

Solectria Commercial MODBUS Register Table for PVI 60-95kW Grid-Tie Inverters

- Notes: 1) Each register/data point contains a raw 16-bit signed or unsigned number. The appropriate multiplier must be applied to each number to obtain the scaled representation indicated under the 'Unit' column. Each word is ordered {MSB, LSB}.
- 2) Do not attempt to write to **Reserved** registers.
- 3) The **Memory Type** is for writeable registers only and is defined as follows: **V**, volatile, has effect immediately, but not remembered the next day; **P**, permanent, need to cycle power to have effect, but will be remembered next day.

Register	Offset	Description	Unit	Multiplier	Type	Write	Memory Type	Notes
40001	0	DC Voltage	V	0.195313	int16s	No	-	-
40002	1	Apparent AC Power Output	W	19.53125	int16s	No	-	-
40003	2	AC Grid Frequency	Hz	0.048828	int16s	No	-	-
40004	3	Reserved	-	-	-	-	-	-
40005	4	L1-to-L2 AC Voltage	V	0.195313	int16s	No	-	-
40006	5	L2-to-L3 AC Voltage	V	0.195313	int16s	No	-	-
40007	6	L1-to-L3 AC Voltage	V	0.195313	int16s	No	-	-
40008	7	Phase Sequence	-	-	int16s	No	-	0: Not Locked; 1:CCW; 2:CCW
40009	8	AC Energy MSW	kWh	0.1	int16u	No	-	Cumulative Energy = {MSW,LSW}*0.1
40010	9	AC Energy LSW	kWh	0.1	int16u	No	-	-
40011	10	On-grid Hours MSW	h	1	int16u	No	-	Cumulative Hours = {MSW,LSW}
40012	11	On-grid Hours LSW	h	1	int16u	No	-	-
40013	12	Fan On-time Hours	h	1	int16u	No	-	Cumulative Value
40014	13	AC Contactor Cycles	-	-	int16u	No	-	Cumulative Value
40015	14	Network ID	-	-	int16u	Yes	P	-
40016	15	Critical Alarms	-	-	int16u	No	-	See Alarm Definitions
40017	16	Informative Alarms 1	-	-	int16u	No	-	See Alarm Definitions
40018	17	Reserved	-	-	-	-	-	-
40019	18	Inverter Status	-	-	int16u	No	-	See Alarm Definitions
40020	19	Reserved	-	-	-	-	-	-
40021	20	SolZone DC Current #1	A	0.1	int16s	No	-	Used for SolZone Subarray Monitoring Option Only; 8000h: Sensor Disconnected
40022	21	SolZone DC Current #2	A	0.1	int16s	No	-	Used for SolZone Subarray Monitoring Option Only; 8000h: Sensor Disconnected
40023	22	SolZone DC Current #3	A	0.1	int16s	No	-	Used for SolZone Subarray Monitoring Option Only; 8000h: Sensor Disconnected
40024	23	SolZone DC Current #4	A	0.1	int16s	No	-	Used for SolZone Subarray Monitoring Option Only; 8000h: Sensor Disconnected
40025	24	SolZone DC Current #5	A	0.1	int16s	No	-	Used for SolZone Subarray Monitoring Option Only; 8000h: Sensor Disconnected
40026	25	SolZone DC Current #6	A	0.1	int16s	No	-	Used for SolZone Subarray Monitoring Option Only; 8000h: Sensor Disconnected
40027	26	SolZone DC Current #7	A	0.1	int16s	No	-	Used for SolZone Subarray Monitoring Option Only; 8000h: Sensor Disconnected
40028	27	SolZone DC Current #8	A	0.1	int16s	No	-	Used for SolZone Subarray Monitoring Option Only; 8000h: Sensor Disconnected
40029	28	SolZone DC Current (Total)	A	0.1	int16s	No	-	Used for SolZone Subarray Monitoring Option Only; 8000h: No Sensors Available
40030	29	Reserved	-	-	-	-	-	-
40031	30	Reserved	-	-	-	-	-	-
40032	31	Inverter Manufacture Year and Month	-	-	int16u	No	-	Inverter Serial Number appears as YYMMDD-##; this register is for YYMM in hex format
40033	32	Inverter Manufacture Day and Serial Number	-	-	int16u	No	-	Inverter Serial Number appears as YYMMDD-##; this register is for DD## in hex format
40034	33	Reserved	-	-	-	-	-	-
40035	34	Reserved	-	-	-	-	-	-
40036	35	Reserved	-	-	-	-	-	-
40037	36	Reserved	-	-	-	-	-	-
40038	37	Reserved	-	-	-	-	-	-
40039	38	Reserved	-	-	-	-	-	-
40040	39	Reserved	-	-	-	-	-	-

