Table of Contents	200	700	750

Setup & Status

Reg	Name	Size	Type	Access	NV	Scale	Units	Range	Notes	7 5 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.	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.	YP
4073	Reset Counter	1	Uint	R/W	Y	-	-	-	Counts the number of times the meter boots up	YP
4105	Scale Factor I (current)	1	Integer	RO	N	-	-	-	Power of 10 See notes for calculations	YP
4106	Scale Factor V (voltage)	1	Integer	RO	N	-	-	-	Power of 10 See notes for calculations	YP
4107	Scale Factor W (power)	1	Integer	RO	N	-	-	-	Power of 10 See notes for calculations	YP
4108	Scale Factor E (energy)	1	Integer	RO	N	-	-	-	Power of 10 See notes for calculations	YP
4110	Usage Hours	1	Integer	RO	Y	-	Hours	0-32767		YP
4111	Usage Minutes	1	Integer	RO	Y	-	Minutes	0-59		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	YP
4117	Thermal Demand Interval	1	Integer	R/W	Y	-	Minutes	1-60	Current Demand Only	YP
4118	Power Block Demand Interval	1	Integer	R/W	Y	-	Minutes	1-60	Duration in minutes	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)	YP
4120	CT Ratio - Primary	1	Integer	R/W	Y	-	-	1-32767		YP
4121	CT Ratio - Secondary	1	Integer	R/W	Y	-	-	1 or 5		YP
4122	PT Ratio - Primary	1	Integer	R/W	Y	-	-	1-32767		YP
4123	PT Ratio - Scale (0 = No PT)	1	Integer	R/W	Y	-	-	0, 1, 10, 100		YP
4124	PT Ratio - Secondary	1	Integer	R/W	Y	-	-	100, 110, 115, 120		YP
4125	Service Frequency	1	Integer	R/W	Y	-	Hz	50 or 60		YP
4126	Reset Commands	1	Integer	R/W	N	-	-	N/A	Always return a 0. A listing of commands is on sheet Reset Commands	YP
4127	System Type	1	Integer	R/W	Y	-	-	10,11,12,30,31,32,40,42,44		YP
4128	Display Mode	1	Integer	R/W	Y	-	-	0,1	0 = IEC Units 1 = IEEE Units	YP

