

Table of Contents	2 0 0	7 0 0	7 5 0
Setup & Status	YP	YP	YP
Metering	YP	YP	YP
Min Max	YP	YP	YP
Demand	YP	YP	YP
IO	YP	YP	YP
Alarms	N	N	YP
Reset Commands	YP	YP	YP
DL System	YP	YP	YP
Notes	YP	YP	YP

Setup & Status

Reg	Name	Size	Type	Access	NV	Scale	Units	Range	Notes	7 0 0	7 0 0 P	7 1 0
1204	Usage Hours	2	Float	RO	Y	-	Hours	>= 0.0	This combination timer counts the total time for which the absolute current on at least one phase is > 0.1Amp.	Y	Y	YP
1206	Usage Minutes	2	Float	RO	Y	-	Minutes	0.0-59.0	This combination timer counts the total time for which the absolute current on at least one phase is > 0.1Amp.	Y	Y	YP
4105	Scale Factor I (current)	1	Integer	RO	N	-	-	-	Power of 10 See notes for calculations	Y	Y	YP
4106	Scale Factor V (voltage)	1	Integer	RO	N	-	-	-	Power of 10 See notes for calculations	Y	Y	YP
4107	Scale Factor W (power)	1	Integer	RO	N	-	-	-	Power of 10 See notes for calculations	Y	Y	YP
4108	Scale Factor E (energy)	1	Integer	RO	N	-	-	-	Power of 10 See notes for calculations	Y	Y	YP
4110	Usage Hours	1	Integer	RO	Y	-	Hours	0-32767		Y	Y	YP
4111	Usage Minutes	1	Integer	RO	Y	-	Minutes	0-59		Y	Y	YP
4112	Error Bitmap	1	Integer	RO	N	-	-	-	bit0: VA Clipping bit1: VB Clipping bit2: VC Clipping bit3: IA Clipping bit4: IB Clipping bit5: IC Clipping bit6: Freq Invalid reserved: bit 7: IA would clip if changed to high gain reserved: bit 8: IB would clip if changed to high gain reserved: bit 9: IC would clip if changed to high gain	Y	Y	YP
4117	Thermal Demand Interval	1	Integer	R/W	Y	-	Minutes	1-60	Current Demand Only	Y	Y	YP
4118	Power Block Demand Interval	1	Integer	R/W	Y	-	Minutes	1-60	Duration in minutes	Y	Y	YP
4119	Power Block Demand Number of Sub-Intervals	1	Integer	R/W	Y	-	Seconds	1-60	0: Sliding Block Calculation If Reg[4118] <= 15 Minutes the Sub-interval is 15 Seconds If Reg[4118] > 15 Minutes the Sub-interval is 60 Seconds 1: Fixed Block Else: Rolling Block (Must be evenly divided into 4188 to the second)	Y	Y	YP
4120	CT Ratio - Primary	1	Integer	R/W	Y	-	-	1-32767		Y	Y	YP
4121	CT Ratio - Secondary	1	Integer	R/W	Y	-	-	1 or 5		Y	Y	YP
4122	PT Ratio - Primary	1	Integer	R/W	Y	-	-	1-32767		Y	Y	YP
4123	PT Ratio - Scale (0 = No PT)	1	Integer	R/W	Y	-	-	0, 1, 10, 100		Y	Y	YP
4124	PT Ratio - Secondary	1	Integer	R/W	Y	-	-	100, 110, 115, 120		Y	Y	YP
4125	Service Frequency	1	Integer	R/W	Y	-	Hz	50 or 60		Y	Y	YP
4126	Reset Commands	1	Integer	R/W	N	-	-	N/A	Always return a 0. A listing of commands is on sheet Reset Commands	N	N	YP
4127	System Type	1	Integer	R/W	Y	-	-	10,11,12,30,31,32,40,42,44		Y	Y	YP
4128	Display Mode	1	Integer	R/W	Y	-	-	0,1	0 = IEC Units 1 = IEEE Units	Y	Y	YP

Metered Data (updated every 12 cycles)

