G Panel Modbus Register Mapping

Channel Name	Channel # (Decimal)	Register(s) PMSC	Bit	Mask	# of Words	MB Register Gen #1	MB Register Gen #2	MB Register Gen #3	MB Register Gen #4
-<Analog Input Channels> Typical non-Bifuel, MPS, G-panel unit – Channel # is matched with GenLink DCP									
OIL TEMPERATURE	1	140	N/A	N/A	1 AVAILABLE	4236	8332	12428	16537
COOLANT TEMPERATURE	2	142	N/A	N/A	1 AVAILABLE	4238	8334	12430	16539
OIL PRESSURE	3	144	N/A	N/A	1 AVAILABLE	4240	8336	12432	16541
GOVERNOR COMMAND	4	146	N/A	N/A	1 AVAILABLE	4242	8338	12434	16543
USER CONFIGURABLE 05	5	148	N/A	N/A	1	4244			
USER CONFIGURABLE 06	6	150	N/A	N/A	1	4246			
USER CONFIGURABLE 07	7	152	N/A	N/A	1	4248			
USER CONFIGURABLE 08	8	154	N/A	N/A	1	4250			
USER CONFIGURABLE 09	9	156	N/A	N/A	1	4252			
COOLANT LEVEL	10	158	N/A	N/A	1 AVAILABLE	4254	8350	12448	16542
FUEL LEVEL	11	160	N/A	N/A	1 AVAILABLE	4256	8352	12450	16546
AI-1 AUX INPUT 1	12	162	N/A	N/A	1	4258			
AI-2 AUX INPUT 2	13	164	N/A	N/A	1	4260			
USER CONFIGURABLE 14	14	166	N/A	N/A	1	4262			
BAT CHARGE CURRENT	15	168	N/A	N/A	1 AVAILABLE .1	4264			
USER CONFIGURABLE 16	16	170	N/A	N/A	1	4266			
USER CONFIGURABLE 17	17	172	N/A	N/A	1	4268			
BATTERY VOLTAGE	18	174	N/A	N/A	1 AVAILABLE .1	4270	8366	12462	16558
BUS CURRENT PHASE A	19	176	N/A	N/A	1	4272			
BUS CURRENT PHASE B	20	178	N/A	N/A	1	4274			
BUS CURRENT PHASE C	21	180	N/A	N/A	1	4276			
BUS AVERAGE CURRENT	22	182	N/A	N/A	1	4278			
GEN CURRENT PHASE A	23	184	N/A	N/A	1 AVAILABLE	4280	8376	12472	16568
GEN CURRENT PHASE B	24	186	N/A	N/A	1 AVAILABLE	4282	8378	12474	16570
GEN CURRENT PHASE C	25	188	N/A	N/A	1 AVAILABLE	4284	8380	12476	16572
GEN AVERAGE CURRENT	26	190	N/A	N/A	1 AVAILABLE	4286	8382	12478	16574
BUS VOLT PHASE A-B	27	192	N/A	N/A	1 AVAILABLE	4288	8384	12480	16576
BUS VOLT PHASE B-C	28	194	N/A	N/A	1 AVAILABLE	4290	8386	12482	16578
BUS VOLT PHASE C-A	29	196	N/A	N/A	1 AVAILABLE	4292	8388	12484	16580
BUS AVERAGE VOLTAGE	30	198	N/A	N/A	1 AVAILABLE	4294	8390	12486	16582
GEN VOLT PHASE A-B	31	200	N/A	N/A	1 AVAILABLE	4296	8392	12488	16584
GEN VOLT PHASE B-C	32	202	N/A	N/A	1 AVAILABLE	4298	8394	12490	16586
GEN VOLT PHASE C-A	33	204	N/A	N/A	1 AVAILABLE	4300	8396	12492	16588

Parameter	Reg	Val	DI	Bit	Mask	Scale	Qty	Status	R1	R2	R3	R4
GEN AVERAGE VOLTAGE	34	206					1	AVAILABLE	4302	8398	12494	16590
GEN TOTAL KW	35	208					1	AVAILABLE	4304	8400	12496	16592
BUS TOTAL KW	36	210					1		4306	8402		16596
GEN TOTAL PF	37	212					1		4308	8404	12500	16596
BUS TOTAL PF	38	214					1		4310			
GEN FREQUENCY	39	216				.01	1		4312	8408	12504	16600
BUS FREQUENCY	40	218				.01	1		4314	8410	12506	16602
