

### SIGMA S6100 MODBUS Memory Map

Addr	Tag	Description	Parameter	Range	Data type	Read/Write	KepServe rDDE Link
<b>Measurements</b>							
1	U12	Phase 1-2 Voltage	0 - 65535 VAC	0 - 65535	Word	R	0
2	U23	Phase 2-3 Voltage	0 - 65535 VAC	0 - 65535	Word	R	1
3	U31	Phase 3-1 Voltage	0 - 65535 VAC	0 - 65535	Word	R	1
4	U1N	Phase 1-N Voltage	0 - 65535 VAC	0 - 65535	Word	R	0
5	U2N	Phase 2-N Voltage	0 - 65535 VAC	0 - 65535	Word	R	1
6	U3N	Phase 3-N Voltage	0 - 65535 VAC	0 - 65535	Word	R	1
7	Freq	Frequency	0 - 999.9 Hz	0 - 9999	Word	R	0
8	PhaseDeviation	Phase Deviation	0-360	0-360	Word	R	
<b>Status</b>							
30	GovIdle	Gov Idle	0 - 1	0 - 1	Word	R	
31	GovFreqCtrl	Gov Freq Ctrl	0 - 1	0 - 1	Word	R	
32	GovSync	Gov Sync	0 - 1	0 - 1	Word	R	
33	GovRampUp	Gov Ramp Up	0 - 1	0 - 1	Word	R	
34	GovLs	Gov Ls	0 - 1	0 - 1	Word	R	
35	GovUnload	Gov Unload	0 - 1	0 - 1	Word	R	
36	AvrIdle	Avr Idle	0 - 1	0 - 1	Word	R	
37	AvrVoltCtrl	Avr Volt Ctrl	0 - 1	0 - 1	Word	R	
38	AvrMatch	Avr Matching	0 - 1	0 - 1	Word	R	
39	AvrRampUp	Avr Ramp Up	0 - 1	0 - 1	Word	R	
40	AvrLs	Avr Ls	0 - 1	0 - 1	Word	R	
41	AvrUnload	Avr Unload	0 - 1	0 - 1	Word	R	
42	EngineStart	Engine Start	0 - 1	0 - 1	Word	R	
43							
44							
45							
46							
47							
48							
49							
50							
51							
52							
53							
54							
55	VEUpperTrip	Voltage Establish Upper Trip	0 - 1	0 - 1	Word	R	
56	VELowerTrip	Voltage Establish Lower Trip	0 - 1	0 - 1	Word	R	
57	FEUpperTrip	Frequency Establish Upper Trip	0 - 1	0 - 1	Word	R	
58	FELowerTrip	Frequency Establish Lower Trip	0 - 1	0 - 1	Word	R	
59	CBCloseError	Curcuit Breaker Close Error	0 - 1	0 - 1	Word	R	
60	SyncError	Sync Error	0 - 1	0 - 1	Word	R	
61	EngineStartError	Engine Start Error	0 - 1	0 - 1	Word	R	
62	EngineError	Engine Error	0 - 1	0 - 1	Word	R	
63							
64							
65							
66							
67							
68							
69	Powersupply1Fault	Powersupply 1 Fault	0 - 1	0 - 1	Word	R	
70	Powersupply2Fault	Powersupply 2 Fault	0 - 1	0 - 1	Word	R	
71	CanbusFault	Canbus Fault	0 - 1	0 - 1	Word	R	
72	MHFault	Measurehead Fault	0 - 1	0 - 1	Word	R	
73	ExtSyncFault	External Sync Fault	0 - 1	0 - 1	Word	R	
74	IntSyncFault	Internal Sync Fault	0 - 1	0 - 1	Word	R	
75	DeadbusWireFault	Deadbus Wire Fault	0 - 1	0 - 1	Word	R	
76	CTWireFault	CT Wire Fault	0 - 1	0 - 1	Word	R	
77							
78							
79							
<b>LED Status</b>							
80	LEDOnOffMask	LED On/Off Status	Bit mask	-	Word	R	0
		Bit 0 = Primary Supply					
		Bit 1 = Backup Supply					
		Bit 2 = Manual					
		Bit 3 = Voltage OK					
		Bit 4 = Phase OK					
		Bit 5 = Unload					
		Bit 6 = C/B Block					
		Bit 7 = C/B Closed					
		Bit 8 = C/B Trip					
		Bit 9 = Speed +					
		Bit 10 = Speed -					
		Bit 11 = Volt +					
		Bit 12 = Volt -					
		Bit 13 = Alarm					
81	LEDFlashMask	LED Flash Status	Bit mask	-	Word	R	3



		Bit 0 = Primary Supply					
		Bit 1 = Backup Supply					
		Bit 2 = Manual					
		Bit 3 = Voltage OK					
		Bit 4 = Phase OK					
		Bit 5 = Unload					
		Bit 6 = C/B Block					
		Bit 7 = C/B Closed					
		Bit 8 = C/B Trip					
		Bit 9 = Speed +					
		Bit 10 = Speed -					
		Bit 11 = Volt +					
		Bit 12 = Volt -					
		Bit 13 = Alarm					
<b>Input Status</b>							
82	InputMask	Input Status	Bit mask	-	Word	R	0
		Bit 0 = Volt Incr.					