Reg	Name	Size	Type	Access	NV	Scale	Units	Range	Notes	750
1000	Signed Real Energy, Consumption	2	Float	RO	Y	-	kWh	-	Signed in all PM2s, PM7s and PM750	YP
1002	Apparent Energy, Consumption	2	Float	RO	Y	-	kVAh	-		YP
1004	Signed Reactive Energy, Consumption	2	Float	RO	Y	-	kVARh	-	Signed in all PM2s, PM7s and PM750	YP
1006	Real Power, Total	2	Float	RO	N	-	kW	-	Signed in all PM2s, PM7s and PM750	YP
1008	Apparent Power, Total	2	Float	RO	N	-	kVA	-		YP
1010	Reactive Power, Total	2	Float	RO	N	-	kVAR	-	Signed in all PM2s, PM7s and PM750	YP
1012	Power Factor, Total	2	Float	RO	N	-	-	0.0 - 1.0		YP
1014	Voltage, L-L, 3P Average	2	Float	RO	N	-	Volt	-		YP
1016	Voltage, L-N, 3P Average	2	Float	RO	N	-	Volt	-		YP
1018	Current, 3P Average	2	Float	RO	N	-	Amp	-		YP
1020	Frequency	2	Float	RO	N	-	Hz	45.0 - 65.0	Derived from Phase A	YP
1034	Current, A	2	Float	RO	N	-	Amp	-		YP
1036	Current, B	2	Float	RO	N	-	Amp	-		YP
1038	Current, C	2	Float	RO	N	-	Amp	-		YP
1040	Current, N	2	Float	RO	N	-	Amp	-		YP
1054	Voltage, A-B	2	Float	RO	N	-	Volt	-		YP
1056	Voltage, B-C	2	Float	RO	N	-	Volt	-		YP
1058	Voltage, C-A	2	Float	RO	N	-	Volt	-		YP
1060	Voltage, A-N	2	Float	RO	N	-	Volt	-		YP
1062	Voltage, B-N	2	Float	RO	N	-	Volt	-		YP
1064	Voltage, C-N	2	Float	RO	N	-	Volt	-		YP
1066	Real Power, A	2	Float	RO	N	-	kW	-	Signed in all PM7s and PM750	YP
1068	Real Power, B	2	Float	RO	N	-	kW	-	Signed in all PM7s and PM750	YP
1070	Real Power, C	2	Float	RO	N	-	kW	-	Signed in all PM7s and PM750	YP
1072	Apparent Power, A	2	Float	RO	N	-	kVA	-		YP
1074	Apparent Power, B	2	Float	RO	N	-	kVA	-		YP
1076	Apparent Power, C	2	Float	RO	N	-	kVA	-		YP
1078	Reactive Power, A	2	Float	RO	N	-	kVAR	-	Signed in all PM7s and PM750	YP
1080	Reactive Power, B	2	Float	RO	N	-	kVAR	-	Signed in all PM7s and PM750	YP
1082	Reactive Power, C	2	Float	RO	N	-	kVAR	-	Signed in all PM7s and PM750	YP
1084	Current, A, THD	2	Float	RO	N	-	%	0.0-1000.0		YP
1086	Current, B, THD	2	Float	RO	N	-	%	0.0-1000.0		YP
1088	Current, C, THD	2	Float	RO	N	-	%	0.0-1000.0		YP
1092	Voltage, A-N, THD	2	Float	RO	N	-	%	0.0-1000.0		YP
1094	Voltage, B-N, THD	2	Float	RO	N	-	%	0.0-1000.0		YP
1096	Voltage, C-N, THD	2	Float	RO	N	-	%	0.0-1000.0		YP
1098	Voltage, A-B, THD	2	Float	RO	N	-	%	0.0-1000.0		YP
1100	Voltage, B-C, THD	2	Float	RO	N	-	%	0.0-1000.0		YP
1102	Voltage, C-A, THD	2	Float	RO	N	-	%	0.0-1000.0		YP
4000	Real Energy, Consumption	2	Long	RO	Y	E	kWh/Scale	0-0xFFFFFFFF	Signed in all PM2's, PM7s and PM750	YP
4002	Apparent Energy, Consumption	2	Long	RO	Y	E	kVAh/Scale	0-0xFFFFFFFF		YP
4004	Reactive Energy, Consumption	2	Long	RO	Y	E	kVARh/Scale	0-0xFFFFFFFF	Signed in all PM2's, PM7s and PM750	YP
4006	Real Power, Total	1	Integer	RO	N	W	kW/Scale	0-32767	Signed in all PM2's, PM7s and PM750	YP
4007	Apparent Power, Total	1	Integer	RO	N	W	kVA/Scale	0-32767		YP