Reg	Name	Size	Type	Access	NV	Scale	Units	Range	Notes	7 0 0	7 0 0 P	7 1 0
1000	Signed Real Energy, Consumption	2	Float	RO	Y	-	kWh	-	Signed in all PM2s, PM7s and PM750	Y	Y	YP
1002	Apparent Energy, Consumption	2	Float	RO	Y	-	kVAh	-		Y	Y	YP
1004	Signed Reactive Energy, Consumption	2	Float	RO	Y	-	kVARh	-	Signed in all PM2s, PM7s and PM750	Y	Y	YP
1006	Real Power, Total	2	Float	RO	N	-	kW	-	Signed in all PM2s, PM7s and PM750	Y	Y	YP
1008	Apparent Power, Total	2	Float	RO	N	-	kVA	-		Y	Y	YP
1010	Reactive Power, Total	2	Float	RO	N	-	kVAR	-	Signed in all PM2s, PM7s and PM750	Y	Y	YP
1012	Power Factor, Total	2	Float	RO	N	-	-	0.0 - 1.0		Y	Y	YP
1014	Voltage, L-L, 3P Average	2	Float	RO	N	-	Volt	-		Y	Y	YP
1016	Voltage, L-N, 3P Average	2	Float	RO	N	-	Volt	-		Y	Y	YP
1018	Current, 3P Average	2	Float	RO	N	-	Amp	-		Y	Y	YP
1020	Frequency	2	Float	RO	N	-	Hz	45.0 - 65.0	Derived from Phase A	Y	Y	YP
1034	Current, A	2	Float	RO	N	-	Amp	-		Y	Y	YP
1036	Current, B	2	Float	RO	N	-	Amp	-		Y	Y	YP
1038	Current, C	2	Float	RO	N	-	Amp	-		Y	Y	YP
1040	Current, N	2	Float	RO	N	-	Amp	-		Y	Y	YP
1054	Voltage, A-B	2	Float	RO	N	-	Volt	-		Y	Y	YP
1056	Voltage, B-C	2	Float	RO	N	-	Volt	-		Y	Y	YP
1058	Voltage, C-A	2	Float	RO	N	-	Volt	-		Y	Y	YP
1060	Voltage, A-N	2	Float	RO	N	-	Volt	-		Y	Y	YP
1062	Voltage, B-N	2	Float	RO	N	-	Volt	-		Y	Y	YP
1064	Voltage, C-N	2	Float	RO	N	-	Volt	-		Y	Y	YP
1066	Real Power, A	2	Float	RO	N	-	kW	-	Signed in all PM7s and PM750	Y	Y	YP
1068	Real Power, B	2	Float	RO	N	-	kW	-	Signed in all PM7s and PM750	Y	Y	YP
1070	Real Power, C	2	Float	RO	N	-	kW	-	Signed in all PM7s and PM750	Y	Y	YP

Metered Data (updated every 12 cycles)

Reg	Name	Size	Type	Access	NV	Scale	Units	Range	Notes	7 0 0	7 0 0 P	7 1 0
1072	Apparent Power, A	2	Float	RO	N	-	kVA	-		Y	Y	YP
1074	Apparent Power, B	2	Float	RO	N	-	kVA	-		Y	Y	YP
1076	Apparent Power, C	2	Float	RO	N	-	kVA	-		Y	Y	YP
1078	Reactive Power, A	2	Float	RO	N	-	kVAR	-	Signed in all PM7s and PM750	Y	Y	YP
1080	Reactive Power, B	2	Float	RO	N	-	kVAR	-	Signed in all PM7s and PM750	Y	Y	YP
1082	Reactive Power, C	2	Float	RO	N	-	kVAR	-	Signed in all PM7s and PM750	Y	Y	YP
1084	Current, A, THD	2	Float	RO	N	-	%	0.0-1000.0		Y	Y	YP
1086	Current, B, THD	2	Float	RO	N	-	%	0.0-1000.0		Y	Y	YP
1088	Current, C, THD	2	Float	RO	N	-	%	0.0-1000.0		Y	Y	YP
1092	Voltage, A-N, THD	2	Float	RO	N	-	%	0.0-1000.0		Y	Y	YP
1094	Voltage, B-N, THD	2	Float	RO	N	-	%	0.0-1000.0		Y	Y	YP
1096	Voltage, C-N, THD	2	Float	RO	N	-	%	0.0-1000.0		Y	Y	YP
1098	Voltage, A-B, THD	2	Float	RO	N	-	%	0.0-1000.0		Y	Y	YP
1100	Voltage, B-C, THD	2	Float	RO	N	-	%	0.0-1000.0		Y	Y	YP
1102	Voltage, C-A, THD	2	Float	RO	N	-	%	0.0-1000.0		Y	Y	YP
4000	Real Energy, Consumption	2	Long	RO	Y	E	kWh/Scale	0-0xFFFFFFFF	Signed in all PM2's, PM7s and PM750	Y	Y	YP
4002	Apparent Energy, Consumption	2	Long	RO	Y	E	kVAh/Scale	0-0xFFFFFFFF		Y	Y	YP
4004	Reactive Energy, Consumption	2	Long	RO	Y	E	kVARh/Scale	0-0xFFFFFFFF	Signed in all PM2's, PM7s and PM750	Y	Y	YP
4006	Real Power, Total	1	Integer	RO	N	W	kW/Scale	0-32767	Signed in all PM2's, PM7s and PM750	Y	Y	YP
4007	Apparent Power, Total	1	Integer	RO	N	W	kVA/Scale	0-32767		Y	Y	YP
4008	Reactive Power, Total	1	Integer	RO	N	W	kVAR/Scale	0-32767	Signed in all PM2's, PM7s and PM750	Y	Y	YP
4009	Power Factor, Total	1	Integer	RO	N	0.0001	-	0-1		Y	Y	YP
4010	Voltage, L-L, 3P Average	1	Integer	RO	N	V	Volt/Scale	0-32767		Y	Y	YP
4011	Voltage, L-N, 3P Average	1	Integer	RO	N	V	Volt/Scale	0-32767		Y	Y	YP