		Bit 1 = Volt Decr.					
		Bit 2 = Speed Incr.					
		Bit 3 = Speed Decr.					
		Bit 4 = F/V Ctrl. Disable					
		Bit 5 = Manual Ctrl.					
		Bit 6 = C/B Close Block					
		Bit 7 = Unload					
		Bit 8 = Engine Failed					
<b>Output Status</b>							
83	OutputMask	Output Status	Bit mask	-	Word	RW	0
		Bit 0 = Engine Start					
		Bit 1 = Engine Stop					
<b>Relay Status</b>							
84	RelayMask	Relay Status	Bit mask	-	Word	R	0
		Bit 0 = C/B Close					
		Bit 1 = C/B Trip					
		Bit 2 = Speed +					
		Bit 3 = Speed -					
		Bit 4 = Volt +					
		Bit 5 = Volt -					
		Bit 6 = Alarm					
<b>Control Status</b>							
87	SpeedCtrlStatus	Status information for Speed Control	Bit mask	-	Word	R	0
		0 = Stopped					
		1 = Power-up					
		2 = Frequency to preset					
		3 = Frequency to net					
		4 = Synchronizing					
		5 = Synchronization OK					
		6 = Active Load Sharing Ramp Up					
		7 = Active Load Sharing Ramp Up Ended					
		8 = Active Load Sharing					
		9 = Active Load Sharing Ramp Down					
		10 = Active Load Sharing Ramp Down Ended					
		17 = Active Load Sharing Frequency Control					
88	VoltCtrlStatus	Status information for Voltage Control	Bit mask	-	Word	R	0
		0 = Stopped					
		1 = Power-up					
		11 = Voltage to preset					
		12 = Voltage to net					
		13 = Reactive Loadsharing					
		14 = Reactive Load Sharing Ramp Up					
		15 = Reactive Load Sharing Ramp Down					
		16 = Voltage Control Deactivated					
<b>Alarm Status</b>							
89	AlarmMask	Alarm Error Status	Bit mask	-	Word	R	0
		Bit 0 = Primary Supply					
		Bit 1 = Backup Supply					
		Bit 2 = Can Bus					
		Bit 3 = Measure Head					
		Bit 4 = Sync. Ext. Signal					
		Bit 5 = Sync. Int. Signal					
		Bit 6 = Unused					
		Bit 7 = Main Loop					
<b>Configuration</b>							
100	VEEnabled	Volt. Establish. Protection Enabled	Index	0 - 1	Word	RW	0
		0 = No					
		1 = Yes					
101	VELowLevel	Volt. Establish. Protection Lower Level	50 - 100 %	50 - 100	Word	RW	70
102	VEUpLevel	Volt. Establish. Protection Upper Level	100 - 150 %	100 - 150	Word	RW	130
103	VELowDelay	Volt. Establish. Protection Lower Delay	1.0 - 30.0 s	10 - 300	Word	RW	2
104	VEUpDelay	Volt. Establish. Protection Upper Delay	1.0 - 30.0 s	10 - 300	Word	RW	2
105							
106							
107							



108	FEEnabled	Freq. Establish. Protection Enabled	Index	0 - 1	Word	RW	0
		0 = No 1 = Yes					
109	FELowLevel	Freq. Establish. Protection Lower Level	50 - 100 %	50 - 100	Word	RW	70
110	FEUpLevel	Freq. Establish. Protection Upper Level	100 - 150 %	100 - 150	Word	RW	130
111	FELowDelay	Freq. Establish. Protection Lower Delay	1.0 - 30.0 s	10 - 300	Word	RW	2
112	FEUpDelay	Freq. Establish. Protection Upper Delay	1.0 - 30.0 s	10 - 300	Word	RW	2
113	FDEnabled	Freq. Deviation Protection Enabled	Index	0 - 1	Word	RW	0
114	FDLevel	Freq. Deviation Protection Level	0.2 - 10.0 Hz	2 - 100	Word	RW	2
115	PMStart	PM Start On Protection Fault	Index	0 - 1	Word	RW	0
