

## MODBUS Register Mappings

### Combined Single Phase / Three Phase Inverter Model - MODBUS Mapping

Start	End	size	R/W	Name	Type	Units	Scale Factor	Contents	Description
1	1	1	R	C_SunSpec_DID	uint16	N/A	N/A	111, 112, or 113	Uniquely identifies this as a SunSpec Inverter FLOAT Modbus Map; 111: single phase 112: split phase 113: three phase
2	2	1	R	C_SunSpec_Length	uint16	Registers	N/A	62	Length of model block
3	4	2	R	I_AC_Current_f	float32	Amps	N/A	Measured	AC Total Current value
5	6	2	R	I_AC_CurrentA_f	float32	Amps	N/A	Measured	AC Phase-A Current value
7	8	2	R	I_AC_CurrentB_f	float32	Amps	N/A	Measured	AC Phase-B Current value
9	10	2	R	I_AC_CurrentC_f	float32	Amps	N/A	Measured	AC Phase-C Current value
11	12	2	R	I_AC_VoltageAB_f	float32	Volts	N/A	Measured	AC Voltage Phase-AB value
13	14	2	R	I_AC_VoltageBC_f	float32	Volts	N/A	Measured	AC Voltage Phase BC value
15	16	2	R	I_AC_VoltageCA_f	float32	Volts	N/A	Measured	AC Voltage Phase CA value
17	18	2	R	I_AC_VoltageAN_f	float32	Volts	N/A	Measured	AC Voltage Phase-A-to-neutral value
19	20	2	R	I_AC_VoltageBN_f	float32	Volts	N/A	Measured	AC Voltage Phase B-to-neutral value
21	22	2	R	I_AC_VoltageCN_f	float32	Volts	N/A	Measured	AC Voltage Phase C-to-neutral value

									neutral value
23	24	2	R	I_AC_Power_f	float32	Watts	N/A	Measured	AC Power value
25	26	2	R	I_AC_Frequency_f	float32	Hertz	N/A	Measured	AC Frequency value
27	28	2	R	I_AC_VA_f	float32	VA	N/A	Measured	Apparent Power
29	30	2	R	I_AC_VAR_f	float32	VAR	N/A	Measured	Reactive Power
31	32	2	R	I_AC_PF_f	float32	%	N/A	Measured	Power Factor
33	34	2	R	I_AC_Energy_WH_f	float32	WattHours	N/A	Measured	AC Lifetime Energy production
35	36	2	R	I_DC_Current_f	float32	Amps	N/A	Measured	DC Current value
37	38	2	R	I_DC_Voltage_f	float32	Volts	N/A	Measured	DC Voltage value
39	40	2	R	I_DC_Power_f	float32	Watts	N/A	Measured	DC Power value
41	42	2	R	I_Temp_Cab_f	float32	Degrees C	N/A	Measured	Cabinet Temperature
43	44	2	R	I_Temp_Sink_f	float32	Degrees C	N/A	Measured	Coolant or Heat Sink Temperature
45	46	2	R	I_Temp_Trans_f	float32	Degrees C	N/A	Measured	Transformer Temperature
47	48	2	R	I_Temp_Other_f	float32	Degrees C	N/A	Measured	Other Temperature
49	50	1	R	I_Status	uint16	Enumerated	N/A	Descriptive	Operating State
51	52	1	R	I_Status_Vendor	uint16	Enumerated	N/A	Descriptive	Vendor Defined Operating State
53	54	2	R	I_Event_1	uint32	Bitfield	N/A	Descriptive	Event Flags (bits 0-31)
55	56	2	R	I_Event_2	uint32	Bitfield	N/A	Descriptive	Event Flags (bits 32-63)
57	58	2	R	I_Event_1_Vendor	uint32	Bitfield	N/A	Descriptive	Vendor Defined Event Flags (bits 0-31)
59	60	2	R	I_Event_2_Vendor	uint32	Bitfield	N/A	Descriptive	Vendor Defined Event Flags (bits 32-63)
61	62	2	R	I_Event_3_Vendor	uint32	Bitfield	N/A	Descriptive	Vendor Defined Event Flags (bits 64-95)
63	64	2	R	I_Event_4_Vendor	uint32	Bitfield	N/A	Descriptive	Vendor Defined

									Event Flags (bits 96-12'
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