

## Systems Integration

# Square D Modbus Solution: PowerLogic® Series 600 Power Meter

Table 1. Series 600 Power Meter Point Map, Application 4501.

Point	Type	Description	Range/Units <sup>a,b,c</sup>
1	LAO	Slave Address	1 to 247
2	LAI	Application Number	4501
3	LDI	Communication Fault	Off/On
4	LAO	First IP Address Byte	0 to 255
5	LAO	Second IP Address Byte	0 to 255
6	LAO	Third IP Address Byte	0 to 255
7	LAO	Fourth IP Address Byte	0 to 255
8	LAO	IP Port	502
9	LAO	Base Offset	0 to 65535
10	LAO	Enable to Send Initial Values	0=No 1=Yes
11	LAI	Frequency	45.00 to 66.00 Hz
13	LAI	Current Phase A	0 to 32767 A
14	LAI	Current Phase B	0 to 32767 A
15	LAI	Current Phase C	0 to 32767 A
16	LAI	Current Neutral Calculated	0 to 32767 A
20	LAI	Current Unbalance, Phase A	0 to 100%
21	LAI	Current Unbalance, Phase B	0 to 100%
22	LAI	Current Unbalance, Phase C	0 to 100%
23	LAI	Current Unbalance, Worst	0 to 100%
24	LAI	Voltage Phase A to B	0 to 32767 V
25	LAI	Voltage Phase B to C	0 to 32767 V
26	LAI	Voltage Phase C to A	0 to 32767 V
28	LAI	Voltage, Phase A to Neutral	0 to 32767 V
29	LAI	Voltage, Phase B to Neutral	0 to 32767 V
30	LAI	Voltage, Phase C to Neutral	0 to 32767 V

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**Table 1. Series 600 Power Meter Point Map, Application 4501. (continued)**

<b>Point</b>	<b>Type</b>	<b>Description</b>	<b>Range/Units<sup>a,b,c</sup></b>
32	LAI	Voltage Unbalance, Phase A to B	0 to ±100%
33	LAI	Voltage Unbalance, Phase B to C	0 to ±100%
34	LAI	Voltage Unbalance, Phase C to A	0 to ±100%
35	LAI	Voltage Unbalance, L to L Worst	0 to ±100%
36	LAI	Voltage Unbalance, Phase A to Neutral	0 to ±100%
37	LAI	Voltage Unbalance, Phase B to Neutral	0 to ±100%
38	LAI	Voltage Unbalance, Phase C to Neutral	0 to ±100%
39	LAI	Voltage Unbalance, Phase to Neutral, Worst	0 to ±100%
41	LAI	True Power Factor Phase A	1 to ±0.001
42	LAI	True Power Factor Phase B	1 to ±0.001
43	LAI	True Power Factor Phase C	1 to ±0.001
44	LAI	True Power Factor, 3-Phase Total	1 to ±0.001
49	LAI	Real Power Phase A	0 to ±32767 kW
50	LAI	Real Power Phase B	0 to ±32767 kW
51	LAI	Real Power Phase C	0 to ±32767 kW
52	LAI	Real Power 3-Phase Total	0 to ±32767 kW
53	LAI	Reactive Power Phase A	0 to ±32767 kVAr
54	LAI	Reactive Power Phase B	0 to ±32767 kVAr
55	LAI	Reactive Power Phase C	0 to ±32767 kVAr
56	LAI	Reactive Power 3-Phase Total	0 to ±32767 kVAr
57	LAI	Apparent Power Phase A	0 to 32767 kVA
58	LAI	Apparent Power Phase B	0 to 32767 kVA
59	LAI	Apparent Power Phase C	0 to 32767 kVA
60	LAI	Apparent Power 3-Phase Total	0 to 32767 kVA
61	LAI	THD/thd A Current	0 to 100%
62	LAI	THD/thd B Current	0 to 100%
63	LAI	THD/thd C Current	0 to 100%
65	LAI	THD/thd A Voltage	0 to 100%
66	LAI	THD/thd B Voltage	0 to 100%
67	LAI	THD/thd C Voltage	0 to 100%
69	LAI	A Current Fundamental RMS Magnitude	0 to 32767 A
70	LAI	A Current Fundamental Coincident Angle	0 to 359.9°
71	LAI	B Current Fundamental RMS Magnitude	0 to 32767 A
72	LAI	B Current Fundamental Coincident Angle	0 to 359.9°
73	LAI	C Current Fundamental RMS Magnitude	0 to 32767 A