116	FSStability	Frequency Stabilization Stability	1 - 100	1 - 100	Word	RW	10
117	FSDeadband	Frequency Stabilization Deadband	0.1 - 20.0 %	1 - 200	Word	RW	0.2
118	FSPIDP	Frequency Stabilization PID - P	1.0 - 20.0 x	10 - 200	Word	RW	4
119	FSPIDI	Frequency Stabilization PID - I	0 - 5000 ms	0 - 5000	Word	RW	10
120	FSPIDD	Frequency Stabilization PID - D	0 - 100 ms	0 - 100	Word	RW	1
121							
122							
123							
124	AutoSyncCheckSync	Auto Synchronizer Check Synchronizer	Index	0 - 1	Word	RW	0
125	AutoSyncDeadBus	Auto Synchronizer Dead Bus Closure	Index	0 - 1	Word	RW	0
126	AutoSyncSyncTime	Auto Synchronizer Synchronization Time	0 - 1000 s	0 - 1000	Word	RW	60
127	AutoSyncStability	Auto Synchronizer Stability	1 - 100	1 - 100	Word	RW	1
128	AutoSyncDeadband	Auto Synchronizer Deadband	0.1 - 20.0 %	1 - 200	Word	RW	1
129	AutoSyncFreqDev	Auto Synchronizer Frequency Deviation	0.1 - 10.0 Hz	1 - 100	Word	RW	0
130	AutoSyncPhaseDev	Auto Synchronizer Phase Deviation	1 - 15 Deg	1 - 15	Word	RW	5
131	AutoSyncCBCloseTime	Auto Synchronizer CB Close Time	1 - 1000 ms	1 - 1000	Word	RW	80
132	AutoSyncPIDP	Auto Synchronizer PID - P	1.0 - 20.0 x	10 - 200	Word	RW	6
133	AutoSyncPIDI	Auto Synchronizer PID - I	0 - 5000 ms	0 - 5000	Word	RW	10
134	AutoSyncPIDD	Auto Synchronizer PID - D	0 - 100 ms	0 - 100	Word	RW	1
135							
136							
137							
138							
139	ActLSLoadDev	Act. Load Sharer Load Deviation	-100 - 100 %	-100 - 100	Word	RW	0
140	ActLSStability	Act. Load Sharer Stability	1 - 100	1 - 100	Word	RW	5
141	ActLSDeadband	Act. Load Sharer Deadband	2 - 20.0 %	20 - 200	Word	RW	2
142	ActLSPLVoltMin	Act. Load Sharer Parallel Lines Voltage Min.	-6.0 - 6.0 VDC	-60 - 60	Word	RW	0
143	ActLSPLVoltMax	Act. Load Sharer Parallel Lines Voltage Max.	-6.0 - 6.0 VDC	-60 - 60	Word	RW	6
144	ActLSRampTime	Act. Load Sharer Ramp Time	1 - 100 s	1 - 100	Word	RW	20
145	ActLSRampStability	Act. Load Sharer Ramp Stability	1 - 100	1 - 100	Word	RW	10
146	ActLSCBTripLevel	Act. Load Sharer CB Trip Level	1 - 50 %	1 - 50	Word	RW	5
147	ActLSPIDP	Act. Load Sharer PID - P	1.0 - 20.0 x	10 - 200	Word	RW	1
148	ActLSPIDI	Act. Load Sharer PID - I	0 - 5000 ms	0 - 5000	Word	RW	10
149	ActLSPIDD	Act. Load Sharer PID - D	0 - 100 ms	0 - 100	Word	RW	1
150							
151							
152							
153							
154							
155	VSStability	Voltage Stabilization Stability	1 - 100	1 - 100	Word	RW	5
156	VSDeadband	Voltage Stabilization Deadband	0.1 - 20.0 %	1 - 200	Word	RW	0
157	VSPIDP	Voltage Stabilization PID - P	1.0 - 20.0 x	10 - 200	Word	RW	1
158	VSPIDI	Voltage Stabilization PID - I	0 - 5000 ms	0 - 5000	Word	RW	10
159	VSPIDD	Voltage Stabilization PID - D	0 - 100 ms	0 - 100	Word	RW	1
160							
161							
162							
163							
164							
165							
166	VMStability	Volatge Matcher Stability	1 - 100	1 - 100	Word	RW	5
167	VMDeadband	Voltage Matcher Deadband	0.1 - 20.0 %	1 - 200	Word	RW	5
168	VMPIDP	Voltage Matcher PID - P	1.0 - 20.0 x	10 - 200	Word	RW	1