Solectria Commercial MODBUS Register Table for PVI 60-95kW Grid-Tie Inverters

- Notes: 1) Each register/data point contains a raw 16-bit signed or unsigned number. The appropriate multiplier must be applied to each number to obtain the scaled representation indicated under the 'Unit' column. Each word is ordered {MSB, LSB}.
- 2) Do not attempt to write to **Reserved** registers.
- 3) The **Memory Type** is for writeable registers only and is defined as follows: **V**, volatile, has effect immediately, but not remembered the next day; **P**, permanent, need to cycle power to have effect, but will be remembered next day.

Register	Offset	Description	Unit	Multiplier	Type	Write	Memory Type	Notes
40041	40	AC Over Voltage Setting	V	0.195313	int16s	Yes	P	-
40042	41	AC Critical Over Voltage Setting	V	0.195313	int16s	Yes	P	-
40043	42	AC Reconnect Over Voltage Setting	V	0.195313	int16s	Yes	P	-
40044	43	AC Under Voltage Setting	V	0.195313	int16s	Yes	P	-
40045	44	AC Critical Under Voltage Setting	V	0.195313	int16s	Yes	P	-
40046	45	AC Over Frequency Setting	Hz	0.048828	int16s	No	-	-
40047	46	AC Under Frequency Setting	Hz	0.048828	int16s	Yes	P	-
40048	47	AC Critical Under Frequency Setting	Hz	0.048828	int16s	No	-	-
40049	48	AC Over Voltage Clearing Time	s	0.01	int16s	Yes	P	-
40050	49	AC Under Voltage Clearing Time	s	0.01	int16s	Yes	P	-
40051	50	AC Under Frequency Clearing Time	s	0.01	int16s	Yes	P	-
40052	51	UL Fault Reconnect Wait Time Setting	s	0.01	int16s	Yes	P	-
40053	52	Reserved	-	-	-	-	-	-
40054	53	Reserved	-	-	-	-	-	-
40055	54	Reserved	-	-	-	-	-	-
40056	55	Reserved	-	-	-	-	-	-
40057	56	Reserved	-	-	-	-	-	-
40058	57	Reserved	-	-	-	-	-	-
40059	58	Reserved	-	-	-	-	-	-
40060	59	Reserved	-	-	-	-	-	-
40061	60	Reserved	-	-	-	-	-	-
40062	61	Real AC Output Current Limit Percentage	%	0.006103516	int16s	Yes	V	-
40063	62	Reserved	-	-	-	-	-	-
40064	63	VAR Control Scheme	-	-	int16s	Yes	V	0: No VAR Control; 1: Fixed PF; 2: VAC Control; 3: Fixed VAR
40065	64	Reactive Power Angle Set Point	degree	0.005493164	int16s	Yes	V	Only Active When 40064 is Set to '1'
40066	65	VAR Control VAC Set Point	V	0.195313	int16s	Yes	V	Only Active When 40064 is Set to '2'
40067	66	Reactive Power Output Set Point	VAR	19.53125	int16s	Yes	V	Only Active When 40064 is Set to '3'
40068	67	Reserved	-	-	-	-	-	-
40069	68	Reserved	-	-	-	-	-	-
40070	69	Reserved	-	-	-	-	-	-
40071	70	Reserved	-	-	-	-	-	-
40072	71	Reserved	-	-	-	-	-	-
40073	72	Reserved	-	-	-	-	-	-
40074	73	Reserved	-	-	-	-	-	-
40075	74	Reserved	-	-	-	-	-	-
40076	75	Reserved	-	-	-	-	-	-
40077	76	Reserved	-	-	-	-	-	-
40078	77	Reserved	-	-	-	-	-	-
40079	78	Reserved	-	-	-	-	-	-
40080	79	Reserved	-	-	-	-	-	-
40081	80	Real AC Power Output	W	19.53125	int16s	No	-	-
40082	81	Reactive AC Power Output	VAR	19.53125	int16s	No	-	-
40083	82	Reserved	-	-	-	-	-	-
40084	83	Reserved	-	-	-	-	-	-