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**Table 1. Series 600 Power Meter Point Map, Application 4501. (continued)**

Point	Type	Description	Range/Units <sup>a,b,c</sup>
74	LAI	C Current Fundamental Coincident Angle	0 to 359.9°
79	LAI	A Voltage Fundamental RMS Magnitude	0 to 32767 V
80	LAI	A Voltage Fundamental Coincident Angle	0 to 359.9°
81	LAI	B Voltage Fundamental RMS Magnitude	0 to 32767 V
82	LAI	B Voltage Fundamental Coincident Angle	0 to 359.9°
83	LAI	C Voltage Fundamental RMS Magnitude	0 to 32767 V
84	LAI	C Voltage Fundamental Coincident Angle	0 to 359.9°
85	LAI	A-B Voltage Fundamental RMS Magnitude	0 to 32767 V
86	LAI	A-B Voltage Fundamental Coincident Angle	0 to 359.9°
87	LAI	B-C Voltage Fundamental RMS Magnitude	0 to 32767 V
88	LAI	A-B Voltage Fundamental Coincident Angle	0 to 359.9°
89	LAI	C-A Voltage Fundamental RMS Magnitude	0 to 32767 V
90	LAI	A-B Voltage Fundamental Coincident Angle	0 to 359.9°
92	LAO	Reset Meter	4110 = Reset Min/Max 5110 = Reset All Demands 5120 = Reset Peak Demand, Power and Associated Average Power Factors 6210 = Reset All Accumulated Energies
94	LAI	Minimum Frequency	45.00 to 66.00 Hz
96	LAI	Minimum Current Phase A	0 to 32767 A
97	LAI	Minimum Current Phase B	0 to 32767 A
98	LAI	Minimum Current Phase C	0 to 32767 A
99	LAI	Minimum Current Neutral Calculated	0 to 32767 A
103	LAI	Minimum Current Unbalance, Phase A	0 to 100%
104	LAI	Minimum Current Unbalance, Phase B	0 to 100%
105	LAI	Minimum Current Unbalance, Phase C	0 to 100%
106	LAI	Minimum Current Unbalance, Worst	0 to 100%
107	LAI	Minimum Voltage Phase A to B	0 to 32767 V
108	LAI	Minimum Voltage Phase B to C	0 to 32767 V
109	LAI	Minimum Voltage Phase C to A	0 to 32767 V
111	LAI	Minimum Voltage, Phase A to Neutral	0 to 32767 V
112	LAI	Minimum Voltage, Phase B to Neutral	0 to 32767 V
113	LAI	Minimum Voltage, Phase C to Neutral	0 to 32767 V
115	LAI	Minimum Voltage Unbalance, Phase A to B	0 to ±100%
116	LAI	Minimum Voltage Unbalance, Phase B to C	0 to ±100%

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**Table 1. Series 600 Power Meter Point Map, Application 4501. (continued)**