169	VMPIDI	Voltage Matcher PID - I	0 - 5000 ms	0 - 5000	Word	RW	10
170	VMPIDD	Voltage Matcher PID - D	0 - 100 ms	0 - 100	Word	RW	1
171							
172							
173							
174							
175							
176	ReactLSLoadDev	React. Load Sharer Load Deviation	-100 - 100 %	-100 - 100	Word	RW	5
177	ReactLSStability	React. Load Sharer Stability	1 - 100	1 - 100	Word	RW	20
178	ReactLSDeadband	React. Load Sharer Deadband	2 - 20.0 %	20 - 200	Word	RW	0
179	ReactLSPLVoltMin	React. Load Sharer Parallel Lines Voltage Min.	-6.0 - 6.0 VDC	-60 - 60	Word	RW	0
180	ReactLSPLVoltMax	React. Load Sharer Parallel Lines Voltage Max.	-6.0 - 6.0 VDC	-60 - 60	Word	RW	60
181	ReactLSRampTime	React. Load Sharer Ramp Time	1 - 100 s	1 - 100	Word	RW	20
182	ReactLSRampStability	React. Load Sharer Ramp Stability	1 - 100	1 - 100	Word	RW	10
183	ReactLSCBTripLevel	React. Load Sharer CB Trip Level	1 - 50 %	1 - 50	Word	RW	5
184	ReactLSPIDP	React. Load Sharer PID - P	1.0 - 20.0 x	10 - 200	Word	RW	10
185	ReactLSPIDI	React. Load Sharer PID - I	0 - 5000 ms	0 - 5000	Word	RW	10
186	ReactLSPIDD	React. Load Sharer PID - D	0 - 100 ms	0 - 100	Word	RW	1
187							



188							
189							
190							
191	AlarmRelayProtection	Alarm Relay Protection	Index	0 - 1	Word	RW	0
192	CBTripContact	C/B Trip Relay Normal State	Index	0 - 1	Word	RW	1
		0 = Normally Deenergized (ND)					
		1 = Normally Energized (NE)					
193	StartSignal	Start Signal Type	Index	0 - 1	Word	RW	0
		0 = Continous Signal					
		1 = Pulse					
194	StartPulse	Start Pulse Length	100 - 5000 ms	100 - 5000	Word	RW	1000
195	StartTimeOut	Start Timeout	0 - 255 s	0 - 255	Word	RW	10
196	StopSignal	Stop Signal Type	Index	0 - 1	Word	RW	0
		0 = Continous Signal					
		1 = Pulse					
197	StopPulse	Stop Pulse Length	100 - 5000 ms	100 - 5000	Word	RW	1000
198	CoolDown	Cool Down delay	0 - 5000 s	0 - 5000	Word	RW	10
199							
200							
201							
202							
203							
204							
205							
206							
207							
208							
209							
210	SpeedCtrlEnable	Speed Control Enable	Index	0 - 1	Word	RW	
211	SpeedCtrlMode	Speed Control Mode	Index	0 - 1	Word	RW	0
		0 = Governor					
		1 = Frequency Out					
212	SpeedCtrlOut	Speed Control Output	Index	0 - 1	Word	RW	0
		0 = Speed Relay					
		1 = Analog Output 1					
213	SpeedCtrlPulse	Speed Control Pulse Duration	10 - 10000 ms	10 - 10000	Word	RW	250
214	SpeedCtrlDutyCycle	Speed Control Duty Cycle	0.0 - 25.5 s	0 - 255	Word	RW	20
215	SpeedCtrlSignal	Speed Control Analog Output Signal	Index	0 - 2	Word	RW	0
		0 = Voltage					
		1 = Current					
		2 = PWM					
216	SpeedCtrlVoltMin	Speed Control Output Voltage Min.	-10.000 - 10.000 VDC	-10000 - 10000	Word	RW	-5
217	SpeedCtrlVoltMax	Speed Control Output Voltage Max.	-10.000 - 10.000 VDC	-10000 - 10000	Word	RW	5
218	SpeedCtrlCurMin	Speed Control Output Current Min.	0.000 - 24.000 mA	0 - 24000	Word	RW	4
219	SpeedCtrlCurMax	Speed Control Output Current Max.	0.000 - 24.000 mA	0 - 24000	Word	RW	20
