



# Total Solution

- Industrial Design
- No Limit in Power
- 48 VDC Heavy Duty
- Low Time to Repair
- Rectifier Input Galvanic Isolation
- Inverter Output Galvanic Isolation



## Features

- RFI / EMI filtering
- Free contact relay
- Pure sine wave output
- IEC 62040-3 compliant
- GSM modem (optional)
- Power generator compatible
- Input power factor correction
- Remote LCD panels (optional)
- Heavy-duty and High MTBF design
- Fully digitized microprocessor controlled
- Hot-swappable battery, replaceable by user
- Inverter and rectifier short circuit protection
- Inverter powers and transformer overheat protection
- Mains connection to UPS output (inverter) protection
- Rectifier powers and transformer overheat protection
- Two-phase (400 V) connection to UPS input protection
- LAN support and remote managed via SNMP (optional)
- Battery over / under voltage and reverse polarity protection
- User friendly, informative LCD on front panel of the control unit
- Eight more programmable NO-NC free contact relays (optional)
- SCM (Spot Charging Management) and Advanced Battery Management
- Rectifiers and inverters parallel operation for load-sharing and redundancy
- Adjustable charge current, input voltage and frequency ranges by control unit

Uninterruptible Power Supply Energy Efficiency Label		
Manufacturer / Licensor	Hyundai Corporation	
Brand	<b>HYUNDAI</b>	
Model	SR5+2*SI5	
Nominal Power kW <sup>1</sup> / kVA <sup>2</sup>	2.4 / 3.0	
Mode of Operation		
Conversion Efficiency Categories <sup>3</sup>		
Conversion Efficiency > 98% <b>A</b>		<b>A</b>
Conversion Efficiency > 96% <b>B</b>		
Conversion Efficiency > 94% <b>C</b>		
Conversion Efficiency > 92% <b>D</b>	<b>D</b>	
Conversion Efficiency > 90% <b>E</b>		
Conversion Efficiency > 88% <b>F</b>		
Conversion Efficiency < 88% <b>G</b>		
Energy Losses kWh / year <sup>4</sup>	899	203

1 At resistive load  
2 At non-linear load according to EN/IEC 62040-3  
3 The conversion efficiency was determined by the worst-case efficiency at the loading levels tested  
4 Energy losses at resistive continuous load with 50% of nominal power operated at the normal mode

Total Solution UPS Package with more than 92% efficiency including double-conversion specifications, galvanic isolation at rectifier input, galvanic isolation at inverter output, 48 VDC bus with no booster, THDI less than 7% and input power factor of more than 0.98, separate modules for parallel redundant rectifier SR series and inverter SI series, that can easily be augmented or changed for more power and performance. These special features extend the useful life of the units and enable the customer to design and assemble MC series by-pass control unit, RU series racks and single- and three-phase UPS, based on the customer's requirements.

## Applications

- Automation equipment
- Telecommunications
- Process machinery
- Industrial controls
- Broadcasting
- Data centers
- Banking

## Rectifier technical data sheet

Construction		
Model	<b>SR5-3000</b>	<b>Unit</b>
Current rating	100	A
Dimensions W*D*H	100*480*222 Rack-Mount (5U 19" for 4 pcs)	mm
Weight (approx)	20	Kg
Environmental		
Storage temperature	-20 to 70	°C
Operating temperature	0 to 40	°C
Altitude	<3000	m
Relative humidity	0 to 95 Without Condensation	%
Degree of protection	20 (IEC 60529)	IP
Normal mode acoustic noise at 1 m	<50	dBA
Stored energy mode acoustic noise at 1m	<50	dBA
Electrical UPS input characteristics		
Nominal AC voltage	220/230	VAC
4 wires three modules 3-phase AC voltage	380/400	VAC
Voltage range	-30 to +20	%
THDI	<7	%
Power factor	> .98	
Soft start	10	Sec
Nominal frequency	50	Hz
Electrical output characteristics		
Nominal DC voltage	48	VDC
Nominal DC current	100	ADC
Overload capability	150 @ 6 sec, 125 @ 10 min	%
Parallel Operation		
Parallel quantity and availability for load sharing and redundancy	No Limit	
Protection		
Overload	AC to DC galvanic Isolation	
AC over voltage	Rectifier powers and transformer overheat protection	
AC under voltage		
Output short circuit		
Battery reverse polarity		

## Inverter technical data sheet

Construction		
Model	<b>SI5-1500</b>	<b>Unit</b>
Power rating (W/VA)	1200/1500	W/VA
Dimensions W*D*H	100*480*222 Rack-Mount (5U 19" for 4 pcs)	mm
Weight (approx)	20	Kg
Environmental		
Storage temperature	-20 to 70	°C
Operating temperature	0 to 40	°C
Altitude	<3000	m
Relative humidity	0 to 95 Without condensation	%
Degree of protection	20 (IEC 60529)	IP
Normal mode acoustic noise at 1 m	<50	dBA
Stored energy mode acoustic noise at 1m	<50	dBA
Electrical input characteristics		
Nominal DC voltage	48	VDC
Voltage range	40 to 60	VDC
Electrical output characteristics		
Nominal AC voltage	220/230	V r.m.s.
Voltage variation	< ±0.5 (Free running) < ±5 (Grid Mode)	%
Nominal frequency	50	Hz
Frequency variation	50 ±0.01 (Free running) Be synchronous with input in the mains mode	Hz
Linear load total voltage distortion	<3%	%THD
Non-Linear load total voltage distortion	<5%	%THD
waveform	Sinusoidal	
overload capability	200 @Starting, 125 @10 min	%
Parallel Operation		
Parallel quantity and availability for load sharing and redundancy	No Limit	
Protection		
Overload	Output short circuit	
DC over voltage	Inverter powers and transformer overheat protection	
DC under voltage	DC to AC galvanic Isolation	
Battery reverse polarity		
Mains connection to output		