There are three things you need to be concerned with on the device you use – the data protocol, the communication protocol, and the baud rate of the communication. The data protocol we've already established is Modbus RTU, and your device has to be a Master device – it will be actively polling the System Controller for information.

Unless there will be an LCM (Load Cpacity Manager) used for the site, you're going to use the diagnostic port of the System Controller for your connection. If there will be an LCM included with this installation please consult the factory and the LCM manaual for guidance in cases like this. The communication protocol of this port is RS-232, and there are three terminals on TB3 in the controller cabinet collectively labeled 'Diagnostic', and individually labeled '232 Rx', '232 Tx', and '232 COM'. Our default setting for this port is 'Diagnostic Port'. One of the distributors MPS certified technicians will need to change that to 'Modbus Slave', and make sure the baud rate is correct for your device. If your device does not use RS-232 you'll need a data converter. We offer an RS232 to RS485 converter kit if you are interested in that (part number 0F0580).

Once you're connected and communicating you'll use Modbus command 03 – Read Holding Registers. The HTML document you have also refers to commands 14 – Read File Record and 15 – Write File Record. Please don't attempt to use them and ignore any references in the HTML document that are referenced as file ___, record ___, byte ___. That all has to do with the changing of parameters, and we'd rather that were done with Genlink-DCP.

The System Controller (SC) memory is laid out so the SC data resides in memory locations 0 to 4095. Gen 1's data is in locations 4096 to 8191, Gen 2 from 8192 to 12287, and Gen 3 from 12288 to 16383. The data resides in the order given in the HTML document. For example, the battery voltage, listed as AI_Battery_Voltage, is given in the document as register 174, with a length of 2 bytes, or two words/registers. If you poll register 174 you should get the SC's battery voltage. Add 4096 and you'll get gen 1's battery voltage (register 4270), add 8192 and you'll get gen 2's battery voltage (register 8366), etc. The equation for any piece of data is [Gen #] * 4096 + [Register #]. Note that we've run into some Modbus software which won't allow access to registers over 10,000. Make sure ahead of time that you won't have that limitation, and if you do, it's a problem with the software.