Reg	Name	Size	Type	Access	NV	Scale	Units	Range	Notes	750
4008	Reactive Power, Total	1	Integer	RO	N	W	kVAR/Scale	0-32767	Signed in all PM2's, PM7s and PM750	YP
4009	Power Factor, Total	1	Integer	RO	N	0.0001	-	0-1		YP
4010	Voltage, L-L, 3P Average	1	Integer	RO	N	V	Volt/Scale	0-32767		YP
4011	Voltage, L-N, 3P Average	1	Integer	RO	N	V	Volt/Scale	0-32767		YP
4012	Current, 3P Average	1	Integer	RO	N	I	Amp/Scale	0-32767		YP
4013	Frequency	1	Integer	RO	N	0.01	Hz	4500-6500	Derived from Phase A	YP
4020	Current, A	1	Integer	RO	N	I	Amp/Scale	0-32767		YP
4021	Current, B	1	Integer	RO	N	I	Amp/Scale	0-32767		YP
4022	Current, C	1	Integer	RO	N	I	Amp/Scale	0-32767		YP
4023	Current, N	1	Integer	RO	N	I	Amp/Scale	0-32767		YP
4030	Voltage, A-B	1	Integer	RO	N	V	Volt/Scale	0-32767		YP
4031	Voltage, B-C	1	Integer	RO	N	V	Volt/Scale	0-32767		YP
4032	Voltage, C-A	1	Integer	RO	N	V	Volt/Scale	0-32767		YP
4033	Voltage, A-N	1	Integer	RO	N	V	Volt/Scale	0-32767		YP
4034	Voltage, B-N	1	Integer	RO	N	V	Volt/Scale	0-32767		YP
4035	Voltage, C-N	1	Integer	RO	N	V	Volt/Scale	0-32767		YP
4036	Real Power, A	1	Integer	RO	N	W	kW/Scale	0-32767	Signed in all PM7s and PM750	YP
4037	Real Power, B	1	Integer	RO	N	W	kW/Scale	0-32767	Signed in all PM7s and PM750	YP
4038	Real Power, C	1	Integer	RO	N	W	kW/Scale	0-32767	Signed in all PM7s and PM750	YP
4039	Apparent Power, A	1	Integer	RO	N	W	kVA/Scale	0-32767		YP
4040	Apparent Power, B	1	Integer	RO	N	W	kVA/Scale	0-32767		YP
4041	Apparent Power, C	1	Integer	RO	N	W	kVA/Scale	0-32767		YP
4042	Reactive Power, A	1	Integer	RO	N	W	kVAR/Scale	0-32767	Signed in all PM7s and PM750	YP
4043	Reactive Power, B	1	Integer	RO	N	W	kVAR/Scale	0-32767	Signed in all PM7s and PM750	YP
4044	Reactive Power, C	1	Integer	RO	N	W	kVAR/Scale	0-32767	Signed in all PM7s and PM750	YP
4045	Current, A, THD	1	Integer	RO	N	0.1	%	0-10000		YP
4046	Current, B, THD	1	Integer	RO	N	0.1	%	0-10000		YP
4047	Current, C, THD	1	Integer	RO	N	0.1	%	0-10000		YP
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.	YP
4049	Voltage, A-N, THD	1	Integer	RO	N	0.1	%	0-10000		YP
4050	Voltage, B-N, THD	1	Integer	RO	N	0.1	%	0-10000		YP
4051	Voltage, C-N, THD	1	Integer	RO	N	0.1	%	0-10000		YP
4052	Voltage, A-B, THD	1	Integer	RO	N	0.1	%	0-10000		YP
4053	Voltage, B-C, THD	1	Integer	RO	N	0.1	%	0-10000		YP
4054	Voltage, C-A, THD	1	Integer	RO	N	0.1	%	0-10000		YP