ENGINE RPM	41	220				.01	1	AVAILABLE	4316	8412	12508	16602
RPM 2	42	222					1					
RPM 3	43	224					1					
Engine Hours		306						AVAILABLE	4402	8498	12594	16690
Last Run Kw Hrs		576						AVAILABLE	4672	8768	12864	16960
Total Kw Hrs		580						AVAILABLE	4676	8772	12868	16964
- <Digital Input Channels>												
AUTO SWITCH	129		1	15	0x8000		N/A	AVAILABLE	4225	8321	12417	16513
MANUAL SWITCH	129		2	14	0x4000		N/A	AVAILABLE	4225	8321	12417	16513
ALARM ACKNOWLEDGE	129		3	13	0x2000		N/A	AVAILABLE	4225	8321	12417	16513
EMERGENCY STOP	129		4	12	0x1000		N/A	AVAILABLE	4225	8321	12417	16513
REMOTE START	129		5	11	0x0800		N/A	AVAILABLE	4225	8321	12417	16513
BATTERY CHARGER FAIL	129		6	10	0x0400		N/A	AVAILABLE	4225	8321	12417	16513
RUPTURED BASIN	129		7	9	0x0200		N/A	AVAILABLE	4225	8321	12417	16513
USER CONFIGURABLE 08	129		8	8	0x0100		N/A		4225	8321	12417	16513
USER CONFIGURABLE 09	129		9	7	0x0080		N/A		4225	8321	12417	16513
USER CONFIGURABLE 10	129		10	6	0x0040		N/A		4225	8321	12417	16513
STOP DEADBUS CONNECT	129		11	5	0x0020		N/A	AVAILABLE	4225	8321	12417	16513
EXERCISER	129		12	4	0x0010		N/A		4225	8321	12417	16513
GEN SWITCH STATUS	129		13	3	0x0008		N/A	AVAILABLE	4225	8321	12417	16513
UTIL SWITCH STATUS	129		14	2	0x0004		N/A	AVAILABLE	4225	8321	12417	16513
SEL TRIP STATUS	129		15	1	0x0002		N/A		4225	8321	12417	16513
MCB STATUS	129		16	0	0x0001		N/A		4225	8321	12417	16513
PHASE ROTATION VALID	130		17	15	0x8000		N/A		4226	8322	12418	16514
USER CONFIGURABLE 18	130		18	14	0x4000		N/A		4226	8322	12418	16514
USER CONFIGURABLE 19	130		19	13	0x2000		N/A		4226	8322	12418	16514
USER CONFIGURABLE 20	130		20	12	0x1000		N/A		4226	8322	12418	16514
USER CONFIGURABLE 21	130		21	11	0x0800		N/A		4226	8322	12418	16514
USER CONFIGURABLE 22	130		22	10	0x0400		N/A		4226	8322	12418	16514
USER CONFIGURABLE 23	130		23	9	0x0200		N/A		4226	8322	12418	16514
USER CONFIGURABLE 24	130		24	8	0x0100		N/A		4226	8322	12418	16514

Function	#	Bit	Hex			Reg1	Reg2	Reg3	Reg4
MODEM SELECTED	25	7	0x0080	N/A	N/A	4226	8322	12418	16514
GENERATOR OVERSPEED	26	6	0x0040	N/A	AVAILABLE	4226	8322	12418	16514
DI-1	27	5	0x0020	N/A	AVAILABLE	4226	8322	12418	16514
DI-2	28	4	0x0010	N/A	AVAILABLE	4226	8322	12418	16514
DI-3 / LINE POWER	29	3	0x0008	N/A	AVAILABLE	4226	8322	12418	16514
DI-4 / GENERATOR PWR	30	2	0x0004	N/A	AVAILABLE	4226	8322	12418	16514
USER CONFIGURABLE 31	31	1	0x0002	N/A		4226	8322	12418	16514
USER CONFIGURABLE 32	32	0	0x0001	N/A		4226	8322	12418	16514
-<Digital Output Functions>									
COMMON ALARM	1	15	0x8000	N/A	AVAILABLE	4227	8323	12419	16515
COMMON WARNING	2	14	0x4000	N/A	AVAILABLE	4227	8323	12419	16515
