

MODBUS REGISTER LIST of 1-PHASE OFFGRID PCU

SR.NO	PCU PARAMETERS	PARAMETER (SIGNED/UNSIGNED)	READ/ WRITE	UNIT	ADDRESS	SCALING
1	Battery Voltage	16-bit unsigned int	Read Only	VOLT	40001	VALUE / 10
2	Battery Current(with sign)	16-bit signed int 16-	Read Only	AMP	40002	VALUE / 10
3	Load %	bit unsigned int 16-	Read Only		40003	VALUE
4	Load Voltage	bit unsigned int 16-	Read Only	VOLT	40006	VALUE / 10
5	Load Power	bit unsigned int 16-	Read Only	kW	40010	VALUE / 10
6	PV Power	bit unsigned int 16-	Read Only	kW	40012	VALUE / 10
7	Grid Voltage	bit unsigned int 16-	Read Only	VOLT	40014	VALUE / 10
8	Grid Power (kVA)	bit unsigned int 16-	Read Only	kW	40017	VALUE / 10
9	Grid Frequency	bit unsigned int 16-	Read Only	Hz	40018	VALUE / 10
10	Load Current	bit unsigned int 16-	Read Only	AMP	40021	VALUE / 10
11	PV Voltage	bit unsigned int 16-	Read Only	VOLT	40025	VALUE / 10
12	PV Current	bit unsigned int 16-	Read Only	AMP	40026	VALUE / 10
13	Today Solar Generation	bit unsigned int 16-	Read Only	kWh	40044	VALUE / 10
14	Grid Current	bit unsigned int 32-	Read Only	AMP	40075	VALUE / 10
15	Total Solar Generation	bit unsigned int	Read Only	kWh	40045-46	VALUE / 10

Indication/Status

Sr.No	Register Name	Register Address	Register Discription
1	DSP STATE	40049	Enumerated Value 1 = System OFF 2 = System ON (Inverter Mode) (Inverter is supplying load, AC charger is disengaged) 4 = System ON (Grid Mode) (AC input is supplying load and battery charging)
2	Supervisory State	40050	0 = System Idle 3 = Float Charging 4 = Boost Charging
3	Inverter Status	40053	Read Only IF Value 8 = Load on Solar + Grid Read Only IF Value 16 = Load on Grid Read Only IF Value 32 = Load on Solar Read Only IF Value 64 = Load on Solar + Battery Read Only IF Value 128 = Load On Grid + Battery Read Only IF Value 264 = Load on Inverter/Battery

ALARMS

Sr.No	Read Only	16-bit unsigned int
1		Grid Under Voltage Bit-1
2		Grid Over Voltage Bit-2
3		Inverter Over Voltage Bit-3
4		Inverter Overload Bit-5
5		Inverter Short Circuit/ Current Limit Bit-6
6	Fault and Alarm	40051 Battery Under Voltage Bit-7
7		Battery Over Voltage Bit-9
8		System Over Temperature Bit-10
9		Grid Under Frequency Bit-12
10		Grid Back Feed Bit-14