Metered Data (updated every 12 cycles)

Reg	Name	Size	Type	Access	NV	Scale	Units	Range	Notes	7 0 0	7 0 0 P	7 1 0
4012	Current, 3P Average	1	Integer	RO	N	I	Amp/Scale	0-32767		Y	Y	YP
4013	Frequency	1	Integer	RO	N	0.01	Hz	4500-6500	Derived from Phase A	Y	Y	YP
4020	Current, A	1	Integer	RO	N	I	Amp/Scale	0-32767		Y	Y	YP
4021	Current, B	1	Integer	RO	N	I	Amp/Scale	0-32767		Y	Y	YP
4022	Current, C	1	Integer	RO	N	I	Amp/Scale	0-32767		Y	Y	YP
4023	Current, N	1	Integer	RO	N	I	Amp/Scale	0-32767		Y	Y	YP
4030	Voltage, A-B	1	Integer	RO	N	V	Volt/Scale	0-32767		Y	Y	YP
4031	Voltage, B-C	1	Integer	RO	N	V	Volt/Scale	0-32767		Y	Y	YP
4032	Voltage, C-A	1	Integer	RO	N	V	Volt/Scale	0-32767		Y	Y	YP
4033	Voltage, A-N	1	Integer	RO	N	V	Volt/Scale	0-32767		Y	Y	YP
4034	Voltage, B-N	1	Integer	RO	N	V	Volt/Scale	0-32767		Y	Y	YP
4035	Voltage, C-N	1	Integer	RO	N	V	Volt/Scale	0-32767		Y	Y	YP
4036	Real Power, A	1	Integer	RO	N	W	kW/Scale	0-32767	Signed in all PM7s and PM750	Y	Y	YP
4037	Real Power, B	1	Integer	RO	N	W	kW/Scale	0-32767	Signed in all PM7s and PM750	Y	Y	YP
4038	Real Power, C	1	Integer	RO	N	W	kW/Scale	0-32767	Signed in all PM7s and PM750	Y	Y	YP
4039	Apparent Power, A	1	Integer	RO	N	W	kVA/Scale	0-32767		Y	Y	YP
4040	Apparent Power, B	1	Integer	RO	N	W	kVA/Scale	0-32767		Y	Y	YP
4041	Apparent Power, C	1	Integer	RO	N	W	kVA/Scale	0-32767		Y	Y	YP
4042	Reactive Power, A	1	Integer	RO	N	W	kVAR/Scale	0-32767	Signed in all PM7s and PM750	Y	Y	YP
4043	Reactive Power, B	1	Integer	RO	N	W	kVAR/Scale	0-32767	Signed in all PM7s and PM750	Y	Y	YP
4044	Reactive Power, C	1	Integer	RO	N	W	kVAR/Scale	0-32767	Signed in all PM7s and PM750	Y	Y	YP
4045	Current, A, THD	1	Integer	RO	N	0.1	%	0-10000		Y	Y	YP
4046	Current, B, THD	1	Integer	RO	N	0.1	%	0-10000		Y	Y	YP
4047	Current, C, THD	1	Integer	RO	N	0.1	%	0-10000		Y	Y	YP