Min Max values

Reg	Name	Size	Type	Access	NV	Scale	Units	Range	Notes	750
1104	Real Power, Total Minimum	2	Float	RO	Y	-	kW	-		YP
1106	Apparent Power, Total Minimum	2	Float	RO	Y	-	kVA	-		YP
1108	Reactive Power, Total Minimum	2	Float	RO	Y	-	kVAR	-		YP
1110	Power Factor, Total Minimum	2	Float	RO	Y	-	-	0.0-1.0		YP
1112	Frequency Minimum	2	Float	RO	Y	-	Hz	45.0-65.0	derived from Phase A	YP
1114	Current, A, Minimum	2	Float	RO	Y	-	Amp	-		YP
1116	Current, B, Minimum	2	Float	RO	Y	-	Amp	-		YP
1118	Current, C, Minimum	2	Float	RO	Y	-	Amp	-		YP
1120	Current, N, Minimum	2	Float	RO	Y	-	Amp	-		YP
1122	Voltage, A-N, Minimum	2	Float	RO	Y	-	Volt	-		YP
1124	Voltage, B-N, Minimum	2	Float	RO	Y	-	Volt	-		YP
1126	Voltage, C-N, Minimum	2	Float	RO	Y	-	Volt	-		YP
1128	Voltage, A-B, Minimum	2	Float	RO	Y	-	Volt	-		YP
1130	Voltage, B-C, Minimum	2	Float	RO	Y	-	Volt	-		YP
1132	Voltage, C-A, Minimum	2	Float	RO	Y	-	Volt	-		YP
1134	Current, A, THD Minimum	2	Float	RO	Y	-	%	0.0-1000.0		YP
1136	Current, B, THD Minimum	2	Float	RO	Y	-	%	0.0-1000.0		YP
1138	Current, C, THD Minimum	2	Float	RO	Y	-	%	0.0-1000.0		YP
1142	Voltage, A-N, THD Minimum	2	Float	RO	Y	-	%	0.0-1000.0		YP
1144	Voltage, B-N, THD Minimum	2	Float	RO	Y	-	%	0.0-1000.0		YP
1146	Voltage, C-N, THD Minimum	2	Float	RO	Y	-	%	0.0-1000.0		YP
1148	Voltage, A-B, THD Minimum	2	Float	RO	Y	-	%	0.0-1000.0		YP
1150	Voltage, B-C, THD Minimum	2	Float	RO	Y	-	%	0.0-1000.0		YP
1152	Voltage, C-A, THD Minimum	2	Float	RO	Y	-	%	0.0-1000.0		YP
1154	Real Power, Total Maximum	2	Float	RO	Y	-	kW	-		YP
1156	Apparent Power, Total Maximum	2	Float	RO	Y	-	kVA	-		YP
1158	Reactive Power, Total Maximum	2	Float	RO	Y	-	kVAR	-		YP
1160	Power Factor, Total Maximum	2	Float	RO	Y	-	-	0.0-1.0		YP
1162	Frequency Maximum	2	Float	RO	Y	-	Hz	45.0-65.0	derived from Phase A	YP
1164	Current, A, Maximum	2	Float	RO	Y	-	Amp	-		YP
1166	Current, B, Maximum	2	Float	RO	Y	-	Amp	-		YP
1168	Current, C, Maximum	2	Float	RO	Y	-	Amp	-		YP
1170	Current, N, Maximum	2	Float	RO	Y	-	Amp	-		YP
1172	Voltage, A-N, Maximum	2	Float	RO	Y	-	Volt	-		YP
1174	Voltage, B-N, Maximum	2	Float	RO	Y	-	Volt	-		YP
1176	Voltage, C-N, Maximum	2	Float	RO	Y	-	Volt	-		YP
1178	Voltage, A-B, Maximum	2	Float	RO	Y	-	Volt	-		YP
1180	Voltage, B-C, Maximum	2	Float	RO	Y	-	Volt	-		YP
1182	Voltage, C-A, Maximum	2	Float	RO	Y	-	Volt	-		YP
1184	Current, A, THD Maximum	2	Float	RO	Y	-	%	0.0-1000.0		YP
1186	Current, B, THD Maximum	2	Float	RO	Y	-	%	0.0-1000.0		YP
1188	Current, C, THD Maximum	2	Float	RO	Y	-	%	0.0-1000.0		YP
1192	Voltage, A-N, THD Maximum	2	Float	RO	Y	-	%	0.0-1000.0		YP
1194	Voltage, B-N, THD Maximum	2	Float	RO	Y	-	%	0.0-1000.0		YP
1196	Voltage, C-N, THD Maximum	2	Float	RO	Y	-	%	0.0-1000.0		YP
1198	Voltage, A-B, THD Maximum	2	Float	RO	Y	-	%	0.0-1000.0		YP
1200	Voltage, B-C, THD Maximum	2	Float	RO	Y	-	%	0.0-1000.0		YP
1202	Voltage, C-A, THD Maximum	2	Float	RO	Y	-	%	0.0-1000.0		YP
4055	Real Power, Total Minimum	1	Integer	RO	Y	W	kW	0-32767		YP
4056	Apparent Power, Total Minimum	1	Integer	RO	Y	W	kVA	0-32767		YP