LO OIL PRESSURE WARN	3	13	0x2000	N/A	AVAILABLE	4227	8323	12419	16515
LO OIL PRESSURE ALRM	4	12	0x1000	N/A	AVAILABLE	4227	8323	12419	16515
HI COOLANT TEMP WARN	5	11	0x0800	N/A	AVAILABLE	4227	8323	12419	16515
HI COOLANT TEMP ALRM	6	10	0x0400	N/A	AVAILABLE	4227	8323	12419	16515
LO COOLANT TEMP WARN	7	9	0x0200	N/A	AVAILABLE	4227	8323	12419	16515
HI OIL TEMP WARN	8	8	0x0100	N/A	AVAILABLE	4227	8323	12419	16515
HI OIL TEMP ALARM	9	7	0x0080	N/A	AVAILABLE	4227	8323	12419	16515
LO BATTERY VOLT WARN	10	6	0x0040	N/A	AVAILABLE	4227	8323	12419	16515
HI BATTERY VOLT WARN	11	5	0x0020	N/A	AVAILABLE	4227	8323	12419	16515
OVERSPEED ALARM	12	4	0x0010	N/A	AVAILABLE	4227	8323	12419	16515
UNDERSPEED ALARM	13	3	0x0008	N/A	AVAILABLE	4227	8323	12419	16515
OVER VOLTAGE ALARM	14	2	0x0004	N/A	AVAILABLE	4227	8323	12419	16515
UNDER VOLTAGE ALARM	15	1	0x0002	N/A	AVAILABLE	4227	8323	12419	16515
OVER FREQUENCY ALARM	16	0	0x0001	N/A	AVAILABLE	4227	8323	12419	16515
UNDER FREQUENCY ALRM	17	15	0x8000	N/A	AVAILABLE	4228	8324	12420	16516
HI FUEL ALARM	18	14	0x4000	N/A	AVAILABLE	4228	8324	12420	16516
LO FUEL WARNING	19	13	0x2000	N/A	AVAILABLE	4228	8324	12420	16516
LO FUEL ALARM	20	12	0x1000	N/A	AVAILABLE	4228	8324	12420	16516
FAIL TO START ALARM	21	11	0x0800	N/A	AVAILABLE	4228	8324	12420	16516
COOLANT LEVEL ALARM	22	10	0x0400	N/A	AVAILABLE	4228	8324	12420	16516
RPM SENSOR FAIL ALRM	23	9	0x0200	N/A	AVAILABLE	4228	8324	12420	16516
START INHIBIT ALARM	24	8	0x0100	N/A	AVAILABLE	4228	8324	12420	16516
ESTOP ALARM	25	7	0x0080	N/A	AVAILABLE	4228	8324	12420	16516
OIL PRESS SENSOR FLT	26	6	0x0040	N/A	AVAILABLE	4228	8324	12420	16516
OIL TEMP SENSOR FLT	27	5	0x0020	N/A	AVAILABLE	4228	8324	12420	16516
COOLANT TEMP SENSOR	28	4	0x0010	N/A	AVAILABLE	4228	8324	12420	16516
KNOCK UNIT FAULT	29	3	0x0008	N/A	N/A	4228	8324	12420	16516

Name										
KNOCK NOT CALIBRATED	30	132	2	0x0004	N/A		4228	8324	12420	16516
XFER SWITCH ERROR AL	31	132	1	0x0002	N/A		4228	8324	12420	16516
REVERSE POWER ALARM	32	132	0	0x0001	N/A		4228	8324	12420	16516
MCB IS OPEN	33	133	15	0x8000	N/A		4229	8325	12421	16517
OIL FLT BLOCKD ALRM	34	133	14	0x4000	N/A		4229	8325	12421	16517
AIR FLT BLOCKD ALRM	35	133	13	0x2000	N/A		4229	8325	12421	16517
OXYGEN SENSOR FAULT	36	133	12	0x1000	N/A		4229	8325	12421	16517
ALTERNATOR PROBLEM	37	133	11	0x0800	N/A	AVAILABLE	4229	8325	12421	16517
GAS PRESSURE WARN	38	133	10	0x0400	N/A		4229	8325	12421	16517
EXHAUST TEMP WARNING	39	133	9	0x0200	N/A		4229	8325	12421	16517
EXHAUST TEMP ALARM	40	133	8	0x0100	N/A		4229	8325	12421	16517
FLAME DETECTION	41	133	7	0x0080	N/A		4229	8325	12421	16517
