

FEATURES

Isolation Transformer

Internally at Input

Smart Control and Reliability

With DSP

Charging Modes

Float, Equalize and Boost

Language Options

Turkish, English, German, Dutch,
Portuguese, Spanish, Russian

Monitoring and Control

Over RS232-RS485



OPTIONS

Active Parallel Operation

With Current Sharing up to 4 Devices

Battery Temperature Compensation

Automatically Adjusts DC Battery Voltage
as per Temperature

Battery Tests

with Adjustable Voltage and Duration

Touch Screen

Colored TFT



KEY FEATURES		
Model	SD-1	SD-3
Input Phase	Single Phase	Three Phases
INPUT PARAMETERS		
Voltage	110VAC / 115VAC / 120VAC 220VAC / 230VAC / 240VAC (OPT: Others)	190VAC / 200VAC / 210VAC 380VAC / 400VAC / 415VAC 440VAC / 460VAC / 600VAC (OPT: Others)
Voltage Range	±10% / ±15% / ±20%	±10% / ±15% / ±20%
Wiring	2W (P+N)	3W (3P) / 4W (3P+N)
Frequency	50Hz, 60Hz or 400Hz (±15%)	
Rectifier Type	Full Bridge	6-Pulse / 12-Pulse
Power Factor	>0.7	0.8 (6-Pulse) / 0.9 (12-Pulse)
THDi	<50%	<30% (6-Pulse) / <12% (12-Pulse)
OUTPUT PARAMETERS		
Output Voltage	12VDC / 24VDC / 48VDC / 60VDC / 110VDC / 125VDC / 220VDC / 250VDC / 400VDC / 600VDC (OPT: Others)	
Output Current	10A to 200A	10A to 5000A
Efficiency	75% to 87%	80% to 94%
Voltage Regulation	<0,5%	
Current Regulation	<2%	
Overload	Current Limiting @100% of Nominal Current (Adjustable)	
Ripple	<4%	<1%
BATTERY PARAMETERS		
Battery Type	VRLA / OPzV / OPzS / Ni-Cd	
Battery Charge Voltage	VRLA / OPzV / OPzS: 2,23VDC to 2,35VDC (Float) – 2.40VDC (Boost/Equalize) per cell (Adjustable) Ni-Cd: 1,42VDC (Float) – 1,47VDC to 1,7VDC (Boost/Equalize) per cell (Adjustable)	
Battery Charge Current	VRLA / OPzV / OPzS: 10-15% Current of Battery Capacity (Adjustable) Ni-Cd: 20% Current of Battery Capacity (Adjustable)	
Boost Charge Timer	0-20 Hours (Adjustable)	
Voltage Adjustable Range	80% to 125% of Nominal Voltage	
PHYSICAL CHARACTERISTICS		
Cabinet Type	Standalone Tower (OPT: Others)	
Cabinet Colour	RAL7032, RAL7035 (OPT: Others)	
Protection Degree	IP20 (OPT: IP21 to IP55)	
Cooling System	Fan Forced Ventilation (OPT: Natural Cooling, Water Cooling, Smart Fans)	
Cable Entry	Bottom (OPT: Top, Rear, Side)	
ENVIRONMENT		
Storage Temperature	-25 to 70°C	
Operating Temperature	-10 to 50°C	
Relative Humidity	0 to 95% (Non-Condensing)	
Operating Altitude	1000m from MSL (1% derate each 100m after 1000m)	
Acoustic Noise	55dB to 75dB	
Isolation	1500VAC, 2000VAC or 3000VAC (Input&Output to Chassis)	
Isolation Resistance	200MΩ	
COMMUNICATIONS		
Standard Communication	ModBus RTU over RS232 (OPT: RS485, ModBus TCP/IP, SNMP and IEC61850), Dry Contact x4 (OPT: to x16)	
Parallel Operation	Passive: Infinite (OPT: Active: Up to 4 Units)	
HMI	LED/LCD Panel (OPT: Touch Screen Panel, Mimic Panel)	
Languages	Turkish, English, German, Dutch, Portuguese, Spanish, Russian	
PROTECTIONS		
Battery Protection	Temperature Compensating Charge / LVD / Battery Current Limiting	
Input / Output Protection	MCB or MCCB for Input, Output and Battery Line (Input AC) Failure, DC & Battery Low-High Alarm Output Current Limiting, DC Earth Fault, Over Temperature Load on Battery, Charger Failure, Emergency Stop	
ADDITIONAL FEATURES (OPT.)		
Load Output	Diode Dropper or DC/DC Converter	
Gauges	Input Voltage & Current Output Voltage & Current Battery Voltage & Current	
DC Power Supply	Output & Battery Monitoring Continue (when AC Fails)	
Protections	Fan Failure, SCR Fuse Failure, Breaker Off, External Block Parallel Fault, Temperature Probe Failure, High Ripple	
Others	SPD, Cabinet Heater, Cabinet Lightning, Service Plug	
STANDARDS		
EN62310-1	General and Safety Requirements	
EN62310-2	Electromagnetic Compatibility (EMC) Requirements	
EN62310-3	Method for Specifying Performance and Test Requirements	

Note: Product properties may change without a notice by EPC.