmonics Current Y Phase	✓	✓
279	40929	Float	13th Harmonics Current B Phase	✓	✓
280	40931	Float	14th Harmonics Voltage R Phase	V	✓
281	40933	Float	14th Harmonics Voltage Y Phase	✓	✓
282	40935	Float	14th Harmonics Voltage B Phase	✓	✓
283	40937	Float	14th Harmonics Current R Phase	✓	✓
284	40939	Float	14th Harmonics Current Y Phase	✓	✓
285	40941	Float	14th Harmonics Current B Phase	✓	✓
286	40943	Float	15th Harmonics Voltage R Phase	✓	✓
287	40945	Float	15th Harmonics Voltage Y Phase	✓	✓
288	40947	Float	15th Harmonics Voltage B Phase	✓	✓
289	40949	Float	15th Harmonics Current R Phase	✓	V
290	40951	Float	15th Harmonics Current Y Phase	✓	✓
291	40953	Float	15th Harmonics Current B Phase	✓	✓
292	40955	Float	16th Harmonics Voltage R Phase	✓	✓
293	40957	Float	16th Harmonics Voltage Y Phase	✓	✓
294	40959	Float	16th Harmonics Voltage B Phase	✓	✓
295	40961	Float	16th Harmonics Current R Phase	✓	✓
296	40963	Float	16th Harmonics Current Y Phase	✓	✓
297	40965	Float	16th Harmonics Current B Phase	✓	✓
298	40967	Float	17th Harmonics Voltage R Phase	✓	✓

299	40969	Float	17th Harmonics Voltage Y Phase	✓	✓
300	40971	Float	17th Harmonics Voltage B Phase	•	✓
301	40973	Float	17th Harmonics Current R Phase	•	✓
302	40975	Float	17th Harmonics Current Y Phase	✓	V
303	40977	Float	17th Harmonics Current B Phase	✓	✓
304	40979	Float	18th Harmonics Voltage R Phase	✓	✓
305	40981	Float	18th Harmonics Voltage Y Phase	✓	✓
306	40983	Float	18th Harmonics Voltage B Phase	✓	✓
307	40985	Float	18th Harmonics Current R Phase	✓	✓
308	40987	Float	18th Harmonics Current Y Phase	✓	✓
309	40989	Float	18th Harmonics Current B Phase	V	V
310	40991	Float	19th Harmonics Voltage R Phase	✓	✓
311	40993	Float	19th Harmonics Voltage Y Phase	✓	✓
312	40995	Float	19th Harmonics Voltage B Phase	✓	✓
313	40997	Float	19th Harmonics Current R Phase	✓	✓
314	40999	Float	19th Harmonics Current Y Phase	✓	✓
315	41001	Float	19th Harmonics Current B Phase	✓	✓
316	41003	Float	20th Harmonics Voltage R Phase	✓	✓
317	41005	Float	20th Harmonics Voltage Y Phase	✓	✓
318	41007	Float	20th Harmonics Voltage B Phase	v	✓
319	41009	Float	20th Harmonics Current R Phase	v	✓
320	41011	Float	20th Harmonics Current Y Phase	v	✓
321	41013	Float	20th Harmonics Current B Phase	v	✓
322	41015	Float	21st Harmonics Voltage R Phase	•	✓
323	41017	Float	21st Harmonics Voltage Y Phase	v	✓
324	41019	Float	21st Harmonics Voltage B Phase	v	✓
325	41021	Float	21st Harmonics Current R Phase	~	~
326	41023	Float	21st Harmonics Current Y Phase	V	✓
327	41025	Float	21st Harmonics Current B Phase	v	✓
328	41027	Float	22nd Harmonics Voltage R Phase	v	✓
329	41029	Float	22nd Harmonics Voltage Y Phase	V	✓
330	41031	Float	22nd Harmonics Voltage B Phase	~	V