Metered Data (updated every 12 cycles)

Reg	Name	Size	Type	Access	NV	Scale	Units	Range	Notes	7 0 0	7 0 P	7 1 0
4048	Power Factor, Total Signed	1	Integer	RO	N	0.001	-	-1.000 to 1.000	"-" sign indicates lag If a negative value is reported, add 32768 then divide by 1000 to find the lagging PF reported.	y	y	YP
4049	Voltage, A-N, THD	1	Integer	RO	N	0.1	%	0-10000		Y	Y	YP
4050	Voltage, B-N, THD	1	Integer	RO	N	0.1	%	0-10000		Y	Y	YP
4051	Voltage, C-N, THD	1	Integer	RO	N	0.1	%	0-10000		Y	Y	YP
4052	Voltage, A-B, THD	1	Integer	RO	N	0.1	%	0-10000		Y	Y	YP
4053	Voltage, B-C, THD	1	Integer	RO	N	0.1	%	0-10000		Y	Y	YP
4054	Voltage, C-A, THD	1	Integer	RO	N	0.1	%	0-10000		Y	Y	YP

Min Max values

Reg	Name	Size	Type	Access	NV	Scale	Units	Range	Notes	7 0 0	7 0 0 P	7 1 0
1104	Real Power, Total Minimum	2	Float	RO	Y	-	kW	-		Y	Y	YP
1106	Apparent Power, Total Minimum	2	Float	RO	Y	-	kVA	-		Y	Y	YP
1108	Reactive Power, Total Minimum	2	Float	RO	Y	-	kVAR	-		Y	Y	YP
1110	Power Factor, Total Minimum	2	Float	RO	Y	-	-	0.0-1.0		Y	Y	YP
1112	Frequency Minimum	2	Float	RO	Y	-	Hz	45.0-65.0	derived from Phase A	Y	Y	YP
1114	Current, A, Minimum	2	Float	RO	Y	-	Amp	-		Y	Y	YP
1116	Current, B, Minimum	2	Float	RO	Y	-	Amp	-		Y	Y	YP
1118	Current, C, Minimum	2	Float	RO	Y	-	Amp	-		Y	Y	YP
1120	Current, N, Minimum	2	Float	RO	Y	-	Amp	-		Y	Y	YP
1122	Voltage, A-N, Minimum	2	Float	RO	Y	-	Volt	-		Y	Y	YP
1124	Voltage, B-N, Minimum	2	Float	RO	Y	-	Volt	-		Y	Y	YP
1126	Voltage, C-N, Minimum	2	Float	RO	Y	-	Volt	-		Y	Y	YP
1128	Voltage, A-B, Minimum	2	Float	RO	Y	-	Volt	-		Y	Y	YP
1130	Voltage, B-C, Minimum	2	Float	RO	Y	-	Volt	-		Y	Y	YP
1132	Voltage, C-A, Minimum	2	Float	RO	Y	-	Volt	-		Y	Y	YP
1134	Current, A, THD Minimum	2	Float	RO	Y	-	%	0.0-1000.0		Y	Y	YP
1136	Current, B, THD Minimum	2	Float	RO	Y	-	%	0.0-1000.0		Y	Y	YP
1138	Current, C, THD Minimum	2	Float	RO	Y	-	%	0.0-1000.0		Y	Y	YP
1142	Voltage, A-N, THD Minimum	2	Float	RO	Y	-	%	0.0-1000.0		Y	Y	YP
1144	Voltage, B-N, THD Minimum	2	Float	RO	Y	-	%	0.0-1000.0		Y	Y	YP
1146	Voltage, C-N, THD Minimum	2	Float	RO	Y	-	%	0.0-1000.0		Y	Y	YP
1148	Voltage, A-B, THD Minimum	2	Float	RO	Y	-	%	0.0-1000.0		Y	Y	YP
1150	Voltage, B-C, THD Minimum	2	Float	RO	Y	-	%	0.0-1000.0		Y	Y	YP
1152	Voltage, C-A, THD Minimum	2	Float	RO	Y	-	%	0.0-1000.0		Y	Y	YP
1154	Real Power, Total Maximum	2	Float	RO	Y	-	kW	-		Y	Y	YP
1156	Apparent Power, Total Maximum	2	Float	RO	Y	-	kVA	-		Y	Y	YP
1158	Reactive Power, Total Maximum	2	Float	RO	Y	-	kVAR	-		Y	Y	YP
1160	Power Factor, Total Maximum	2	Float	RO	Y	-	-	0.0-1.0		Y	Y	YP
1162	Frequency Maximum	2	Float	RO	Y	-	Hz	45.0-65.0	derived from Phase A	Y	Y	YP
1164	Current, A, Maximum	2	Float	RO	Y	-	Amp	-		Y	Y	YP
1166	Current, B, Maximum	2	Float	RO	Y	-	Amp	-		Y	Y	YP
1168	Current, C, Maximum	2	Float	RO	Y	-	Amp	-		Y	Y	YP
1170	Current, N, Maximum	2	Float	RO	Y	-	Amp	-		Y	Y	YP
1172	Voltage, A-N, Maximum	2	Float	RO	Y	-	Volt	-		Y	Y	YP
1174	Voltage, B-N, Maximum	2	Float	RO	Y	-	Volt	-		Y	Y	YP
1176	Voltage, C-N, Maximum	2	Float	RO	Y	-	Volt	-		Y	Y	YP
1178	Voltage, A-B, Maximum	2	Float	RO	Y	-	Volt	-		Y	Y	YP
1180	Voltage, B-C, Maximum	2	Float	RO	Y	-	Volt	-		Y	Y	YP
1182	Voltage, C-A, Maximum	2	Float	RO	Y	-	Volt	-		Y	Y	YP
1184	Current, A, THD Maximum	2	Float	RO	Y	-	%	0.0-1000.0		Y	Y	YP
1186	Current, B, THD Maximum	2	Float	RO	Y	-	%	0.0-1000.0		Y	Y	YP
1188	Current, C, THD Maximum	2	Float	RO	Y	-	%	0.0-1000.0		Y	Y	YP
1192	Voltage, A-N, THD Maximum	2	Float	RO	Y	-	%	0.0-1000.0		Y	Y	YP

