

# HSS 48 Series

Solar Sub-rack Power System



## Key Features

- Seamless integration with the legacy DC power system
- Compact, modular, hot pluggable solar subrack
- Interruption free installation
- Equipped with an MPPT charger providing a maximum power track precision of up to 99.5%
- Delivers an ultra-high efficiency of up to 98%
- Supports soft scalable technology
- Integrated protection from external lightning surges
- Full front access for easy operation & maintenance
- Safety: CE certified and complies with EN60950 and EN62109 standards
- Flexible to pair with NetSure™ 531/731 series to form a hybrid system

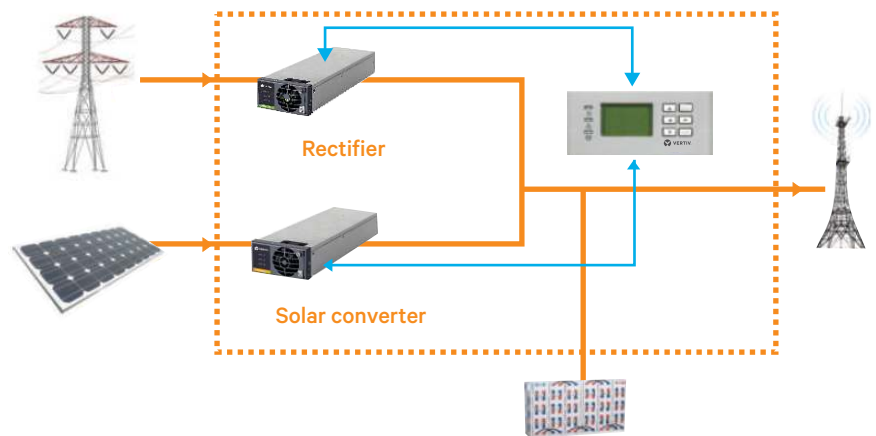
## Applications

- LTE in-building solutions
- FTTx broadband multi-solutions
- Macro station and outdoor cabinet

## Description

The HSS48 series solar sub-rack provides an easy, interruption-free and economical solution to upgrade a legacy DC power system. This ultra-compact, modular sub-rack brings an alternate solar energy source for access and transmission networks. Its fast and precise MPPT (Maximum Power Point Tracking) algorithm provides real-time power tracking and improves power harvesting. By leveraging the solar power at telecom sites, operators can substantially reduce their operational expenses.

## Typical System Architecture



Legacy power system



Solar subrack



Hybrid power system

HSS series MPPT 50A, 100A Solar Subrack		
Parameters		
Model Name	HSS4850/XMX-1	HSS48100/XMX-1
Rated power	3000W	6000W
MPPT converter	S48-3000	
Solar input	58 to 150 VDC	
DC Output Voltage	-42 to 58VDC	
Efficiency	≥98.2%	
Subrack configuration	1 x MPPT module + SPD + Input & output distribution	2 x MPPT module + SPD + Input & output distribution
Interface from solar array	2 x 16 mm <sup>2</sup> , rear connected	4 x 16 mm <sup>2</sup> , rear connected
Interface to -48VDC power system	2 x 16 mm <sup>2</sup> , rear connected	4 x 16 mm <sup>2</sup> , rear connected
Dimensions (WxHxD)	440 x 355 x 44mm	
Weight	≤13kg	≤16kg
Communication alarm interface	RS232 communication, input & output dry contact	Output dry contact



HSS4850



HSS48100

HSS series MPPT 60A Solar Subrack	
Parameters	
Model Name	HSS4860/XSX-1
Rated power	4000W
MPPT converter	S48-2000e3
Solar input	200 to 300VDC
DC Output Voltage	-42 to 58VDC
Efficiency	≥96%
Subrack configuration	2 x MPPT module + SPD + Output distribution
Interface from solar array	2 x M5 Screws, rear connected
Interface to -48VDC power system	2 x M8 Screws, rear connected
Dimensions (WxHxD)	440 x 355 x 44mm
Weight	≤10kg
Communication alarm interface	Output dry contact



HSS4860

Solar MPPT Converter		
Parameters		
Model Name	S48-2000e3	S48-3000
Rated power	2000W	3000W
Input voltage range	120 to 420 VDC*	58 to 150VDC
Output voltage range	-42 to 58 VDC	-42 to 58 VDC
MPPT Precision	≥99%	≥99.5%
Conversion efficiency	≥96%	≥98.2%
Dimensions (WxDxH)	84.5 X 41.4 X 252.5mm	41.4 X 132.3 X 287mm
Weight	≤2kg	≤3kg



S48-2000e3



S48-3000