Note: Be aware that while a building management system (BMS) is active there will likely be problems with the use of GenLink DCP to "drill down" to units (data collision when accessing the same register at once). The best practice to eliminate the nagging issues this brings about is to disconnect the BMS while the system is being serviced via GenLink DCP or connect directly to the generator you intend to work with. It is also suggested that the Modbus program use a 10-15 second refresh rate to improve the receipt of the information without corruption.

G Panel Modbus Register Mapping						
Channel Name	Channel #	Register(s) (Decimal)	Bit	Mask	# of Words	
Typical non-Bifuel, MPS, G-panel unit - Channel # is matched with GenLink DCP						
- <Analog_Input_Channels>						
OIL TEMPERATURE	1	140	N/A	N/A	1	
COOLANT TEMPERATURE	2	142	N/A	N/A	1	
OIL PRESSURE	3	144	N/A	N/A	1	
GOVERNOR COMMAND	4	146	N/A	N/A	1	
USER CONFIGURABLE 05	5	148	N/A	N/A	1	
USER CONFIGURABLE 06	6	150	N/A	N/A	1	
USER CONFIGURABLE 07	7	152	N/A	N/A	1	
USER CONFIGURABLE 08	8	154	N/A	N/A	1	
USER CONFIGURABLE 09	9	156	N/A	N/A	1	
COOLANT LEVEL	10	158	N/A	N/A	1	

FUEL LEVEL	11	160	N/A	N/A	1	
AI-1 AUX INPUT 1	12	162	N/A	N/A	1	
AI-2 AUX INPUT 2	13	164	N/A	N/A	1	
USER CONFIGURABLE 14	14	166	N/A	N/A	1	
BAT CHARGE CURRENT	15	168	N/A	N/A	1	
USER CONFIGURABLE 16	16	170	N/A	N/A	1	
USER CONFIGURABLE 17	17	172	N/A	N/A	1	
BATTERY VOLTAGE	18	174	N/A	N/A	1	
BUS CURRENT PHASE A	19	176	N/A	N/A	1	
BUS CURRENT PHASE B	20	178	N/A	N/A	1	
BUS CURRENT PHASE C	21	180	N/A	N/A	1	
BUS AVERAGE CURRENT	22	182	N/A	N/A	1	
GEN CURRENT PHASE A	23	184	N/A	N/A	1	
GEN CURRENT PHASE B	24	186	N/A	N/A	1	
GEN CURRENT PHASE C	25	188	N/A	N/A	1	
GEN AVERAGE CURRENT	26	190	N/A	N/A	1	
BUS VOLT PHASE A-B	27	192	N/A	N/A	1	
BUS VOLT PHASE B-C	28	194	N/A	N/A	1	
BUS VOLT PHASE C-A	29	196	N/A	N/A	1	
BUS AVERAGE VOLTAGE	30	198	N/A	N/A	1	
GEN VOLT PHASE A-B	31	200	N/A	N/A	1	
GEN VOLT PHASE B-C	32	202	N/A	N/A	1	
GEN VOLT PHASE C-A	33	204	N/A	N/A	1	
GEN AVERAGE VOLTAGE	34	206	N/A	N/A	1	
GEN TOTAL KW	35	208	N/A	N/A	1	
BUS TOTAL KW	36	210	N/A	N/A	1	
GEN TOTAL PF	37	212	N/A	N/A	1	
BUS TOTAL PF	38	214	N/A	N/A	1	
GEN FREQUENCY	39	216	N/A	N/A	1	
BUS FREQUENCY	40	218	N/A	N/A	1	
ENGINE RPM	41	220	N/A	N/A	1	