Min Max values

Reg	Name	Size	Type	Access	NV	Scale	Units	Range	Notes	7 0 0	7 0 0 P	7 1 0
1194	Voltage, B-N, THD Maximum	2	Float	RO	Y	-	%	0.0-1000.0		Y	Y	YP
1196	Voltage, C-N, THD Maximum	2	Float	RO	Y	-	%	0.0-1000.0		Y	Y	YP
1198	Voltage, A-B, THD Maximum	2	Float	RO	Y	-	%	0.0-1000.0		Y	Y	YP
1200	Voltage, B-C, THD Maximum	2	Float	RO	Y	-	%	0.0-1000.0		Y	Y	YP
1202	Voltage, C-A, THD Maximum	2	Float	RO	Y	-	%	0.0-1000.0		Y	Y	YP
4055	Real Power, Total Minimum	1	Integer	RO	Y	W	kW	0-32767		Y	Y	YP
4056	Apparent Power, Total Minimum	1	Integer	RO	Y	W	kVA	0-32767		Y	Y	YP
4057	Reactive Power, Total Minimum	1	Integer	RO	Y	W	kVAR	0-32767		Y	Y	YP
4058	Power Factor, Total Minimum	1	Integer	RO	Y	1E-04	-	0-10000		Y	Y	YP
4059	Frequency Minimum	1	Integer	RO	Y	0.01	Hz	4500-6500	derived from Phase A	Y	Y	YP
4060	Current, A, Minimum	1	Integer	RO	Y	I	Amp	0-32767		Y	Y	YP
4061	Current, B, Minimum	1	Integer	RO	Y	I	Amp	0-32767		Y	Y	YP
4062	Current, C, Minimum	1	Integer	RO	Y	I	Amp	0-32767		Y	Y	YP
4063	Current, N, Minimum	1	Integer	RO	Y	I	Amp	-		Y	Y	YP
4064	Voltage, A-N, Minimum	1	Integer	RO	Y	V	Volt	0-32767		Y	Y	YP
4065	Voltage, B-N, Minimum	1	Integer	RO	Y	V	Volt	0-32767		Y	Y	YP
4066	Voltage, C-N, Minimum	1	Integer	RO	Y	V	Volt	0-32767		Y	Y	YP
4067	Voltage, A-B, Minimum	1	Integer	RO	Y	V	Volt	0-32767		Y	Y	YP
4068	Voltage, B-C, Minimum	1	Integer	RO	Y	V	Volt	0-32767		Y	Y	YP
4069	Voltage, C-A, Minimum	1	Integer	RO	Y	V	Volt	0-32767		Y	Y	YP
4070	Current, A, THD Minimum	1	Integer	RO	Y	0.1	%	0-10000		Y	Y	YP
4071	Current, B, THD Minimum	1	Integer	RO	Y	0.1	%	0-10000		Y	Y	YP
4072	Current, C, THD Minimum	1	Integer	RO	Y	0.1	%	0-10000		Y	Y	YP
4074	Voltage, A-N, THD Minimum	1	Integer	RO	Y	0.1	%	0-10000		Y	Y	YP
4075	Voltage, B-N, THD Minimum	1	Integer	RO	Y	0.1	%	0-10000		Y	Y	YP
4076	Voltage, C-N, THD Minimum	1	Integer	RO	Y	0.1	%	0-10000		Y	Y	YP
4077	Voltage, A-B, THD Minimum	1	Integer	RO	Y	0.1	%	0-10000		Y	Y	YP