Min Max values

Reg	Name	Size	Type	Access	NV	Scale	Units	Range	Notes	750
4057	Reactive Power, Total Minimum	1	Integer	RO	Y	W	kVAR	0-32767		YP
4058	Power Factor, Total Minimum	1	Integer	RO	Y	0.0001	-	0-10000		YP
4059	Frequency Minimum	1	Integer	RO	Y	0.01	Hz	4500-6500	derived from Phase A	YP
4060	Current, A, Minimum	1	Integer	RO	Y	I	Amp	0-32767		YP
4061	Current, B, Minimum	1	Integer	RO	Y	I	Amp	0-32767		YP
4062	Current, C, Minimum	1	Integer	RO	Y	I	Amp	0-32767		YP
4063	Current, N, Minimum	1	Integer	RO	Y	I	Amp	-		YP
4064	Voltage, A-N, Minimum	1	Integer	RO	Y	V	Volt	0-32767		YP
4065	Voltage, B-N, Minimum	1	Integer	RO	Y	V	Volt	0-32767		YP
4066	Voltage, C-N, Minimum	1	Integer	RO	Y	V	Volt	0-32767		YP
4067	Voltage, A-B, Minimum	1	Integer	RO	Y	V	Volt	0-32767		YP
4068	Voltage, B-C, Minimum	1	Integer	RO	Y	V	Volt	0-32767		YP
4069	Voltage, C-A, Minimum	1	Integer	RO	Y	V	Volt	0-32767		YP
4070	Current, A, THD Minimum	1	Integer	RO	Y	0.1	%	0-10000		YP
4071	Current, B, THD Minimum	1	Integer	RO	Y	0.1	%	0-10000		YP
4072	Current, C, THD Minimum	1	Integer	RO	Y	0.1	%	0-10000		YP
4074	Voltage, A-N, THD Minimum	1	Integer	RO	Y	0.1	%	0-10000		YP
4075	Voltage, B-N, THD Minimum	1	Integer	RO	Y	0.1	%	0-10000		YP
4076	Voltage, C-N, THD Minimum	1	Integer	RO	Y	0.1	%	0-10000		YP
4077	Voltage, A-B, THD Minimum	1	Integer	RO	Y	0.1	%	0-10000		YP
4078	Voltage, B-C, THD Minimum	1	Integer	RO	Y	0.1	%	0-10000		YP
4079	Voltage, C-A, THD Minimum	1	Integer	RO	Y	0.1	%	0-10000		YP
4080	Real Power, Total Maximum	1	Integer	RO	Y	W	kW	0-32767		YP
4081	Apparent Power, Total Maximum	1	Integer	RO	Y	W	kVA	0-32767		YP
4082	Reactive Power, Total Maximum	1	Integer	RO	Y	W	kVAR	0-32767		YP
4083	Power Factor, Total Maximum	1	Integer	RO	Y	0.0001	-	0-10000		YP
4084	Frequency Maximum	1	Integer	RO	Y	0.01	Hz	4500-6500	derived from Phase A	YP
4085	Current, A, Maximum	1	Integer	RO	Y	I	Amp	0-32767		YP
4086	Current, B, Maximum	1	Integer	RO	Y	I	Amp	0-32767		YP
4087	Current, C, Maximum	1	Integer	RO	Y	I	Amp	0-32767		YP
4088	Current, N, Maximum	1	Integer	RO	Y	I	Amp	-		YP
4089	Voltage, A-N, Maximum	1	Integer	RO	Y	V	Volt	0-32767		YP
4090	Voltage, B-N, Maximum	1	Integer	RO	Y	V	Volt	0-32767		YP
4091	Voltage, C-N, Maximum	1	Integer	RO	Y	V	Volt	0-32767		YP
4092	Voltage, A-B, Maximum	1	Integer	RO	Y	V	Volt	0-32767		YP
4093	Voltage, B-C, Maximum	1	Integer	RO	Y	V	Volt	0-32767		YP
4094	Voltage, C-A, Maximum	1	Integer	RO	Y	V	Volt	0-32767		YP
4095	Current, A, THD Maximum	1	Integer	RO	Y	0.1	%	0-10000		YP
4096	Current, B, THD Maximum	1	Integer	RO	Y	0.1	%	0-10000		YP
4097	Current, C, THD Maximum	1	Integer	RO	Y	0.1	%	0-10000		YP
4099	Voltage, A-N, THD Maximum	1	Integer	RO	Y	0.1	%	0-10000		YP
4100	Voltage, B-N, THD Maximum	1	Integer	RO	Y	0.1	%	0-10000		YP
4101	Voltage, C-N, THD Maximum	1	Integer	RO	Y	0.1	%	0-10000		YP
4102	Voltage, A-B, THD Maximum	1	Integer	RO	Y	0.1	%	0-10000		YP
4103	Voltage, B-C, THD Maximum	1	Integer	RO	Y	0.1	%	0-10000		YP
4104	Voltage, C-A, THD Maximum	1	Integer	RO	Y	0.1	%	0-10000		YP