RPM 2	42	222	N/A	N/A	1	
RPM 3	43	224	N/A	N/A	1	
- <Digital_Input_Channels>						
AUTO SWITCH	1	129	15	0x8000	N/A	
MANUAL SWITCH	2	129	14	0x4000	N/A	
ALARM ACKNOWLEDGE	3	129	13	0x2000	N/A	
EMERGENCY STOP	4	129	12	0x1000	N/A	
REMOTE START	5	129	11	0x0800	N/A	
BATTERY CHARGER FAIL	6	129	10	0x0400	N/A	
RUPTURED BASIN	7	129	9	0x0200	N/A	
USER CONFIGURABLE 08	8	129	8	0x0100	N/A	
USER CONFIGURABLE 09	9	129	7	0x0080	N/A	
USER CONFIGURABLE 10	10	129	6	0x0040	N/A	
STOP DEADBUS CONNECT	11	129	5	0x0020	N/A	
EXERCISER	12	129	4	0x0010	N/A	
GEN SWITCH STATUS	13	129	3	0x0008	N/A	
UTIL SWITCH STATUS	14	129	2	0x0004	N/A	
SEL TRIP STATUS	15	129	1	0x0002	N/A	

MCB STATUS	16	129	0	0x0001	N/A	
PHASE ROTATION VALID	17	130	15	0x8000	N/A	
USER CONFIGURABLE 18	18	130	14	0x4000	N/A	
USER CONFIGURABLE 19	19	130	13	0x2000	N/A	
USER CONFIGURABLE 20	20	130	12	0x1000	N/A	
USER CONFIGURABLE 21	21	130	11	0x0800	N/A	
USER CONFIGURABLE 22	22	130	10	0x0400	N/A	
USER CONFIGURABLE 23	23	130	9	0x0200	N/A	
USER CONFIGURABLE 24	24	130	8	0x0100	N/A	
MODEM SELECTED	25	130	7	0x0080	N/A	
GENERATOR OVERSPEED	26	130	6	0x0040	N/A	
DI-1	27	130	5	0x0020	N/A	
DI-2	28	130	4	0x0010	N/A	
DI-3 / LINE POWER	29	130	3	0x0008	N/A	
DI-4 / GENERATOR PWR	30	130	2	0x0004	N/A	
USER CONFIGURABLE 31	31	130	1	0x0002	N/A	
USER CONFIGURABLE 32	32	130	0	0x0001	N/A	
- <Digital_Output_Functions>						
COMMON ALARM	1	131	15	0x8000	N/A	
COMMON WARNING	2	131	14	0x4000	N/A	
LO OIL PRESSURE WARN	3	131	13	0x2000	N/A	
LO OIL PRESSURE ALRM	4	131	12	0x1000	N/A	
HI COOLANT TEMP WARN	5	131	11	0x0800	N/A	
HI COOLANT TEMP ALRM	6	131	10	0x0400	N/A	
LO COOLANT TEMP WARN	7	131	9	0x0200	N/A	
HI OIL TEMP WARN	8	131	8	0x0100	N/A	
HI OIL TEMP ALARM	9	131	7	0x0080	N/A	
LO BATTERY VOLT WARN	10	131	6	0x0040	N/A	
HI BATTERY VOLT WARN	11	131	5	0x0020	N/A	
OVERSPEED ALARM	12	131	4	0x0010	N/A	
UNDERSPEED ALARM	13	131	3	0x0008	N/A	
OVER VOLTAGE ALARM	14	131	2	0x0004	N/A	
UNDER VOLTAGE ALARM	15	131	1	0x0002	N/A	
OVER FREQUENCY ALARM	16	131	0	0x0001	N/A	
UNDER FREQUENCY ALRM	17	132	15	0x8000	N/A	
HI FUEL ALARM	18	132	14	0x4000	N/A	
LO FUEL WARNING	19	132	13	0x2000	N/A	
LO FUEL ALARM	20	132	12	0x1000	N/A	
FAIL TO START ALARM	21	132	11	0x0800	N/A	
COOLANT LEVEL ALARM	22	132	10	0x0400	N/A	
RPM SENSOR FAIL ALRM	23	132	9	0x0200	N/A	
START INHIBIT ALARM	24	132	8	0x0100	N/A	
ESTOP ALARM	25	132	7	0x0080	N/A	
OIL PRESS SENSOR FLT	26	132	6	0x0040	N/A	