Point	Type	Description	Range/Units <sup>a,b,c</sup>
117	LAI	Minimum Voltage Unbalance, Phase C to A	0 to ±100%
118	LAI	Minimum Voltage Unbalance, L to L Worst	0 to ±100%
119	LAI	Minimum Voltage Unbalance, Phase A to Neutral	0 to ±100%
120	LAI	Minimum Voltage Unbalance, Phase B to Neutral	0 to ±100%
121	LAI	Minimum Voltage Unbalance, Phase C to Neutral	0 to ±100%
122	LAI	Minimum Voltage Unbalance, Phase to Neutral, Worst	0 to ±100%
124	LAI	Minimum True Power Factor Phase A	1 to ±0.001
125	LAI	Minimum True Power Factor Phase B	1 to ±0.001
126	LAI	Minimum True Power Factor Phase C	1 to ±0.001
127	LAI	Minimum True Power Factor, 3-Phase Total	1 to ±0.001
132	LAI	Minimum Real Power Phase A	0 to ±32767 kW
133	LAI	Minimum Real Power Phase B	0 to ±32767 kW
134	LAI	Minimum Real Power Phase C	0 to ±32767 kW
135	LAI	Minimum Real Power 3-Phase Total	0 to ±32767 kW
136	LAI	Minimum Reactive Power Phase A	0 to ±32767 kVAr
137	LAI	Minimum Reactive Power Phase B	0 to ±32767 kVAr
138	LAI	Minimum Reactive Power Phase C	0 to ±32767 kVAr
139	LAI	Minimum Reactive Power 3-Phase Total	0 to ±32767 kVAr
140	LAI	Minimum Apparent Power Phase A	0 to ±32767 kVA
141	LAI	Minimum Apparent Power Phase B	0 to ±32767 kVA
142	LAI	Minimum Apparent Power Phase C	0 to ±32767 kVA
143	LAI	Minimum Apparent Power 3-Phase Total	0 to ±32767 kVA
144	LAI	Minimum THD/thd A Current	0 to 100%
145	LAI	Minimum THD/thd B Current	0 to 100%
146	LAI	Minimum THD/thd C Current	0 to 100%
148	LAI	Minimum THD/thd A Voltage	0 to 100%
149	LAI	Minimum THD/thd B Voltage	0 to 100%
150	LAI	Minimum THD/thd C Voltage	0 to 100%
152	LAI	Maximum Frequency	45.00 to 66.00 Hz
154	LAI	Maximum Current Phase A	0 to 32767 A
155	LAI	Maximum Current Phase B	0 to 32767 A
156	LAI	Maximum Current Phase C	0 to 32767 A
157	LAI	Maximum Current Neutral Calculated	0 to 32767 A
161	LAI	Maximum Current Unbalance, Phase A	0 to 100%
162	LAI	Maximum Current Unbalance, Phase B	0 to 100%

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**Table 1. Series 600 Power Meter Point Map, Application 4501. (continued)**

Point	Type	Description	Range/Units <sup>a,b,c</sup>
163	LAI	Maximum Current Unbalance, Phase C	0 to 100%
164	LAI	Maximum Current Unbalance, Worst	0 to 100%
165	LAI	Maximum Voltage Phase A to B	0 to 32767 V
166	LAI	Maximum Voltage Phase B to C	0 to 32767 V
167	LAI	Maximum Voltage Phase C to A	0 to 32767 V
169	LAI	Maximum Voltage, Phase A to Neutral	0 to 32767 V
170	LAI	Maximum Voltage, Phase B to Neutral	0 to 32767 V
171	LAI	Maximum Voltage, Phase C to Neutral	0 to 32767 V
173	LAI	Maximum Voltage Unbalance, Phase A to B	0 to ±100%
174	LAI	Maximum Voltage Unbalance, Phase B to C	0 to ±100%
175	LAI	Maximum Voltage Unbalance, Phase C to A	0 to ±100%
176	LAI	Maximum Voltage Unbalance, L to L Worst	0 to ±100%
177	LAI	Maximum Voltage Unbalance, Phase A to Neutral	0 to ±100%
178	LAI	Maximum Voltage Unbalance, Phase B to Neutral	0 to ±100%
179	LAI	Maximum Voltage Unbalance, Phase C to Neutral	0 to ±100%
180	LAI	Maximum Voltage Unbalance, Phase to Neutral, Worst	0 to ±100%
182	LAI	Maximum True Power Factor Phase A	1 to ±0.001
183	LAI	Maximum True Power Factor Phase B	1 to ±0.001
184	LAI	Maximum True Power Factor Phase C	1 to ±0.001
185	LAI	Maximum True Power Factor, 3-Phase Total	1 to ±0.001
190	LAI	Maximum Real Power Phase A	0 to ±32767 kW
191	LAI	Maximum Real Power Phase B	0 to ±32767 kW
192	LAI	Maximum Real Power Phase C	0 to ±32767 kW
193	LAI	Maximum Real Power 3-Phase Total	0 to ±32767 kW
194	LAI	Maximum Reactive Power Phase A	0 to ±32767 kVAr
195	LAI	Maximum Reactive Power Phase B	0 to ±32767 kVAr
196	LAI	Maximum Reactive Power Phase C	0 to ±32767 kVAr
197	LAI	Maximum Reactive Power 3-Phase Total	0 to ±32767 kVAr
198	LAI	Maximum Apparent Power Phase A	0 to 32767 kVA
199	LAI	Maximum Apparent Power Phase B	0 to 32767 kVA
200	LAI	Maximum Apparent Power Phase C	0 to 32767 kVA
201	LAI	Maximum Apparent Power 3-Phase Total	0 to 32767 kVA
202	LAI	Maximum THD/thd A Current	0 to 100%
203	LAI	Maximum THD/thd B Current	0 to 100%
204	LAI	Maximum THD/thd C Current	0 to 100%