Demand Values

Reg	Name	Size	Type	Access	NV	Scale	Units	Range	Notes	750
1022	Real Power, Total Demand Present	2	Float	RO	N	-	kW	-		YP
1024	Apparent Power, Total Demand Present	2	Float	RO	N	-	kVA	-		YP
1026	Reactive Power, Total Demand Present	2	Float	RO	N	-	kVAR	-		YP
1028	Real Power, Total Demand Peak	2	Float	RO	Y	-	kW	-		YP
1030	Apparent Power, Total Demand Peak	2	Float	RO	Y	-	kVA	-		YP
1032	Reactive Power, Total Demand Peak	2	Float	RO	Y	-	kVAR	-		YP
1042	Current, A, Demand Present	2	Float	RO	N	-	Amp	-		YP
1044	Current, B, Demand Present	2	Float	RO	N	-	Amp	-		YP
1046	Current, C, Demand Present	2	Float	RO	N	-	Amp	-		YP
1048	Current, A, Demand Peak	2	Float	RO	Y	-	Amp	-		YP
1050	Current, B, Demand Peak	2	Float	RO	Y	-	Amp	-		YP
1052	Current, C, Demand Peak	2	Float	RO	Y	-	Amp	-		YP
4014	Real Power, Total Demand Present	1	Integer	RO	N	W	kW/Scale	0-32767		YP
4015	Apparent Power, Total Demand Present	1	Integer	RO	N	W	kVA/Scale	0-32767		YP
4016	Reactive Power, Total Demand Present	1	Integer	RO	N	W	kVAR/Scale	0-32767		YP
4017	Real Power, Total Demand Peak	1	Integer	RO	Y	W	kW/Scale	0-32767		YP
4018	Apparent Power, Total Demand Peak	1	Integer	RO	Y	W	kVA/Scale	0-32767		YP
4019	Reactive Power, Total Demand Peak	1	Integer	RO	Y	W	kVAR/Scale	0-32767		YP
4024	Current, A, Demand Present	1	Integer	RO	N	I	Amp/Scale	0-32767		YP
4025	Current, B, Demand Present	1	Integer	RO	N	I	Amp/Scale	0-32767		YP
4026	Current, C, Demand Present	1	Integer	RO	N	I	Amp/Scale	0-32767		YP
4027	Current, A, Demand Peak	1	Integer	RO	Y	I	Amp/Scale	0-32767		YP
4028	Current, B, Demand Peak	1	Integer	RO	Y	I	Amp/Scale	0-32767		YP
4029	Current, C, Demand Peak	1	Integer	RO	Y	I	Amp/Scale	0-32767		YP

