

## 1U Power & Distribution DC System

### Main Features

- 1U height
- Up to 3kW output Power
- -48VDC Output Voltage
- N+1 Rectifier Redundancy
- Efficiency up to 95%
- Hot-swap Rectifier Modules
- Advanced Battery Monitoring
- Wide AC input range 85-300VAC
- Monitoring & Control (SNMP)



Model Number	Max Output Power	Load Distribution	Battery Distribution
HELSYSN1360180R48	2kW	6X30A MCBs	1X50A + 1X30A
HELSYSN1540180R48	3kW	4X30A MCBs	1X50A + 1X30A
HELSYSN2540180R48	3kW	6X15A Fuses	2x30A Fuses (parallel)

## Smart HelSys

### Modular & Fully Monitorable -48VDC Power & Distribution System

Smart HelSys system is a compact and intelligent DC Power System, that can fit up to 3X1kW rectifier modules and 1 X HEL-SC501 intelligent controller. Front accessible distribution input and output terminal make the 1U Rack System ideal for easy maintenance and installation.

**HELSYSN1540180R48**



**HELSYSN2540180R48**



**HELSYSN1360180R48**



**HEL-SC501**



## Applications

- Fibre optic network
- Radio Access Network
- Wireless Networks
- Transmission Equipment
- Micro Base Station
- 4G & 5G base stations

## Standards

Electrical	IEC 60950-1
	EN 60950-1
	UL 60950-1
EMC	EN 55022
Environmental	ETSI EN 300 019-2
	ETSI EN 300 132-2
	RoHS

<b>AC Input</b>	
Ac Input Range	85-300VAC *
Power Factor	0.99
Frequency	45-65Hz
THDi	<5% at full load <10% at half load Rated input and output voltage

<b>DC Output</b>	
Output Voltage	-53.5V Rated output voltage -53.5V Float Voltage -56.4V boost voltage
Output Current	≥54A
Voltage Regulation	≤±1%
Current Sharing	≤±5%
Efficiency	≥95%
Ripple and Noise	≤200mV Peak-Peak
Psophometric Noise	≤2mV
Low Voltage Disconnect	80A Bi-stable contactors should be used as BLVD & LLVD1 (Optional )
Protection	Short-circuit protection Overload protection

<b>Environmental</b>	
Operating Temperature Range	-40°to +70° (-40° to +167°)
Storage Temperature	-40° to +85° (-40° to +185°)
Humidity	Operating: ≤90% non- condensing Storage: ≤95% non-condensing

<b>Monitoring</b>	
Controller	HEL-SC501
Display	LCD
Temp Sensors	2
Dry Contact	6 relay outputs
Port	4*RS485, 1*Ethernet, 2*CAN, 1*USB
Protocols	Http, Modbus, IPV4, SNMP V1/V2c

\* Please refer to the rectifier's datasheet for output power derating details. Vin≥154V, Output Power is 1000W