

## E-CUMULUS BASIC SERIES DATASHEET

INVERTER RATING (KVA)	1KVA	2KVA	3KVA	5KVA	5KVA	7.5KVA	10KVA	15KVA	20KVA	25KVA	30KVA	40KVA	50KVA
<b>A. BATTERY</b>													
11	Battery type Supported Li-Ion/Lithium ferro Phosphate												
12	Battery KWH 2.4    3.6    4.8    9.6    9.6    14.4    19.2    28.8    38.4    48    57.6    76.8    96												
13	Peak charging Efficiency (%) >93												
<b>B. INVERTER</b>													
1	No. of Phases/Connection Type 1-Phased/2 wire												
2	Nominal Battery Voltage (Volts) 48    48    48    48    96    96    120    240    240    240    240    240    240												
3	Battery Ripple 5% for VRLA & LMLA/ 1% for Li-Ion & Li- Ph Battery												
4	Nominal Output Voltage/Frequency (Volts/Hz) 230/50												
5	Nominal KVA Capacity (KVA) 1KVA    2KVA    3KVA    5KVA    5KVA    7.5KVA    10KVA    15KVA    20KVA    25KVA    30KVA    40KVA    50KVA												
6	Output Amps 3.47    6.96    10.43    17.39    17.39    26.09    34.78    52.17    69.57    86.96    104.3    139.1    173.9												
7	Voltage Regulation (in standalore Mode) ± 2%												
8	Freq. Regulation (in Standalone mode) ± 0.5 Hz												
9	THD < 3%												
10	Load Power Factor 0.8 lag to unity												
11	Efficiency (%): Peak/ 100% Load/25% Load >89/ >88/ >86    >89/ >88/ >86    >89/ >88/ >86    >90/ >87/ >86    >90/ >87/ >86    >90/ >87/ >86    >89/ >89/ >86    >89/ >89/ >86    >89/ >89/ >86    >91/ >89/ >86    >91/ >89/ >86    >91/ >89/ >86												
12	Over Loads : 100-110% - 60 sec												
13	110-125% - 30 sec												
14	125-150% - 5 sec												
15	Max Allowed Phase Imbalance (%) N/A												
16	Auto Bypass Feature Provided												
<b>C. GRID CHARGER</b>													
1	Grid Voltage Range (Voltage Sync. Range) 160V-280V (Phase to Neutral)												
2	Grid Frequency Range (Freq. Sync. Range) 50 Hz ±5%												
3	Max Grid Import Power (KVA) 1KVA    2KVA    3KVA    5KVA    5KVA    7.5KVA    10KVA    15KVA    20KVA    25KVA    30KVA    40KVA    50KVA												
4	Max Battery Amps During Grid Charging (Amps) 13    27    40    68    34    51    54    40    54    68    72.5    96.6    120.8												
5	Peak charging Efficiency (%) >87												
<b>INVERTER (KW)</b>													
1	0.8	1.6	2.4	4.0	4.0	6.0	8.0	12.0	16.0	20.0	24.0	32.0	40.0
2	PV Side Reverse Polarity , Surg Protection												
3	Battery Side Reverse Polarity, Over/Under Voltage , Current Limit												
4	Grid Side Over/Under Voltage , Over/Under Frequency , Anti-Islanding,Surg Protection												
5	Load Side Overloads, Short circuit												
6	System Protection Over Temperature,Trip,Breakers at all Inputs,Emergency stop												
<b>D. USER INTERFACE</b>													
1	DISPLAY INTERFACE LCD NUMERICAL DISPLAY												
<b>2. DISPLAYED PARAMETERS</b>													
1	Battery Parameters Voltage, Charging Current, Discharging Current,AH-in,AH-out,Cumulative AH-in,Cumulative AH-out,charging state-charging/Discharging.												
2	PV Parameters Voltage, Current, Power, Cumulative,Today Generation												
3	Grid Parameters Voltage, Current, Frequency, Import Power, Import Cumulative Energy,Power Factor												
4	Load Parameters Voltage, Current, Frequency, Power,Cumulative,Power Factor												
5	Data Logging 90 Days PV Generation, Import Energy, Load Energy.												
6	System Level Faults and warnings												
<b>3. INDICATIONS/PROTECTION</b>													
1	LED Indications: Power ON, PV Available, PV Charging, Inverter ON, Grid Import Mode, Fault, HYBRID /OFF GRID Mode												
2	User Keypad for Settings Change Keypad for Settings Input												
3	Breakers at all inputs/Space Heater/Emergency stop Button Provided												
4	Over shoot due to misbehaviour of BHMS Provided												
5	Remote monitoring: Optional Data monitoring through GPRS (Optional)												
<b>Designed and Manufactured the product as for IEC</b>													
<b>Tested as per IEC 61683, IEC 61727, EN 50530 and IEC 60068 (1, 2, 14, 30).</b>													
<b>MISCELLANEOUS</b>													
1	Degree of Protection IP31												
2	Cooling Method Temp. Controlled Force Cooling												
3	Operating Temperature 0-55°C ambient operation												
4	Humidity (Non-condensing) Max. 95% Non-Condensing												
5	Altitude (above sea level) 1000m above sea level												
6	Housing Sheet Metal,Floor Standing						Floor Standing,Front/Rear Door						
7	Colour Shade RAL-7035/RAL-7016 (Other Colours also available on request)												
8	Cable Entry Rear Bottom						Front Bottom						
9	Cable Termination Type Bus Bar Type with ring type lugs												
10	Terminal Sizes(PV/Battery/Grid/Load) TERMINAL SCREW TYPE 35-50MM/35-50MM/25MM/25MM												
11	Dimensions in mm (H X W X D) 360X280X530    360X280X560    360X280X665    360X280X665    478X375X675    528X375X775    528X375X775    715x850x750												
12	Approx. Weight (kg) 30    35    60    80    80    130    140    160    215    245    260    300    350												

Note : The specifications are subject to change due to continuous improvements.  
Higher rating systems are available on request.