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**Table 1. Series 600 Power Meter Point Map, Application 4501. (continued)**

<b>Point</b>	<b>Type</b>	<b>Description</b>	<b>Range/Units<sup>a,b,c</sup></b>
206	LAI	Maximum THD/thd A Voltage	0 to 100%
207	LAI	Maximum THD/thd B Voltage	0 to 100%
208	LAI	Maximum THD/thd C Voltage	0 to 100%
210	LAI	Apparent Energy 3-Phase Total VAh	0 to 10000 VAh
211	LAI	Apparent Energy 3-Phase Total 10 <sup>4</sup> VAh	0 to 10000 VAh
212	LAI	Apparent Energy 3-Phase Total 10 <sup>8</sup> VAh	0 to 10000 VAh
213	LAI	Apparent Energy 3-Phase Total 10 <sup>12</sup> VAh	0 to 10000 VAh
214	LAI	Real Energy 3-Phase Total Wh	0 to ±10000 Wh
215	LAI	Real Energy 3-Phase Total 10 <sup>4</sup> Wh	0 to ±10000 Wh
216	LAI	Real Energy 3-Phase Total 10 <sup>8</sup> Wh	0 to ±10000 Wh
217	LAI	Real Energy 3-Phase Total 10 <sup>12</sup> Wh	0 to ±10000 Wh
218	LAI	Reactive Energy 3-Phase Total VARh	0 to ±10000 VARh
219	LAI	Reactive Energy 3-Phase Total 10 <sup>4</sup> VARh	0 to ±10000 VARh
220	LAI	Reactive Energy 3-Phase Total 10 <sup>8</sup> VARh	0 to ±10000 VARh
221	LAI	Reactive Energy 3-Phase Total 10 <sup>12</sup> VARh	0 to ±10000 VARh
223	LAI	Present Current Demand Phase A	0 to 32767 A
224	LAI	Present Current Demand Phase B	0 to 32767 A
225	LAI	Present Current Demand Phase C	0 to 32767 A
226	LAI	Present Current Demand Neutral	0 to 32767 A
231	LAI	Peak Current Demand Phase A	0 to 32767 A
232	LAI	Peak Current Demand Phase B	0 to 32767 A
233	LAI	Peak Current Demand Phase C	0 to 32767 A
234	LAI	Peak Current Demand Phase N	0 to 32767 A
236	LAI	Present Real Power Demand 3-Phase Total	0 to ±32767 kW
237	LAI	Present Reactive Power Demand 3-Phase Total	0 to ±32767 kVAr
238	LAI	Present Apparent Power Demand 3-Phase Total	0 to 32767 kVA
239	LAI	Peak Real Power Demand 3-Phase Total	0 to ±32767 kW
240	LAI	Average Power Factor at Peak Real	-100 to 100
243	LAI	Peak Reactive Power Demand 3-Phase Total	0 to ±32767 kW
244	LAI	Average Power Factor at Peak Reactive	-100 to 100
247	LAI	Peak Apparent Power Demand 3-Phase Total	0 to ±32767 kVA
248	LAI	Average Power Factor at Peak Apparent	-100 to 100

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**Table 1. Series 600 Power Meter Point Map, Application 4501. (continued)**

<b>Point</b>	<b>Type</b>	<b>Description</b>	<b>Range/Units<sup>a,b,c</sup></b>
251	LAI	Predicted Real Power Demand 3-Phase Total	0 to ±32767 kW
252	LAI	Predicted Reactive Power Demand 3-Phase Total	0 to 32767 kVAr
253	LAI	Predicted Apparent Power Demand 3-Phase Total	0 to ±32767 kVA
<p><sup>a</sup> Values noted for LDIs and LDOs are in the following format: OFF text/ON text.</p> <p><sup>b</sup> This column indicates the value/range or engineering units or both if known.</p> <p><sup>c</sup> The default English value is not italicized. An italicized entry indicates an SI value.</p>			





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