OIL TEMP SENSOR FLT	27	132	5	0x0020	N/A	
COOLANT TEMP SENSOR	28	132	4	0x0010	N/A	
KNOCK UNIT FAULT	29	132	3	0x0008	N/A	
KNOCK NOT CALIBRATED	30	132	2	0x0004	N/A	
XFER SWITCH ERROR AL	31	132	1	0x0002	N/A	

REVERSE POWER ALARM	32	132	0	0x0001	N/A	
MCB IS OPEN	33	133	15	0x8000	N/A	
OIL FILT BLOCKD ALRM	34	133	14	0x4000	N/A	
AIR FILT BLOCKD ALRM	35	133	13	0x2000	N/A	
OXYGEN SENSOR FAULT	36	133	12	0x1000	N/A	
ALTERNATOR PROBLEM	37	133	11	0x0800	N/A	
GAS PRESSURE WARN	38	133	10	0x0400	N/A	
EXHAUST TEMP WARNING	39	133	9	0x0200	N/A	
EXHAUST TEMP ALARM	40	133	8	0x0100	N/A	
FLAME DETECTION	41	133	7	0x0080	N/A	
CARBON MONOXIDE ALRM	42	133	6	0x0040	N/A	
VACUUM SENSOR FAULT	43	133	5	0x0020	N/A	
CAM MAPPED O P	44	133	4	0x0010	N/A	
CRANK MAPPED O P	45	133	3	0x0008	N/A	
GAS FLOW SENSOR FLT	46	133	2	0x0004	N/A	
GENERATOR IN AUTO	47	133	1	0x0002	N/A	
GENERATOR IN MANUAL	48	133	0	0x0001	N/A	
GENERATOR IN OFF	49	134	15	0x8000	N/A	
ENGINE STOPPED	50	134	14	0x4000	N/A	
ENGINE STOPPED-ALARM	51	134	13	0x2000	N/A	
STOPPED READY TO RUN	52	134	12	0x1000	N/A	
RUNNING	53	134	11	0x0800	N/A	
READY TO ACCEPT LOAD	54	134	10	0x0400	N/A	
ALARMS ENABLED	55	134	9	0x0200	N/A	
IN WARM UP	56	134	8	0x0100	N/A	
IN COOL DOWN	57	134	7	0x0080	N/A	
CRANKING	58	134	6	0x0040	N/A	
VOLTAGE DROPOUT	59	134	5	0x0020	N/A	
VOLTAGE PICKUP	60	134	4	0x0010	N/A	
IN LINE INTRRPT DLY	61	134	3	0x0008	N/A	
IN RETURN toUTIL DLY	62	134	2	0x0004	N/A	
IN TDN	63	134	1	0x0002	N/A	
LOAD SHEDDING	64	134	0	0x0001	N/A	
OUT OF SERVICE	65	135	15	0x8000	N/A	
NEED SERVICE	66	135	14	0x4000	N/A	
BATTERY CHARGER FAIL	67	135	13	0x2000	N/A	
LINE POWER	68	135	12	0x1000	N/A	
GENERATOR POWER	69	135	11	0x0800	N/A	
GAS REDUCED - KNOCK	70	135	10	0x0400	N/A	
ALL ENGINES ON LINE	71	135	9	0x0200	N/A	
SHUTDOWN GENSET	72	135	8	0x0100	N/A	
CHECK VOLT PHASE ROT	73	135	7	0x0080	N/A	
CHECK CURR PHASE ROT	74	135	6	0x0040	N/A	
ILC ALARM/WARNING 1	75	135	5	0x0020	N/A	
ILC ALARM/WARNING 2	76	135	4	0x0010	N/A	
GAS SHUTOFF - KNOCK	77	135	3	0x0008	N/A	
HI INLET MAN TEMP AL	78	135	2	0x0004	N/A	
HI INLET MAN TEMP WN	79	135	1	0x0002	N/A	
LO TURBO PRESS - GAS	80	135	0	0x0001	N/A	

LO TURBO PRESS - DSL	81	136	15	0x8000	N/A	
LO GAS PRESS SHUTOFF	82	136	14	0x4000	N/A	
LO GAS PRESS DISABLE	83	136	13	0x2000	N/A	
HI GAS PRESS DISABLE	84	136	12	0x1000	N/A	
CAC BYPASS VALVE FLT	85	136	11	0x0800	N/A	
KNOCK SAMPLE MISSING	86	136	10	0x0400	N/A	
