

## General Specification PVI-STRINGCOMB PVI-STRINGCOMB-S



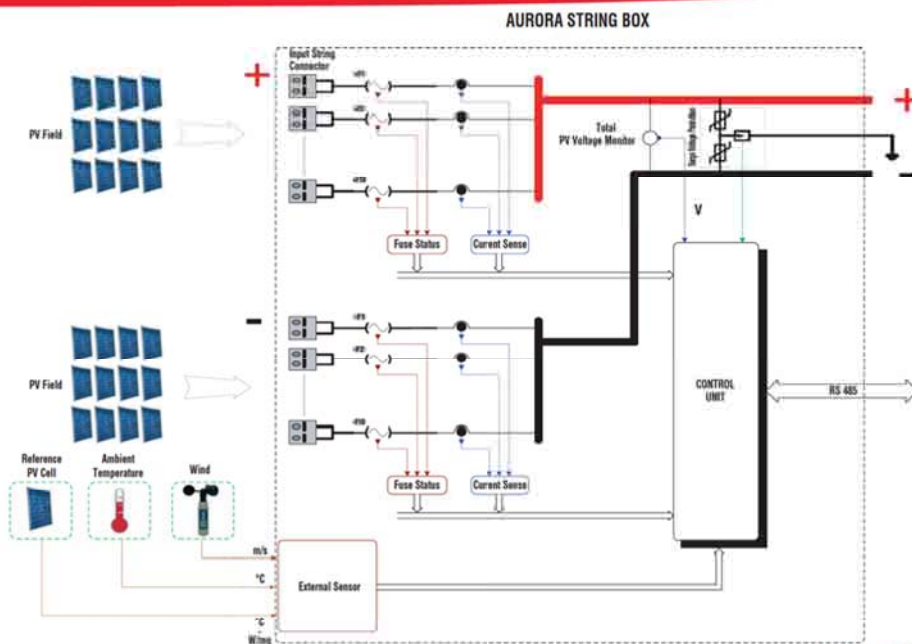
### AURORA® BENEFITS

- The string combiner box for the protection and monitoring of the array in centralized PV systems
- 20 input channels rated 10A (or 10 inputs rated 20A each) with integrated string current measurement (hall effect sensors) are available for an accurate monitoring and early fault detection of each string
- Fuse status monitoring ensures prompt fault detection and alarm
- Up to 20 strings can be connected and paralleled on the same box, with fuse protection on both the positive and negative pole (2 parallel strings for each fuse)
- String cable connection via Multi-Contact or cable glands and terminal blocks
- Overvoltage protection with replaceable varistor cartridge
- Available with integrated output DC switch (STRINGCOMB-S version)
- IP65 plastic enclosure for outdoor installation
- Integrated RS-485 serial port for remote communication with the inverter
- 4 optional analog inputs for connection to external sensors (irradiance, temperature, wind speed, etc...)

### HIGH PERFORMANCE REDEFINED

The string combiner box PVI-STRINGCOMB is an ideal complement to the Aurora PVI-CENTRAL family of inverters that ensures the same control and monitoring accuracy of the PV generator typically achieved with string inverters. The individual string currents are accurately measured with hall effect sensors and any mismatch is promptly detected by the system supervisor to allow for quick identification of any fault of the solar panels. The addition of the optional DC switch available in the PVI-STRINGCOMB-S version is useful in case of long DC cable's paths (i.e. rooftop solar arrays) and to ensure a safe operation and maintenance of the DC side of the system. All string combiner boxes include surge protection with removable elements as well as fuse protection for each couple of string channel.

### BLOCK DIAGRAM



CHARACTERISTICS	PVI-STRINGCOMB	PVI-STRINGCOMB-S
<b>INPUT</b>		
Input Voltage Range [Vdc]	200 - 850	200 - 850
Absolute maximum input voltage [Vdc]	900	900
Measurement channels	10	10
Max. Idc current for each channel [A]	20	20
DC fuses	10 (each polarity)	10 (each polarity)
Number of strings per fuse	2	2
String cable cross section	Up to 6 mm <sup>2</sup>	Up to 6 mm <sup>2</sup>
Maximum number of strings (parallel)	20	20
DC overvoltage protection	Yes (with replaceable cartridge)	Yes (with replaceable cartridge)
<b>OUTPUT</b>		
Max. output current rating	200	200
Output DC cable connection	M8	M8
Grounding connection cable	M8	M8
Output DC switch rating	-	200A/1000V
<b>MECHANICAL AND ENVIRONMENTAL DATA</b>		
Size (height x width x depth) [mm]	559 x 757 x 250	559 x 757 x 250
Weight [kg]		
Protection degree	IP65	IP65
Operating ambient temperature range [°C]	-25 to +55	-25 to +55
Relative humidity	0 to 95%	0 to 95%
<b>COMMUNICATION</b>	via RS485	via RS485
<b>AVAILABLE DATA</b>	String currents, array voltage, fuse status, internal temperature, external sensor's readings, overvoltage protection status	

## MODEL SUMMARY

MODEL NUMBER	CONFIGURATION
PVI-STRINGCOMB	20x10A (or 10x20A) string combiner with current measurement and string protection fuses
PVI-STRINGCOMB-S	20x10A (or 10x20A) string combiner with current measurement, string protection fuses and DC output switch

## STANDARDS AND CODES

Aurora inverters comply with standards set for grid-tied operation, safety and electromagnetic compatibility including: UL 1741, VDE0126, CEI 11-20, DK5940, CEI 64-8, IEC 61683, IEC 61727, EN50081, EN50082, EN61000, CE certification.