4078	Voltage, B-C, THD Minimum	1	Integer	RO	Y	0.1	%	0-10000		Y	Y	YP
4079	Voltage, C-A, THD Minimum	1	Integer	RO	Y	0.1	%	0-10000		Y	Y	YP
4080	Real Power, Total Maximum	1	Integer	RO	Y	W	kW	0-32767		Y	Y	YP
4081	Apparent Power, Total Maximum	1	Integer	RO	Y	W	kVA	0-32767		Y	Y	YP
4082	Reactive Power, Total Maximum	1	Integer	RO	Y	W	kVAR	0-32767		Y	Y	YP
4083	Power Factor, Total Maximum	1	Integer	RO	Y	1E-04	-	0-10000		Y	Y	YP
4084	Frequency Maximum	1	Integer	RO	Y	0.01	Hz	4500-6500	derived from Phase A	Y	Y	YP
4085	Current, A, Maximum	1	Integer	RO	Y	I	Amp	0-32767		Y	Y	YP
4086	Current, B, Maximum	1	Integer	RO	Y	I	Amp	0-32767		Y	Y	YP
4087	Current, C, Maximum	1	Integer	RO	Y	I	Amp	0-32767		Y	Y	YP
4088	Current, N, Maximum	1	Integer	RO	Y	I	Amp	-		Y	Y	YP
4089	Voltage, A-N, Maximum	1	Integer	RO	Y	V	Volt	0-32767		Y	Y	YP
4090	Voltage, B-N, Maximum	1	Integer	RO	Y	V	Volt	0-32767		Y	Y	YP
4091	Voltage, C-N, Maximum	1	Integer	RO	Y	V	Volt	0-32767		Y	Y	YP
4092	Voltage, A-B, Maximum	1	Integer	RO	Y	V	Volt	0-32767		Y	Y	YP
4093	Voltage, B-C, Maximum	1	Integer	RO	Y	V	Volt	0-32767		Y	Y	YP

Min Max values

Reg	Name	Size	Type	Access	NV	Scale	Units	Range	Notes	7 0 0	7 0 0 P	7 1 0
4094	Voltage, C-A, Maximum	1	Integer	RO	Y	V	Volt	0-32767		Y	Y	YP
4095	Current, A, THD Maximum	1	Integer	RO	Y	0.1	%	0-10000		Y	Y	YP
4096	Current, B, THD Maximum	1	Integer	RO	Y	0.1	%	0-10000		Y	Y	YP
4097	Current, C, THD Maximum	1	Integer	RO	Y	0.1	%	0-10000		Y	Y	YP
4099	Voltage, A-N, THD Maximum	1	Integer	RO	Y	0.1	%	0-10000		Y	Y	YP
4100	Voltage, B-N, THD Maximum	1	Integer	RO	Y	0.1	%	0-10000		Y	Y	YP
4101	Voltage, C-N, THD Maximum	1	Integer	RO	Y	0.1	%	0-10000		Y	Y	YP
4102	Voltage, A-B, THD Maximum	1	Integer	RO	Y	0.1	%	0-10000		Y	Y	YP
4103	Voltage, B-C, THD Maximum	1	Integer	RO	Y	0.1	%	0-10000		Y	Y	YP
4104	Voltage, C-A, THD Maximum	1	Integer	RO	Y	0.1	%	0-10000		Y	Y	YP