DISABLE CHECKSYNC BD	87	136	9	0x0200	N/A	
FAULT RELAY ACTIVE	88	136	8	0x0100	N/A	
ANNUNCIATOR LIGHT 20	89	136	7	0x0080	N/A	
PM-SC COMMS FAILED	90	136	6	0x0040	N/A	
CHECK IF ILC RUNNING	91	136	5	0x0020	N/A	
USR CONFIGURABLE 092	92	136	4	0x0010	N/A	
USR CONFIGURABLE 093	93	136	3	0x0008	N/A	
USR CONFIGURABLE 094	94	136	2	0x0004	N/A	
USR CONFIGURABLE 095	95	136	1	0x0002	N/A	
USR CONFIGURABLE 096	96	136	0	0x0001	N/A	
USR CONFIGURABLE 097	97	137	15	0x8000	N/A	
USR CONFIGURABLE 098	98	137	14	0x4000	N/A	
USR CONFIGURABLE 099	99	137	13	0x2000	N/A	
USR CONFIGURABLE 100	100	137	12	0x1000	N/A	
USR CONFIGURABLE 101	101	137	11	0x0800	N/A	
USR CONFIGURABLE 102	102	137	10	0x0400	N/A	
USR CONFIGURABLE 103	103	137	9	0x0200	N/A	
USR CONFIGURABLE 104	104	137	8	0x0100	N/A	
USR CONFIGURABLE 105	105	137	7	0x0080	N/A	
USR CONFIGURABLE 106	106	137	6	0x0040	N/A	
USR CONFIGURABLE 107	107	137	5	0x0020	N/A	
USR CONFIGURABLE 108	108	137	4	0x0010	N/A	
USR CONFIGURABLE 109	109	137	3	0x0008	N/A	
USR CONFIGURABLE 110	110	137	2	0x0004	N/A	
USR CONFIGURABLE 111	111	137	1	0x0002	N/A	
USR CONFIGURABLE 112	112	137	0	0x0001	N/A	
USR CONFIGURABLE 113	113	138	15	0x8000	N/A	
USR CONFIGURABLE 114	114	138	14	0x4000	N/A	
USR CONFIGURABLE 115	115	138	13	0x2000	N/A	
USR CONFIGURABLE 116	116	138	12	0x1000	N/A	
USR CONFIGURABLE 117	117	138	11	0x0800	N/A	
USR CONFIGURABLE 118	118	138	10	0x0400	N/A	
RPM MISSING IN CRANK	119	138	9	0x0200	N/A	
ON-LINE IN BKUP MODE	120	138	8	0x0100	N/A	
ENGINE HOURS NOW	N/A	304	N/A	N/A	2	
G Panel Modbus Register Mapping						
Channel Name	**Channel #**	**Register(s) (Decimal)**	**Bit**	**Mask**	**# of Words**	
Typical PM-SC - Channel # is matched with GenLink DCP						
SC Default						

- <Analog_Input_Channels>						
USER CONFIGURABLE 01	1	140	N/A	N/A	1	
USER CONFIGURABLE 02	2	142	N/A	N/A	1	
USER CONFIGURABLE 03	3	144	N/A	N/A	1	
USER CONFIGURABLE 04	4	146	N/A	N/A	1	
USER CONFIGURABLE 05	5	148	N/A	N/A	1	
USER CONFIGURABLE 06	6	150	N/A	N/A	1	
USER CONFIGURABLE 07	7	152	N/A	N/A	1	
USER CONFIGURABLE 08	8	154	N/A	N/A	1	
USER CONFIGURABLE 09	9	156	N/A	N/A	1	
USER CONFIGURABLE 10	10	158	N/A	N/A	1	
USER CONFIGURABLE 11	11	160	N/A	N/A	1	
USER CONFIGURABLE 12	12	162	N/A	N/A	1	
USER CONFIGURABLE 13	13	164	N/A	N/A	1	
USER CONFIGURABLE 14	14	166	N/A	N/A	1	
USER CONFIGURABLE 15	15	168	N/A	N/A	1	
USER CONFIGURABLE 16	16	170	N/A	N/A	1	
USER CONFIGURABLE 17	17	172	N/A	N/A	1	
BATTERY VOLTAGE	18	174	N/A	N/A	1	