Alarm Setup & Status

Reg	Name	Size	Type	Access	NV	Scale	Units	Range	Notes	750
4113	Alarm Status Bitmap	1	Integer	RO	N	-	-	0x0000 - 07FFF	0 = Alarm OFF 1 = Alarm ON Bit 00 = Alarm Position 1 Bit 01 = Alarm Position 2 Bit 02 = Alarm Position 3 Bit 03 = Alarm Position 4 Bit 04 = Alarm Position 5 Bit 05 = Alarm Position 6 Bit 06 = Alarm Position 7 Bit 07 = Alarm Position 8 Bit 08 = Alarm Position 9 Bit 09 = Alarm Position 10 Bit 10 = Alarm Position 11 Bit 11 = Alarm Position 12 Bit 12 = Alarm Position 13 Bit 13 = Alarm Position 14 Bit 14 = Alarm Position 15 Bit 15 = Not Used	YP
4139	Alarm Setup Semaphore	1	Integer	R/W	N	-	-	0 - 60	Enter the amount of time in seconds needed to write the setup of the alarms	YP
4140	Alarm Position 1 Configuration	16	-	R/CW	Y	-	-	-	See Alarm Configuration Template	YP
4156	Alarm Position 2 Configuration	16	-	R/CW	Y	-	-	-	See Alarm Configuration Template	YP
4172	Alarm Position 3 Configuration	16	-	R/CW	Y	-	-	-	See Alarm Configuration Template	YP
4188	Alarm Position 4 Configuration	16	-	R/CW	Y	-	-	-	See Alarm Configuration Template	YP
4204	Alarm Position 5 Configuration	16	-	R/CW	Y	-	-	-	See Alarm Configuration Template	YP
4220	Alarm Position 6 Configuration	16	-	R/CW	Y	-	-	-	See Alarm Configuration Template	YP
4236	Alarm Position 7 Configuration	16	-	R/CW	Y	-	-	-	See Alarm Configuration Template	YP
4252	Alarm Position 8 Configuration	16	-	R/CW	Y	-	-	-	See Alarm Configuration Template	YP
4268	Alarm Position 9 Configuration	16	-	R/CW	Y	-	-	-	See Alarm Configuration Template	YP
4284	Alarm Position 10 Configuration	16	-	R/CW	Y	-	-	-	See Alarm Configuration Template	YP
4300	Alarm Position 11 Configuration	16	-	R/CW	Y	-	-	-	See Alarm Configuration Template	YP
4316	Alarm Position 12 Configuration	16	-	R/CW	Y	-	-	-	See Alarm Configuration Template	YP
4332	Alarm Position 13 Configuration	16	-	R/CW	Y	-	-	-	See Alarm Configuration Template	YP
4348	Alarm Position 14 Configuration	16	-	R/CW	Y	-	-	-	See Alarm Configuration Template	YP
4364	Alarm Position 15 Configuration	16	-	R/CW	Y	-	-	-	See Alarm Configuration Template	YP

Alarm Configuration Template

Reg	Name	Size	Type	Access	NV	Scale	Units	Range	Notes	750
Base	Alarm Type	1	Integer	R/CW	Y	-	-		10 = Over 20 = Under 60 = Digital (OFF to ON) 61 = Digital (ON to OFF)	YP
Base + 1	Test Register	1	Integer	R/CW	Y	-	-	4006 - 4104, 4110 - 4111, 4115 - 4116		YP
Base + 2	Enable	1	Integer	R/CW	Y	-	-	0 - 1	0 = Disable (default) 1 = Enable	YP
Base + 3	Output Association	1	Integer	R/CW	Y	-	-	0 - 1	0 = Disable (default) 1 = Enable	YP
Base + 4	Pickup Magnitude	1	Integer	R/CW	Y			0 - 32767	Will only evaluate based on Register Value, will not apply scaler	YP
Base + 5	Dropout Magnitude	1	Integer	R/CW	Y			0 - 32767	Will only evaluate based on Register Value, will not apply scaler	YP
Base + 6	Pickup Time Delay	1	Integer	R/CW	Y	-	Seconds	0 - 32767		YP

Alarm Setup & Status

Reg	Name	Size	Type	Access	NV	Scale	Units	Range	Notes	750
Base + 7	Dropout Time Delay	1	Integer	R/CW	Y	-	Seconds	0 - 32767		YP
Base + 8	Label	8	Integer	R/CW	Y	-	-		See Char Table on Notes Sheet	YP