Demand Values

Reg	Name	Size	Type	Access	NV	Scale	Units	Range	Notes	7 0 0	7 0 0 P	7 1 0
1022	Real Power, Total Demand Present	2	Float	RO	N	-	kW	-		Y	Y	YP
1024	Apparent Power, Total Demand Present	2	Float	RO	N	-	kVA	-		Y	Y	YP
1026	Reactive Power, Total Demand Present	2	Float	RO	N	-	kVAR	-		Y	Y	YP
1028	Real Power, Total Demand Peak	2	Float	RO	Y	-	kW	-		Y	Y	YP
1030	Apparent Power, Total Demand Peak	2	Float	RO	Y	-	kVA	-		Y	Y	YP
1032	Reactive Power, Total Demand Peak	2	Float	RO	Y	-	kVAR	-		Y	Y	YP
1042	Current, A, Demand Present	2	Float	RO	N	-	Amp	-		Y	Y	YP
1044	Current, B, Demand Present	2	Float	RO	N	-	Amp	-		Y	Y	YP
1046	Current, C, Demand Present	2	Float	RO	N	-	Amp	-		Y	Y	YP
1048	Current, A, Demand Peak	2	Float	RO	Y	-	Amp	-		Y	Y	YP
1050	Current, B, Demand Peak	2	Float	RO	Y	-	Amp	-		Y	Y	YP
1052	Current, C, Demand Peak	2	Float	RO	Y	-	Amp	-		Y	Y	YP
4014	Real Power, Total Demand Present	1	Integer	RO	N	W	kW/Scale	0-32767		Y	Y	YP
4015	Apparent Power, Total Demand Present	1	Integer	RO	N	W	kVA/Scale	0-32767		Y	Y	YP
4016	Reactive Power, Total Demand Present	1	Integer	RO	N	W	kVAR/Scale	0-32767		Y	Y	YP
4017	Real Power, Total Demand Peak	1	Integer	RO	Y	W	kW/Scale	0-32767		Y	Y	YP
4018	Apparent Power, Total Demand Peak	1	Integer	RO	Y	W	kVA/Scale	0-32767		Y	Y	YP
4019	Reactive Power, Total Demand Peak	1	Integer	RO	Y	W	kVAR/Scale	0-32767		Y	Y	YP
4024	Current, A, Demand Present	1	Integer	RO	N	I	Amp/Scale	0-32767		Y	Y	YP
4025	Current, B, Demand Present	1	Integer	RO	N	I	Amp/Scale	0-32767		Y	Y	YP
4026	Current, C, Demand Present	1	Integer	RO	N	I	Amp/Scale	0-32767		Y	Y	YP
4027	Current, A, Demand Peak	1	Integer	RO	Y	I	Amp/Scale	0-32767		Y	Y	YP
4028	Current, B, Demand Peak	1	Integer	RO	Y	I	Amp/Scale	0-32767		Y	Y	YP
4029	Current, C, Demand Peak	1	Integer	RO	Y	I	Amp/Scale	0-32767		Y	Y	YP

Reset Commands

Command entered to reg [4126	Parameters Entered to reg[7016	Notes	7 0 0	7 0 0 P	7 1 0
666		Restart demand metering This does reset Demand Peaks	Y	Y	YP
6209	The contents of registers 4000-4005 . Note that the CT and PT ratios must be set in the new meter before executing this command	Preset Energy Values	Y	Y	YP
10001		Clear the Usage Timers. (Set to 0)	Y	Y	YP
14255		Reset all Min/Max Values. (Sets values to defaults)	Y	Y	YP
21212		Reset Peak Demand values. (Set to 0)	Y	Y	YP
30078		Clear all Energy Accumulators. (Set to 0)	Y	Y	YP

DL System

Reg	Name	Size	Type	Access	NV	Scale	Units	Range	Notes	7 0 0	7 0 0 P	7 1 0
7000	Firmware Version, Reset System	1	Integer	RO	Y	-	-	0-32767		Y	Y	YP
7001	Firmware Version, Operating System	1	Integer	RO	Y	-	-	-		Y	Y	YP
7002	Serial Number	2	Long	RO	Y	-	-	-	date/time of mfg in UTC	Y	Y	YP
7004	Device ID	1	Integer	RO	Y	-	-	15165 15201 15202	15165 = PM700, PM700P, PM710 15201 = PM200, PM200P, PM210 15202 = PM750	Y	Y	YP
7005	Modbus Address	1	Integer	RO	Y	-	-	1-247		Y	Y	YP
7006	Baudrate	1	Integer	RO	Y	-	-	2400 4800 9600 19200		Y	Y	YP
7007	Password	1	Integer	R/W	Y	-	-	-	always returns 0	Y	Y	YP
7008	Selftest	1	Integer	RO	N	-	-	-	always returns 0	Y	Y	YP
7009	PLOS	1	Integer	RO	N	-	-	0,65535	0 for OK and 65535 for BAD	Y	Y	YP
7010	Reserved	1	Integer	RO	N	-	-	-	always returns 0	Y	Y	YP
7011	Reserved	1	Integer	RO	N	-	-	-	always returns 0	Y	Y	YP
7012	Reserved	1	Integer	RO	N	-	-	-	always returns 0	Y	Y	YP
7013	Reserved	1	Integer	RO	N	-	-	-	always returns 0	Y	Y	YP
7014	Reserved	1	Integer	RO	N	-	-	-	always returns 0	Y	Y	YP