UTIL CURRENT PHASE A	19	176	N/A	N/A	1	
UTIL CURRENT PHASE B	20	178	N/A	N/A	1	
UTIL CURRENT PHASE C	21	180	N/A	N/A	1	
UTIL AVERAGE CURRENT	22	182	N/A	N/A	1	
GEN CURRENT PHASE A	23	184	N/A	N/A	1	
GEN CURRENT PHASE B	24	186	N/A	N/A	1	
GEN CURRENT PHASE C	25	188	N/A	N/A	1	
GEN AVERAGE CURRENT	26	190	N/A	N/A	1	
UTIL VOLT PHASE A-B	27	192	N/A	N/A	1	
UTIL VOLT PHASE B-C	28	194	N/A	N/A	1	
UTIL VOLT PHASE C-A	29	196	N/A	N/A	1	
UTIL AVERAGE VOLTAGE	30	198	N/A	N/A	1	
GEN VOLT PHASE A-B	31	200	N/A	N/A	1	
GEN VOLT PHASE B-C	32	202	N/A	N/A	1	
GEN VOLT PHASE C-A	33	204	N/A	N/A	1	
GEN AVERAGE VOLTAGE	34	206	N/A	N/A	1	
GEN TOTAL KW	35	208	N/A	N/A	1	
UTIL TOTAL KW	36	210	N/A	N/A	1	
GEN TOTAL PF	37	212	N/A	N/A	1	
UTIL TOTAL PF	38	214	N/A	N/A	1	
GEN FREQUENCY	39	216	N/A	N/A	1	
UTIL FREQUENCY	40	218	N/A	N/A	1	
RPM 1	41	220	N/A	N/A	1	
RPM 2	42	222	N/A	N/A	1	
RPM 3	43	224	N/A	N/A	1	
- <Digital_Input_Channels>						
AUTO SWITCH	1	129	15	0x8000	N/A	
MANUAL SWITCH	2	129	14	0x4000	N/A	
ALARM ACKNOWLEDGE	3	129	13	0x2000	N/A	
EMERGENCY STOP	4	129	12	0x1000	N/A	

REMOTE START	5	129	11	0x0800	N/A	
BATTERY CHARGER FAIL	6	129	10	0x0400	N/A	
USER CONFIGURABLE 07	7	129	9	0x0200	N/A	
USER CONFIGURABLE 08	8	129	8	0x0100	N/A	
USER CONFIGURABLE 09	9	129	7	0x0080	N/A	
USER CONFIGURABLE 10	10	129	6	0x0040	N/A	
USER CONFIGURABLE 11	11	129	5	0x0020	N/A	
USER CONFIGURABLE 12	12	129	4	0x0010	N/A	
USER CONFIGURABLE 13	13	129	3	0x0008	N/A	
USER CONFIGURABLE 14	14	129	2	0x0004	N/A	
USER CONFIGURABLE 15	15	129	1	0x0002	N/A	
USER CONFIGURABLE 16	16	129	0	0x0001	N/A	
USER CONFIGURABLE 17	17	130	15	0x8000	N/A	
USER CONFIGURABLE 18	18	130	14	0x4000	N/A	
LCM SHUTDOWN REQ 4	19	130	13	0x2000	N/A	
LCM SHUTDOWN REQ 3	20	130	12	0x1000	N/A	
LCM SHUTDOWN REQ 2	21	130	11	0x0800	N/A	
LCM SHUTDOWN REQ 1	22	130	10	0x0400	N/A	
IN-23 AUX INPUT G	23	130	9	0x0200	N/A	
IN-24 AUX INPUT H	24	130	8	0x0100	N/A	
MODEM SELECTED	25	130	7	0x0080	N/A	
GENERATOR OVERSPEED	26	130	6	0x0040	N/A	
II-1 AUX INPUT A	27	130	5	0x0020	N/A	
II-2 AUX INPUT B	28	130	4	0x0010	N/A	
II-3 AUX C /LINE PWR	29	130	3	0x0008	N/A	
II-4 AUX D / GEN PWR	30	130	2	0x0004	N/A	
II-5 AUX INPUT E	31	130	1	0x0002	N/A	
II-6 AUX INPUT F	32	130	0	0x0001	N/A	
- <Digital Output Functions>						
COMMON ALARM	1	131	15	0x8000	N/A	
COMMON WARNING	2	131	14	0x4000	N/A	
GEN11 CONTACT CLOSED	3	131	13	0x2000	N/A	
GEN12 CONTACT CLOSED	4	131	12	0x1000	N/A	