CARBON MONOXIDE ALRM	42	133	6	0x0040	N/A		4229	8325	12421	16517
VACUUM SENSOR FAULT	43	133	5	0x0020	N/A		4229	8325	12421	16517
CAM MAPPED O P	44	133	4	0x0010	N/A		4229	8325	12421	16517
CRANK MAPPED O P	45	133	3	0x0008	N/A		4229	8325	12421	16517
GAS FLOW SENSOR FLT	46	133	2	0x0004	N/A		4229	8325	12421	16517
GENERATOR IN AUTO	47	133	1	0x0002	N/A	AVAILABLE	4229	8325	12421	16517
GENERATOR IN MANUAL	48	133	0	0x0001	N/A	AVAILABLE	4229	8325	12421	16517
GENERATOR IN OFF	49	134	15	0x8000	N/A	AVAILABLE	4230	8326	12422	16518
ENGINE STOPPED	50	134	14	0x4000	N/A	AVAILABLE	4230	8326	12422	16518
ENGINE STOPPED-ALARM	51	134	13	0x2000	N/A	AVAILABLE	4230	8326	12422	16518
STOPPED READY TO RUN	52	134	12	0x1000	N/A	AVAILABLE	4230	8326	12422	16518
RUNNING	53	134	11	0x0800	N/A	AVAILABLE	4230	8326	12422	16518
READY TO ACCEPT LOAD	54	134	10	0x0400	N/A	AVAILABLE	4230	8326	12422	16518
ALARMS ENABLED	55	134	9	0x0200	N/A	AVAILABLE	4230	8326	12422	16518
IN WARM UP	56	134	8	0x0100	N/A	AVAILABLE	4230	8326	12422	16518
IN COOL DOWN	57	134	7	0x0080	N/A	AVAILABLE	4230	8326	12422	16518
CRANKING	58	134	6	0x0040	N/A	AVAILABLE	4230	8326	12422	16518
VOLTAGE DROPOUT	59	134	5	0x0020	N/A		4230	8326	12422	16518
VOLTAGE PICKUP	60	134	4	0x0010	N/A		4230	8326	12422	16518
IN LINE INTRPT DLY	61	134	3	0x0008	N/A		4230	8326	12422	16518
IN RETURN EQUTIL DLY	62	134	2	0x0004	N/A		4230	8326	12422	16518
IN TDN	63	134	1	0x0002	N/A		4230	8326	12422	16518
LOAD SHEDDING	64	134	0	0x0001	N/A		4230	8326	12422	16518
OUT OF SERVICE	65	135	15	0x8000	N/A		4231	8327	12423	16519
NEED SERVICE	66	135	14	0x4000	N/A		4231	8327	12423	16519
BATTERY CHARGER FAIL	67	135	13	0x2000	N/A	AVAILABLE	4231	8327	12423	16519

Name	#			Hex	Status				
LINE POWER	68	135	12	0x1000	N/A AVAILABLE	4231	8327	12423	16519
GENERATOR POWER	69	135	11	0x0800	N/A AVAILABLE	4231	8327	12423	16519
GAS REDUCED - KNOCK	70	135	10	0x0400	N/A AVAILABLE	4231	8327	12423	16519
ALL ENGINES ON LINE	71	135	9	0x0200	N/A AVAILABLE	4231	8327	12423	16519
SHUTDOWN GENSET	72	135	8	0x0100	N/A AVAILABLE	4231	8327	12423	16519
CHECK VOLT PHASE ROT	73	135	7	0x0080	N/A	4231	8327	12423	16519
CHECK CURR PHASE ROT	74	135	6	0x0040	N/A	4231	8327	12423	16519
IIC ALARM/WARNING 2	75	135	5	0x0020	N/A	4231	8327	12423	16519
IIC ALARM/WARNING 1	76	135	4	0x0010	N/A	4231	8327	12423	16519
GAS SHUTOFF - KNOCK	77	135	3	0x0008	N/A	4231	8327	12423	16519
HI INLET MAN TEMP AL	78	135	2	0x0004	N/A	4231	8327	12423	16519
HI INLET MAN TEMP WN	79	135	1	0x0002	N/A	4231	8327	12423	16519
LO TURBO PRESS - GAS	80	135	0	0x0001	N/A	4231	8327	12423	16519
LO TURBO PRESS - DSI	81	136	15	0x8000	N/A	4232	8328	12424	16520