Default Alarms

Position	Type	Test Register	Label
1	Over	4006	OVER KWt
2	Over	4007	OVER KVAt
3	Over	4008	OVER KVARt
4	Under	4009	UNDER POWER FACTOR T
5	Over	4010	OVER U Vll 3p Ave
6	Over	4011	OVER V Vln 3p Ave
7	Under	4010	UNDER U Vll 3p Ave
8	Under	4011	UNDER V Vln 3p Ave
9	Over	4012	OVER CURRENT I 3p Ave
10	Over	4013	OVER FREQUENCY
11	Under	4013	UNDER FREQUENCY
12	Over	4045	OVER THD CURRENT Ia
13	Over	4052	OVER THD VOLTAGE Vab
14	Digital (OFF to ON)	4115	DIGITAL INPUT S1
15	Digital (OFF to ON)	4116	DIGITAL INPUT S2

Reset Commands

Command entered to reg [4126	Parameters Entered to reg[7016	Notes	7 5 0
666		Restart demand metering This does reset Demand Peaks	YP
3320		De-energize digital output	YP
3321		Energize digital output	YP
3361		Write 3361 to reset digital output counter	YP
3365		Write 3365 to reset digital input counters	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	YP
10001		Clear the Usage Timers. (Set to 0)	YP
14255		Reset all Min/Max Values. (Sets values to defaults)	YP
21212		Reset Peak Demand values. (Set to 0)	YP
30078		Clear all Energy Accumulators. (Set to 0)	YP

DL System

Reg	Name	Size	Type	Access	NV	Scale	Units	Range	Notes	750
7000	Firmware Version, Reset System	1	Integer	RO	Y	-	-	0-32767		YP
7001	Firmware Version, Operating System	1	Integer	RO	Y	-	-	-		YP
7002	Serial Number	2	Long	RO	Y	-	-	-	date/time of mfg in UTC	YP
7004	Device ID	1	Integer	RO	Y	-	-	15165 15201 15202	15165 = PM700, PM700P, PM710 15201 = PM200, PM200P, PM210 15202 = PM750	YP
7005	Modbus Address	1	Integer	RO	Y	-	-	1-247		YP
7006	Baudrate	1	Integer	RO	Y	-	-	2400 4800 9600 19200		YP
7007	Password	1	Integer	R/W	Y	-	-	-	always returns 0	YP
7008	Selftest	1	Integer	RO	N	-	-	-	always returns 0	YP
7009	PLOS	1	Integer	RO	N	-	-	0,65535	0 for OK and 65535 for BAD	YP
7010	Reserved	1	Integer	RO	N	-	-	-	always returns 0	YP
7011	Reserved	1	Integer	RO	N	-	-	-	always returns 0	YP
7012	Reserved	1	Integer	RO	N	-	-	-	always returns 0	YP
7013	Reserved	1	Integer	RO	N	-	-	-	always returns 0	YP
7014	Reserved	1	Integer	RO	N	-	-	-	always returns 0	YP

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

NA / NAN	For integers 32768 and for floats 0x7FC00000

Access

R	Read Only
W	Write Only
R/W	Read/Write
CR/CW	Configurable Read / Configurable Write
R/CW	Read / Configurable Write
PW	Password protected

Type

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

MODBUS COMMANDS
SUPPORTED

0x03:	Read Holding Registers
0x04:	Read Input Registers
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 (Firmmware Version, Operating System) will read as 0 in this condition.
Additionally, the ID string returned from a "Report ID" query (0x11) will be
'PMXXX Power Meter - RESET SYSTEM RUNNING'.
WARNING - The os is very dependant on the RS version. DLF will do a >= check on the RS for
compatability. 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 produced with different RS code. (vers 2.000 and
2.010)

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	ENQ	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 Scalers					
	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	1843200	497664	16	
Scaler - edit to make reg value green	-2	2	2	1	
Register scaled value	9000	18432	4976.64	1.6	