GEN13 CONTACT CLOSED	5	131	11	0x0800	N/A	
GEN14 CONTACT CLOSED	6	131	10	0x0400	N/A	
GEN15 CONTACT CLOSED	7	131	9	0x0200	N/A	
USR CONFIGURABLE 008	8	131	8	0x0100	N/A	
USR CONFIGURABLE 009	9	131	7	0x0080	N/A	
LO BATTERY VOLT WARN	10	131	6	0x0040	N/A	
HI BATTERY VOLT WARN	11	131	5	0x0020	N/A	
USR CONFIGURABLE 012	12	131	4	0x0010	N/A	
USR CONFIGURABLE 013	13	131	3	0x0008	N/A	
USR CONFIGURABLE 014	14	131	2	0x0004	N/A	
USR CONFIGURABLE 015	15	131	1	0x0002	N/A	
USR CONFIGURABLE 016	16	131	0	0x0001	N/A	
USR CONFIGURABLE 017	17	132	15	0x8000	N/A	
USR CONFIGURABLE 018	18	132	14	0x4000	N/A	
USR CONFIGURABLE 019	19	132	13	0x2000	N/A	
USR CONFIGURABLE 020	20	132	12	0x1000	N/A	

FAIL TO START ALARM	21	132	11	0x0800	N/A	
USR CONFIGURABLE 022	22	132	10	0x0400	N/A	
RPM SENSOR FAIL ALRM	23	132	9	0x0200	N/A	
START INHIBIT ALARM	24	132	8	0x0100	N/A	
ESTOP ALARM	25	132	7	0x0080	N/A	
OIL PRESS SENSOR FLT	26	132	6	0x0040	N/A	
OIL TEMP SENSOR FLT	27	132	5	0x0020	N/A	
COOLANT TEMP SENSOR	28	132	4	0x0010	N/A	
USR CONFIGURABLE 029	29	132	3	0x0008	N/A	
USR CONFIGURABLE 030	30	132	2	0x0004	N/A	
XFER SWITCH ERROR AL	31	132	1	0x0002	N/A	
REVERSE POWER ALARM	32	132	0	0x0001	N/A	
USR CONFIGURABLE 033	33	133	15	0x8000	N/A	
USR CONFIGURABLE 034	34	133	14	0x4000	N/A	
USR CONFIGURABLE 035	35	133	13	0x2000	N/A	
USR CONFIGURABLE 036	36	133	12	0x1000	N/A	
USR CONFIGURABLE 037	37	133	11	0x0800	N/A	
USR CONFIGURABLE 038	38	133	10	0x0400	N/A	
USR CONFIGURABLE 039	39	133	9	0x0200	N/A	
USR CONFIGURABLE 040	40	133	8	0x0100	N/A	
USR CONFIGURABLE 041	41	133	7	0x0080	N/A	
USR CONFIGURABLE 042	42	133	6	0x0040	N/A	
USR CONFIGURABLE 043	43	133	5	0x0020	N/A	
USR CONFIGURABLE 044	44	133	4	0x0010	N/A	
USR CONFIGURABLE 045	45	133	3	0x0008	N/A	
USR CONFIGURABLE 046	46	133	2	0x0004	N/A	
GENERATOR IN AUTO	47	133	1	0x0002	N/A	
GENERATOR IN MANUAL	48	133	0	0x0001	N/A	
GENERATOR IN OFF	49	134	15	0x8000	N/A	
ENGINE STOPPED	50	134	14	0x4000	N/A	
ENGINE STOPPED-ALARM	51	134	13	0x2000	N/A	
STOPPED READY TO RUN	52	134	12	0x1000	N/A	
RUNNING	53	134	11	0x0800	N/A	
READY TO ACCEPT LOAD	54	134	10	0x0400	N/A	
ALARMS ENABLED	55	134	9	0x0200	N/A	
IN WARM UP	56	134	8	0x0100	N/A	
IN COOL DOWN	57	134	7	0x0080	N/A	
CRANKING	58	134	6	0x0040	N/A	
VOLTAGE DROPOUT	59	134	5	0x0020	N/A	
VOLTAGE PICKUP	60	134	4	0x0010	N/A	
IN LINE INTRRPT DLY	61	134	3	0x0008	N/A	
IN RETURN toUTIL DLY	62	134	2	0x0004	N/A	
IN TDN	63	134	1	0x0002	N/A	