220	SpeedCtrlPWMFreq	Speed Control PWM Output Frequency	100 - 32000 Hz	100 - 32000	Word	RW	500
221							
222	SpeedCtrlPWMVoltMax	Speed Control PWMOutput Voltage Max.	-8.000 - 8.000 VDC	-8000 - 8000	Word	RW	8
223							
224							
225							
226							
227							
228							
229							
230	VoltageCtrlEnable	Voltage Control Enable	Index	0 - 1	Word	RW	
231	VoltCtrlMode	Voltage Control Mode	Index	0 - 1	Word	RW	0
		0 = AVR					
		1 = Voltage Out					
232	VoltCtrlOut	Voltage Control Output	Index	0 - 1	Word	RW	0
		0 = Volt Relay					
		1 = Analog Output 2					
233	VoltCtrlPulse	Voltage Control Pulse Duration	10 - 10000 ms	10 - 10000	Word	RW	250
234	VoltCtrlDutyCycle	Voltage Control Duty Cycle	0.0 - 25.5 s	0 - 255	Word	RW	20
235	VoltCtrlSignal	Voltage Control Analog Output Signal	Index	0 - 2	Word	RW	0
		0 = Voltage					
		1 = Current					
		2 = PWM					
236	VoltCtrlVoltMin	Voltage Control Output Voltage Min.	-10.000 - 10.000 VDC	-10000 - 10000	Word	RW	-5
237	VoltCtrlVoltMax	Voltage Control Output Voltage Max.	-10.000 - 10.000 VDC	-10000 - 10000	Word	RW	5
238	VoltCtrlCurMin	Voltage Control Output Current Min.	0.000 - 24.000 mA	0 - 24000	Word	RW	4
239	VoltCtrlCurMax	Voltage Control Output Current Max.	0.000 - 24.000 mA	0 - 24000	Word	RW	20
240	VoltCtrlPWMFreq	Voltage Control PWM Output Frequency	100 - 32000 Hz	100 - 32000	Word	RW	500
241							
242	VoltCtrlPWMVoltMax	Voltage Control PWMOutput Voltage Max.	-8.000 - 8.000 VDC	-8000 - 8000	Word	RW	8
243							
244	PwrSource	Power Source	Index	0 - 2			0
		0 = Auxiliary					
		1 = Shaft					
		2 = Grid					
245	PwrImportEnabled	Power Import Enabled	Index	0 - 1	Word	RW	0
246	PwrImportMax	Power Import Max	1 - 100 %	1 - 100	Word	RW	100



247	PwrImportMode	Power Import Mode	Index	0 - 1	Word	RW	0
		0 = Fixed					
		1 = Peak					
248	PwrImportValue	Power Import Value	1 - 100 %	1 - 100	Word	RW	25
249	PwrExportEnabled	Power Export Enabled	Index	0 - 1	Word	RW	0
250	PwrExportMax	Power Export Max	1 - 100 %	1 - 100	Word	RW	100
251	PwrExportMode	Power Export Mode	Index	0 - 1	Word	RW	0
		0 = Fixed					
		1 = Excess					
252	PwrExportValue	Power Export Value	1 - 100 %	1 - 100	Word	RW	25
253							
254	VoltOKWnd	Voltage OK Window	0 - 20 %	0 - 20	Word	RW	10
255	PowerupDelay	Power-up Delay	0 - 60 s	0 - 60	Word	RW	5
256	DutyHourLow	Duty Hours (x 1)	0 - 999 h	0 - 999	Word	RW	112
257	DutyHourHigh	Duty Hours (x 1000)	0 - 999 h	0 - 999	Word	RW	0
258	Priority	Priority	1 - 15	1 - 15	Word	RW	1
259							
260	RS232BaudRate	RS232 Baud Rate	Index	0 - 4	Word	RW	3
		0 = 1200					
		1 = 2400					
		2 = 4800					
		3 = 9600					
		4 = 19200					
261	RS232Parity	RS232 Parity	Index	0 - 2	Word	RW	0
		0 = None					
		1 = Even					
		2 = Odd					
262	RS232DataBits	RS232 Data Bits	Index	0 - 1	Word	RW	1
		0 = 7					
		1 = 8					
263	RS232StopBits	RS232 Stop Bits	Index	0 - 1	Word	RW	0
		0 = 1					
		1 = 2					