331	41033	Float	22nd Harmonics Current R Phase	✓	✓
332	41035	Float	22nd Harmonics Current Y Phase	✓	✓
333	41037	Float	22nd Harmonics Current B Phase	✓	V
334	41039	Float	23rd Harmonics Voltage R Phase	✓	✓
335	41041	Float	23rd Harmonics Voltage Y Phase	✓	✓
336	41043	Float	23rd Harmonics Voltage B Phase	✓	✓
337	41045	Float	23rd Harmonics Current R Phase	•	✓
338	41047	Float	23rd Harmonics Current Y Phase	✓	✓
339	41049	Float	23rd Harmonics Current B Phase	✓	✓
340	41051	Float	24th Harmonics Voltage R Phase	✓	✓
341	41053	Float	24th Harmonics Voltage Y Phase	✓	✓
342	41055	Float	24th Harmonics Voltage B Phase	✓	✓
343	41057	Float	24th Harmonics Current R Phase	v	✓
344	41059	Float	24th Harmonics Current Y Phase	~	✓
345	41061	Float	24th Harmonics Current B Phase	✓	✓
346	41063	Float	25th Harmonics Voltage R Phase	✓	✓
347	41065	Float	25th Harmonics Voltage Y Phase	v	✓
348	41067	Float	25th Harmonics Voltage B Phase	✓	✓
349	41069	Float	25th Harmonics Current R Phase	✓	✓
350	41071	Float	25th Harmonics Current Y Phase	v	✓
351	41073	Float	25th Harmonics Current B Phase	~	✓
352	41075	Float	26th Harmonics Voltage R Phase	~	✓
353	41077	Float	26th Harmonics Voltage Y Phase	✓	✓
354	41079	Float	26th Harmonics Voltage B Phase	✓	✓
355	41081	Float	26th Harmonics Current R Phase	✓	✓
356	41083	Float	26th Harmonics Current Y Phase	~	✓
357	41085	Float	26th Harmonics Current B Phase	~	✓
358	41087	Float	27th Harmonics Voltage R Phase	~	✓
359	41089	Float	27th Harmonics Voltage Y Phase	✓	✓
360	41091	Float	27th Harmonics Voltage B Phase	✓	✓
361	41093	Float	27th Harmonics Current R Phase	v	V
362	41095	Float	27th Harmonics Current Y Phase	✓	✓

363	41097	Float	27th Harmonics Current B Phase	✓	✓
364	41099	Float	28th Harmonics Voltage R Phase	✓	✓
365	41101	Float	28th Harmonics Voltage Y Phase	✓	✓
366	41103	Float	28th Harmonics Voltage B Phase	✓	✓
367	41105	Float	28th Harmonics Current R Phase	✓	✓
368	41107	Float	28th Harmonics Current Y Phase	✓	✓
369	41109	Float	28th Harmonics Current B Phase	✓	✓
370	41111	Float	29th Harmonics Voltage R Phase	✓	✓
371	41113	Float	29th Harmonics Voltage Y Phase	✓	✓
372	41115	Float	29th Harmonics Voltage B Phase	✓	✓
373	41117	Float	29th Harmonics Current R Phase	✓	✓
374	41119	Float	29th Harmonics Current Y Phase	✓	✓
375	41121	Float	29th Harmonics Current B Phase	✓	✓
376	41123	Float	30th Harmonics Voltage R Phase	✓	✓
377	41125	Float	30th Harmonics Voltage Y Phase	✓	✓
378	41127	Float	30th Harmonics Voltage B Phase	✓	✓
379	41129	Float	30th Harmonics Current R Phase	✓	✓
380	41131	Float	30th Harmonics Current Y Phase	✓	✓
381	41133	Float	30th Harmonics Current B Phase	✓	✓
382	41135	Float	31st Harmonics Voltage R Phase	✓	✓
383	41137	Float	31st Harmonics Voltage Y Phase	✓	✓
384	41139	Float	31st Harmonics Voltage B Phase	✓	✓
385	41141	Float	31st Harmonics Current R Phase	✓	✓
386	41143	Float	31st Harmonics Current Y Phase	✓	✓
387	41145	Float	31st Harmonics Current B Phase	✓	✓