



IntelliString™ Smart Combiner Box

Quality, Accuracy and Ease of Installation

String-level performance data is a valuable tool for PV system owners because it enables fast diagnosis of PV system underperformance due to failed modules, shading or soiling. Until now this important tool was primarily used on large expensive systems due to the high cost of monitoring at the string level. Now the IntelliString™ line of smart string combiner boxes offer a solution that is practical and affordable enough to use on all commercial installations.

AE IntelliString™ combiner boxes are among the most robust in the industry with a 5-year warranty and NEMA 4X construction. Coupled with our industry-leading support team, buying combiner boxes from AE simplifies the procurement and site management of your solar installation, therefore, maximizing output.



Features

- ULI741, CSA 22.2, CE listed at 1000VDC
- Robust NEMA 4X fiberglass enclosure as a standard feature
- Back panel with integrated wire management and silk screening of all components
- Suitable for either positive or negative grounded arrays with no mechanical changes required
- Solid busbar eliminates messy wiring to fuse blocks
- Finger safe fuse holders
- Lockable exterior latch and all stainless steel hardware
- Clear "touch-safe" covers
- 5 year warranty
- Monitor up to 20A per string
- Open Modbus communications compatible with industry leading monitoring providers

Specifications

Inverter	IntelliString 8	IntelliString 16
Maximum Number of input strings	8	16
Maximum Output Current (A)	200	200
Maximum DC Voltage Input	1000	1000
Maximum Output Wire Size	350 MCM	350 MCM
Power Supply (Customer Supplied)	24VDC	24VDC
Communications*	Modbus via RS-485	Modbus via RS-485
Dimensions (H" X W" X D")	22" X 18" X 9"	26" X 26" X 10.39"
Weight (lbs)	25	44

*Commercial monitoring software required

Specifications are subject to change without notice.



Advanced Energy Industries, Inc. • 20720 Brinson Blvd. PO Box 7348 • Bend, 97708 OR U.S.A.
 T: 877.312.3832 • sales.support@aei.com • www.advanced-energy.com/renewables
 Please see www.advanced-energy.com for worldwide contact information.

© Advanced Energy Industries, Inc. 2011
 All rights reserved. Printed in U.S.A.
 55-600100-70-C 0M 6/11



PV Powered™ solAron® siteguard®

String Combiner Boxes

Advanced Energy’s DC String Combiner Boxes are Reliable, Safe and Convenient

Advanced Energy's DC String Combiner Box provides a means of combining multiple positive or negative grounded source circuits into a single DC output. With no hardware changes required for positive or negative grounded systems, AE combiner boxes are ideally suited for bi-polar or mono-polar applications. Each source circuit is fused separately using a touch-safe fuse holder. The combiner box allows for fail-safe operation of the system in the unlikely event that a problem with a source circuit leads to abnormally high current. In addition, the combiner box provides a convenient means of accessing the DC portion of a PV system for routine maintenance and troubleshooting.



String Combiner 24 Inside Panel



String Combiner 12 Inside Panel

Features

- UL1741, CSA C22.2, CE listed @ 1000VDC
- NEMA 4X fiberglass enclosure as a standard feature
- Back panel with integrated wire management and silk screening of all components
- Suitable for either positive or negative grounded arrays with no mechanical changes required
- Solid busbar eliminates messy wiring to fuse blocks
- Finger safe fuse holders
- Lockable exterior latch and all stainless steel hardware
- Clear touch-safe covers
- 5 year warranty to be consistent with intellistring list

Specifications

Model	Combiner 6	Combiner 12	Combiner 24	Combiner 36	Combiner 52
Maximum Number of Input Strings	6	12	24	36	52
Maximum Output Current (A)	120	180	360	540	780
Maximum DC Voltage Input	1000	1000	1000	1000	1000
Maximum Output Wire Size	1 x 3/0	1 x 350 MCM	2 x 350 MCM	2 x 350 MCM	2 X 600 MCM
Dimensions (H" x W"x D")	15.75" x 14" x 6.55"	17.75" x 16" x 8.5"	21.5" x 17.75" x 8.5"	25.5" x 21.5" x 10"	36" x 30" x 8"
Weight (lbs)	14	20	31	43	75

Specifications are subject to change without notice.



Advanced Energy Industries, Inc. • 20720 Brinson Blvd. PO Box 7348 • Bend, 97708 OR U.S.A.
 T: 877.312.3832 • sales.support@aei.com • www.advanced-energy.com/renewables
 Please see www.advanced-energy.com for worldwide contact information.

© Advanced Energy Industries, Inc. 2011
 All rights reserved. Printed in U.S.A.
 55-600100-70-C 0M 6/11