LO GAS PRESS SHUTOFF	82	136	14	0x4000	N/A	4232	8328	12424	16520
LO GAS PRESS DISABLE	83	136	13	0x2000	N/A	4232	8328	12424	16520
HI GAS PRESS DISABLE	84	136	12	0x1000	N/A	4232	8328	12424	16520
CAC BYPASS VALVE FLT	85	136	11	0x0800	N/A	4232	8328	12424	16520
KNOCK SAMPLE MISSING	86	136	10	0x0400	N/A	4232	8328	12424	16520
DISABLE CHECKSYNC BD	87	136	9	0x0200	N/A	4232	8328	12424	16520
FAULT RELAY ACTIVE	88	136	8	0x0100	N/A AVAILABLE	4232	8328	12424	16520
ANNUNCIATOR LIGHT 20	89	136	7	0x0080	N/A AVAILABLE	4232	8328	12424	16520
PM-SC COMMS FAILED	90	136	6	0x0040	N/A	4232	8328	12424	16520
CHECK IF IIC RUNNING	91	136	5	0x0020	N/A	4232	8328	12424	16520
USR CONFIGURABLE 092	92	136	4	0x0010	N/A	4232	8328	12424	16520
USR CONFIGURABLE 093	93	136	3	0x0008	N/A	4232	8328	12424	16520
USR CONFIGURABLE 094	94	136	2	0x0004	N/A	4232	8328	12424	16520
USR CONFIGURABLE 095	95	136	1	0x0002	N/A	4232	8328	12424	16520
USR CONFIGURABLE 096	96	136	0	0x0001	N/A	4232	8328	12424	16520
USR CONFIGURABLE 097	97	137	15	0x8000	N/A	4233	8329	12425	16521
USR CONFIGURABLE 098	98	137	14	0x4000	N/A	4233	8329	12425	16521
USR CONFIGURABLE 099	99	137	13	0x2000	N/A	4233	8329	12425	16521
USR CONFIGURABLE 100	100	137	12	0x1000	N/A	4233	8329	12425	16521
USR CONFIGURABLE 101	101	137	11	0x0800	N/A	4233	8329	12425	16521
USR CONFIGURABLE 102	102	137	10	0x0400	N/A	4233	8329	12425	16521
USR CONFIGURABLE 103	103	137	9	0x0200	N/A	4233	8329	12425	16521
USR CONFIGURABLE 104	104	137	8	0x0100	N/A	4233	8329	12425	16521
USR CONFIGURABLE 105	105	137	7	0x0080	N/A	4233	8329	12425	16521

USR CONFIGURABLE 106	106	137	6	0x0040	N/A	4233	8329	12425	16521
USR CONFIGURABLE 107	107	137	5	0x0020	N/A	4233	8329	12425	16521
USR CONFIGURABLE 108	108	137	4	0x0010	N/A	4233	8329	12425	16521
USR CONFIGURABLE 109	109	137	3	0x0008	N/A	4233	8329	12425	16521
USR CONFIGURABLE 110	110	137	2	0x0004	N/A	4233	8329	12425	16521
USR CONFIGURABLE 111	111	137	1	0x0002	N/A	4233	8329	12425	16521
USR CONFIGURABLE 112	112	137	0	0x0001	N/A	4233	8329	12425	16521
USR CONFIGURABLE 113	113	138	15	0x8000	N/A	4234	8330	12426	16522
USR CONFIGURABLE 114	114	138	14	0x4000	N/A	4234	8330	12426	16522
USR CONFIGURABLE 115	115	138	13	0x2000	N/A	4234	8330	12426	16522
USR CONFIGURABLE 116	116	138	12	0x1000	N/A	4234	8330	12426	16522
USR CONFIGURABLE 117	117	138	11	0x0800	N/A	4234	8330	12426	16522
USR CONFIGURABLE 118	118	138	10	0x0400	N/A	4234	8330	12426	16522
RPM MISSING IN CRANK	119	138	9	0x0200	N/A AVAILABLE	4234	8330	12426	16522
ON-LINE IN BKUP MODE	120	138	8	0x0100	N/A AVAILABLE	4234	8330	12426	16522
ENGINE HOURS NOW	N/A	304	N/A	N/A	2	4400	8496	12592	16688