LOAD SHEDDING	64	134	0	0x0001	N/A	
OUT OF SERVICE	65	135	15	0x8000	N/A	
NEED SERVICE	66	135	14	0x4000	N/A	
BATTERY CHARGER FAIL	67	135	13	0x2000	N/A	
LINE POWER	68	135	12	0x1000	N/A	
GENERATOR POWER	69	135	11	0x0800	N/A	

USR CONFIGURABLE 070	70	135	10	0x0400	N/A	
ALL ENGINES ON LINE	71	135	9	0x0200	N/A	
SHUTDOWN_GENSET	72	135	8	0x0100	N/A	
UTIL MCB IS OPEN	73	135	7	0x0080	N/A	
GEN MCB IS OPEN	74	135	6	0x0040	N/A	
ILC ALARM/WARNING 1	75	135	5	0x0020	N/A	
ILC ALARM/WARNING 2	76	135	4	0x0010	N/A	
GEN01 CONTACT CLOSED	77	135	3	0x0008	N/A	
GEN02 CONTACT CLOSED	78	135	2	0x0004	N/A	
GEN03 CONTACT CLOSED	79	135	1	0x0002	N/A	
GEN04 CONTACT CLOSED	80	135	0	0x0001	N/A	
GEN05 CONTACT CLOSED	81	136	15	0x8000	N/A	
GEN06 CONTACT CLOSED	82	136	14	0x4000	N/A	
GEN07 CONTACT CLOSED	83	136	13	0x2000	N/A	
GEN08 CONTACT CLOSED	84	136	12	0x1000	N/A	
GEN09 CONTACT CLOSED	85	136	11	0x0800	N/A	
GEN10 CONTACT CLOSED	86	136	10	0x0400	N/A	
USR CONFIGURABLE 087	87	136	9	0x0200	N/A	
FAULT RELAY ACTIVE	88	136	8	0x0100	N/A	
ANNUNCIATOR LIGHT 20	89	136	7	0x0080	N/A	
A GEN COMMS FAILED	90	136	6	0x0040	N/A	
CHECK IF ILC RUNNING	91	136	5	0x0020	N/A	
USR CONFIGURABLE 092	92	136	4	0x0010	N/A	
USR CONFIGURABLE 093	93	136	3	0x0008	N/A	
USR CONFIGURABLE 094	94	136	2	0x0004	N/A	
USR CONFIGURABLE 095	95	136	1	0x0002	N/A	
USR CONFIGURABLE 096	96	136	0	0x0001	N/A	
USR CONFIGURABLE 097	97	137	15	0x8000	N/A	
USR CONFIGURABLE 098	98	137	14	0x4000	N/A	
USR CONFIGURABLE 099	99	137	13	0x2000	N/A	
USR CONFIGURABLE 100	100	137	12	0x1000	N/A	
USR CONFIGURABLE 101	101	137	11	0x0800	N/A	
USR CONFIGURABLE 102	102	137	10	0x0400	N/A	
USR CONFIGURABLE 103	103	137	9	0x0200	N/A	
USR CONFIGURABLE 104	104	137	8	0x0100	N/A	
USR CONFIGURABLE 105	105	137	7	0x0080	N/A	
USR CONFIGURABLE 106	106	137	6	0x0040	N/A	
EXERCISE_ACTIVE	107	137	5	0x0020	N/A	
USR CONFIGURABLE 108	108	137	4	0x0010	N/A	
USR CONFIGURABLE 109	109	137	3	0x0008	N/A	
USR CONFIGURABLE 110	110	137	2	0x0004	N/A	
USR CONFIGURABLE 111	111	137	1	0x0002	N/A	
USR CONFIGURABLE 112	112	137	0	0x0001	N/A	
USR CONFIGURABLE 113	113	138	15	0x8000	N/A	
USR CONFIGURABLE 114	114	138	14	0x4000	N/A	
USR CONFIGURABLE 115	115	138	13	0x2000	N/A	
USR CONFIGURABLE 116	116	138	12	0x1000	N/A	
USR CONFIGURABLE 117	117	138	11	0x0800	N/A	
USR CONFIGURABLE 118	118	138	10	0x0400	N/A	

USR CONFIGURABLE 119	119	138	9	0x0200	N/A	
USR CONFIGURABLE 120	120	138	8	0x0100	N/A	