NV
Scale

Value is stored in non-volatile memory
Scalars keep the range of a variable to 3276 to 32767

NA / NAN

For integers 32768 and for floats 0x7FC00000

Access
R
W
R/W
CR/CW
R/CW
PW

Read Only
Write Only
Read/Write
Configurable Read / Configurable Write
Read / Configurable Write
Password protecte

Type
UInt
Integer
Long
Float
Split Floats
Split UInt

Unsigned 16-bit integer
Signed 16-bit integer
Unsigned 32-bit integer Upper 16-bits (MSW) in lowest-numbered register (4010/11 = MSW/LSW)
32-bit floating point Upper 16-bits (MSW) in lowest-numbered register (4010/11 = MSW/LSW)
Split into 4 UChars Upper 8-bits (MSW) in lowest-numbered register (20000/20003 = MSB / LSt
Split into 2 UChars Upper 8-bits (MSW) in lowest-numbered register (20000/20001 = MSB / LSt

MODBUS COMMANDS SUPPORTED

0x03: Read Holding Register
0x04: Read Input Register
0x06: Preset Single Register
0x10: Preset Multiple Registers
0x11: Report ID: Return string:
byte0: address
byte1: 0x11
byte2: #bytes following w/out crc
byte3: ID byte = 250
byte4: status = 0xFF
bytes5+: ID string = "PM450 Power Meter"
0x2B: Read Device Identification, BASIC implementation (0x00, 0x01 and 0x02 data), Conformity Level 1.
Object values:
0x01: "Schneider Electric"
0x02: "PM450"
0x03: "Vxx.yyy", where xx.yyy is the OS version number (reformatted version of the Modbus register #7001, (Firmware Version, Operating System). If register #7001 == 12345, then the 0x03 data would be "V12.345").

SPECIAL NOTES REGARDING

When the Operating System is erased, only registers 7000-7162 are available
Register 7001 (Firmware Version, Operating System) will read as 0 in this condition
Additionally, the ID string returned from a "Report ID" query (0x11) will be
"PM450 Power Meter - RESET SYSTEM RUNNING"
WARNING - The os is very dependant on the RS version, DLF will do a >= check on the RS for compatibility.
This will allow a fw file with newer RS to be saved to a meter with an older version of RS and make the meter
INOPERABLE.

Currently, the PM710 is the only meter that has been reconfigured with different RS code, (uses 2 000 and 2 01

Available characters are in black

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	NUL	SOH	STX	ETX	EOT	ENG	ACK	BEL	BS	HT	LF	VT	FF	CR	SO	SI
1	DLE	DC1	DC2	DC3	DC4	NAK	SYN	ETB	CAN	EM	SUB	ESC	FS	GS	RS	US
2	SP	!	"	#	\$	%	&	'	()	*	+	,	-	.	/
3	0	1	2	3	4	5	6	7	8	9			<	=	>	?
4	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	
5	P	Q	R	S	T	U	V	W	X	Y	Z	[\]	^	_
6	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	
7	p	q	r	s	t	u	v	w	x	y	z	{		}	~	DEL

Customer calculation for Scalars					
	Current	Voltage	Power	Energy	Notes
Scaler PT only	NA	100			Edit values in yellow until Register scaled value is green. I, V, and P are to be scaled between 3276.7 and 32767. E is scaled to be between 1 and 10
Secondary		1	100		
Primary	10	3200			
Calculated Ratio	10	3200			
Max Value Possible	9	576			
Actual max value after ratios	90	1643200	497664	16	
Scaler - edit to make reg value green	2	2	2		
Register scaled value	9006	16432	4976.64	1.6	