Solectria Commercial MODBUS Register Table for PVI 60-95kW Grid-Tie Inverters

- Notes: 1) Each register/data point contains a raw 16-bit signed or unsigned number. The appropriate multiplier must be applied to each number to obtain the scaled representation indicated under the 'Unit' column. Each word is ordered {MSB, LSB}.
 2) Do not attempt to write to **Reserved** registers.
 3) The **Memory Type** is for writeable registers only and is defined as follows: **V**, volatile, has effect immediately, but not remembered the next day; **P**, permanent, need to cycle power to have effect, but will be remembered next day.

Register	Offset	Description	Unit	Multiplier	Type	Write	Memory Type	Notes
40085	84	Power Stage Temperature 1	°C	0.09765625	int16s	No	-	-
40086	85	Reserved	-	-	-	-	-	-
40087	86	Reserved	-	-	-	-	-	-
40088	87	Reserved	-	-	-	-	-	-
40089	88	Reserved	-	-	-	-	-	-
40090	89	Reserved	-	-	-	-	-	-
40091	90	Reserved	-	-	-	-	-	-
40092	91	Reserved	-	-	-	-	-	-
40093	92	Reserved	-	-	-	-	-	-
40094	93	Inverter Output Current (after transformer, rms, average)	A	0.09765625	int16s	No	-	-
40095	94	Reserved	-	-	-	-	-	-
40096	95	Reserved	-	-	-	-	-	-
40097	96	Reserved	-	-	-	-	-	-
40098	97	Reserved	-	-	-	-	-	-
40099	98	Reserved	-	-	-	-	-	-
40100	99	Reserved	-	-	-	-	-	-
40101	100	Cumulative Reactive Energy Generated MSW	kVAh	0.1	int16u	No	-	Cumulative Energy = {MSW,LSW}*0.1
40102	101	Cumulative Reactive Energy Generated LSW	kVAh	0.1	int16u	No	-	-
40103	102	Cumulative Reactive Energy Received MSW	kVAh	0.1	int16u	No	-	Cumulative Energy = {MSW,LSW}*0.1
40104	103	Cumulative Reactive Energy Received LSW	kVAh	0.1	int16u	No	-	-
40105	104	Reserved	-	-	-	-	-	-
40106	105	Reserved	-	-	-	-	-	-
40107	106	Reserved	-	-	-	-	-	-
40108	107	Reserved	-	-	-	-	-	-
40109	108	Reserved	-	-	-	-	-	-
40110	109	Reserved	-	-	-	-	-	-
40111	110	Reserved	-	-	-	-	-	-
40112	111	Reserved	-	-	-	-	-	-
40113	112	Disable Power Remotely by Message	-	-	int16s	Yes	V	0: enable power output; 1: disable power output
40114	113	UL Recover Time Left	s	0.01	int16s	Yes	V	-
40115	114	Reserved	-	-	-	-	-	-
40116	115	Reserved	-	-	-	-	-	-
40117	116	Reserved	-	-	-	-	-	-
40118	117	Reserved	-	-	-	-	-	-
40119	118	Reserved	-	-	-	-	-	-
40120	119	Reserved	-	-	-	-	-	-
40121	120	Reserved	-	-	-	-	-	-
40122	121	Reserved	-	-	-	-	-	-
40123	122	Reserved	-	-	-	-	-	-
40124	123	Reserved	-	-	-	-	-	-
40125	124	Reserved	-	-	-	-	-	-
50000	-	Reserved for SunSpec Expansion	-	-	-	-	-	-