

TN018 – Sonnen eco 8.1 – 3Ph Hybrid Transition to Dual MPPT Input

To enable expansion of the kWp into the eco 8.1 3-Ph Hybrid product sonnen Australia will now offer a dedicated dual MPPT string combiner option.

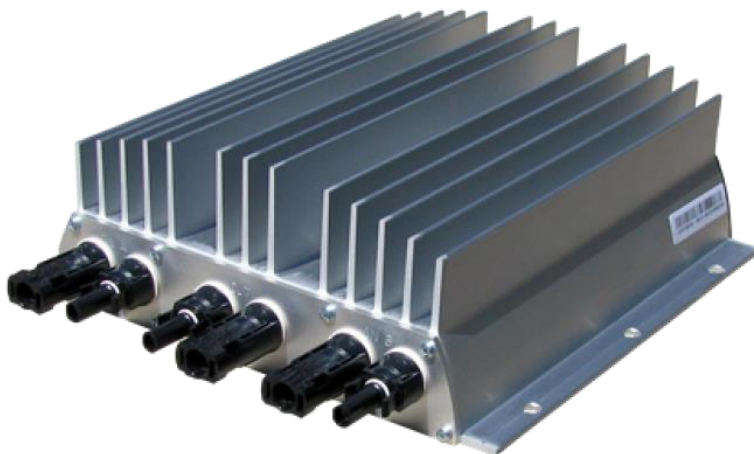
The AMPT V600-12 device is to be installed along with the PV system. The location of the device is at this stage at the discretion of the installer / system designer. The two primary options will be:

- A- Installation of the device on the roof or within the roof cavity prior to the rooftop PV string isolation. A single DC PV connection can then run from the device to the sonnen eco 8.1 system where the required external DC isolation device can be sited.
- B- The device can be installed adjacent to the sonnen eco 8.1 system. The rooftop PV will need to be split into dual array's each with its own DC isolation. From these isolators dual DC PV cable will need to run to the device, between the device and the sonnen eco 8.1 system will be required the DC isolation device.

The dual MPPT string combiner can offer asymmetrical inputs with up to 30% difference in power level and 100Vdc between MPPT inputs.

With regards to the installation please observe the AMPT installation instructions (AMPT String Optimizer V600 Series Installation Manual: 57070004-1H). please note:

- Use a suitable PV cable ($\geq 4 \text{ mm}^2$) for the connection of the string optimizer.
- Use the supplied PV plug-in connectors for the connection of the sonnenBatter hybrid 8.1.
- Use only Amphenol H4 or H4 UTX connectors for the connection of the string optimizer.
- The sonnen eco 8.1 system will require additional configuration by the sonnen Australia service team to reconfigure the MPPT input to being in fixed voltage mode. It is therefore a prerequisite of the commissioning process to contact the service team to assist with the configuration of the system.



Dual MPPT Specification:

Input

Max Vdc per input:	585Vdc
Max Amp per input:	11A
MPPT tracking range:	200-460Vdc
Max input power variation:	30%
Max input Vdc variation:	100Vdc
No of inputs:	2
Typical power per device:	5.7 – 7.7kWp

Output

Max Vdc Output:	0-600Vdc
Max Amp Output:	12A
Max Cont. Power Out	6.8kWdc
Efficiency (Max/CEC/Euro):	99.4/99.1/99.0

Mechanical

Connector Type:	Amphenol H4
Dimensions (mm):	259 x 220 x 80
Weight:	3.8 kg
Operational Temp Range:	-40 °C to +75 °C
Cooling:	Convection
Ingress:	IP 66
Max System Voltage:	1000Vdc
Certification:	ETL to UL 1741; IEC 61000-6-1, IEC 61000-6-3, IEC 62109; CE Declaration