

# Ampt V600 String Optimizer

## Lower Cost and Higher Performing PV Systems

Ampt V600 String Optimizers are DC/DC converters that lower the cost and improve the performance of large-scale PV systems. Ampt optimizers feature patented technology that enables PV systems to deliver more value than traditional system designs without Ampt.

Ampt optimized systems are distinguished from other solutions by uniquely delivering a true spend-less-get-more value proposition. Systems with Ampt lower the total system cost on day one and deliver more energy to increase lifetime revenues.

### Features:

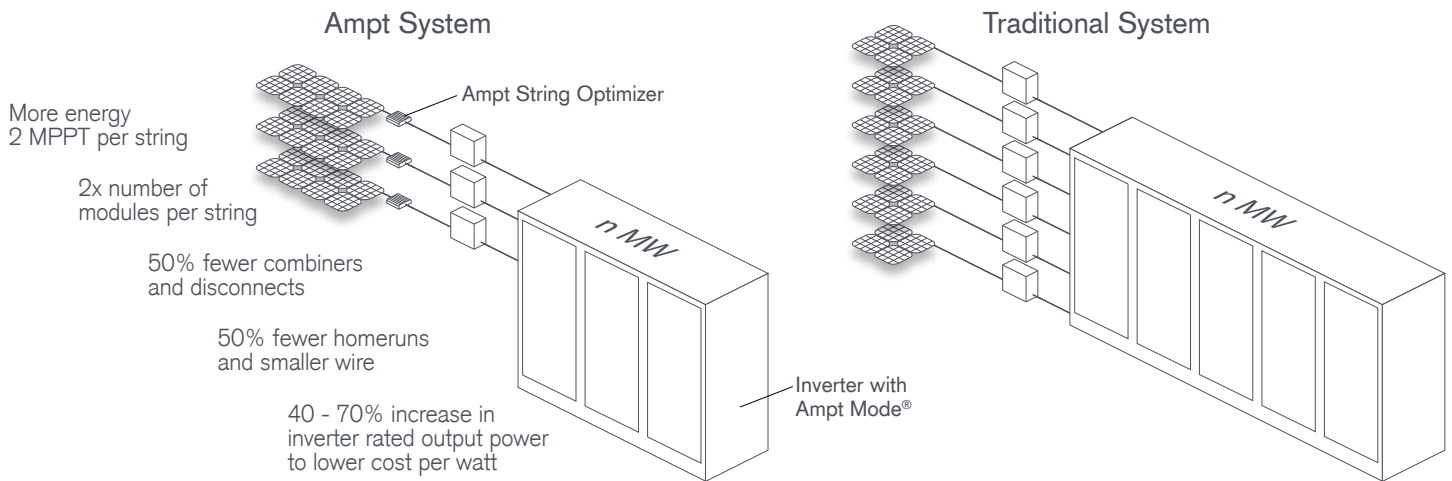
- String Stretch® technology allows 2x the number of modules per string
- Ampt Mode® technology increases inverter rated output power
- Two MPP trackers per PV string improve system performance
- High efficiency power conversion
- Patented output voltage and current limits
- Independent power optimization without reliance on communication

### Benefits:

- Decrease DC wiring and combining costs up to 50% and reduce wire losses
- Decrease inverter cost up to 50%
- Decrease AC electrical BOS costs
- Increase inverter efficiency
- Deliver more energy with higher MPP tracking resolution
- Recover lifetime degradation losses
- Prevent failed PV strings from dropping the entire array

### Results:

- Reduce upfront total system cost
- Increase system lifetime performance
- Realize a lower cost of energy
- Increase return on investment



String Optimizer Model		V425-12	V450-12	V490-12	V570-12	V600-12
<b>Electrical</b>						
<b>Input</b>						
Maximum voltage per input <sup>1</sup>	V	585	585	585	585	585
Maximum current per input <sup>2</sup>	A	11	11	11	11	11
MPP tracking voltage range	V	200 - 460	200 - 460	200 - 460	200 - 460	200 - 460
Number of inputs		2	2	2	2	2
Typical power per optimizer <sup>3</sup>	kWp	5.7 - 7.7	5.7 - 7.7	5.7 - 7.7	5.7 - 7.7	5.7 - 7.7
<b>Output</b>						
Voltage range	V	0 - 425	0 - 450	0 - 490	0 - 570	0 - 600
Maximum current	A	12	12	12	12	12
Efficiency (Max / CEC / Euro)	%	99.4 / 99.1 / 99.0				
<b>Mechanical</b>						
Input and output connector type	Amphenol H4					
Dimensions	10.19" x 8.66" x 3.15" (259mm x 220mm x 80mm)					
Weight	8.4 lbs. (3.8 kg)					
Ambient temperature operating range	-40 °F to +167 °F (-40 °C to +75 °C)					
Cooling	Convection					
<b>General</b>						
Maximum system voltage	600 V (UL and IEC)					
Compliance	ETL to UL 1741; IEC 61000-6-1, 61000-6-3, 62109; CE					
Ingress protection	IP 66					

1. Voc at coldest design temperature - follow Ampt's design guidelines to determine the number of modules per input and maximum system voltage.  
 2. Module Imp at standard test condition (STC) - irradiation level of 1000 W/m<sup>2</sup> at 25°C.  
 3. Power ratings listed are at STC - follow Ampt's design guidelines for recommended input power per optimizer.

