

# RAPID SHUTDOWN COMBINER

/ 1,000 V for commercial and utility projects



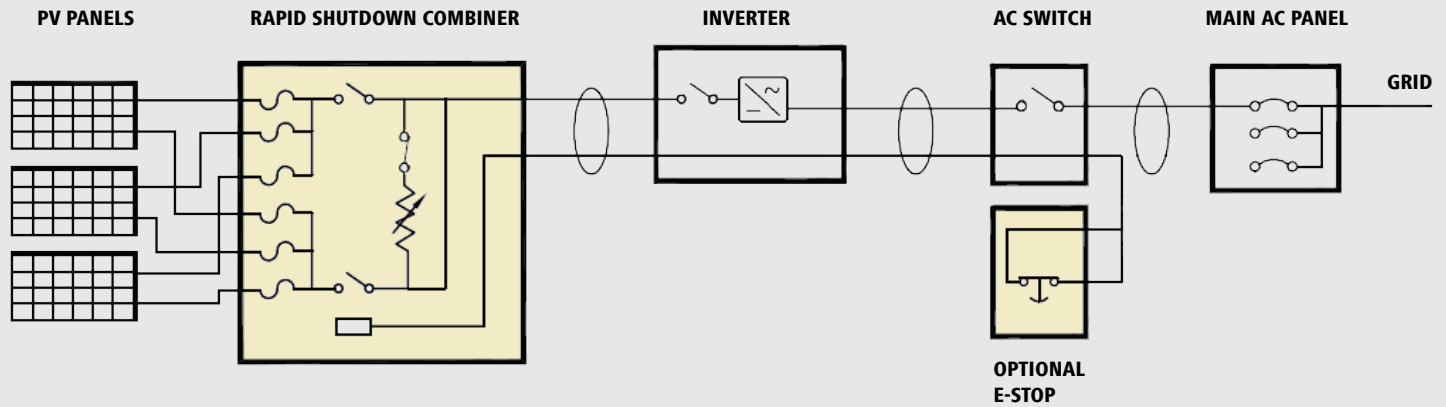
Innovative Solar is based in San Jose, California and has over thirty years of design and engineering experience. Their focus is manufacturing high-quality BOS components for the solar industry and offer a range of rapid shutdown products.

Innovative Solar was selected to design and build a cost-effective 1,000 V rapid shutdown combiner for the commercial and utility markets. The product was customized to meet our stringent specifications. It is currently undergoing compatibility testing at Fronius International and is expected to receive CSA certification in early 2017.

## FEATURES

- Six input strings combined into two output strings
- Self-powered from the PV array
- Supports paired strings with 30 A fuses
- Rated operating temperature is -40 C to 60 C
- Maintenance-free spring clamp inputs
- Designed with simple O+M in mind: battery-free circuit board design and built-in diagnostics
- Field upgradeable
- Lockable disconnect handle
- Rated at 1,000 V DC
- Installation flexibility, can be mounted horizontally or vertically
- Upgradeable surge protection
- Choice of polycarbonate or powder coated CRS enclosure

## CONFIGURATION



## TECHNICAL SPECIFICATIONS

Version: 2 MPPT x 3 String Un-Grounded		
Rapid shutdown	Sealed HV contactors	
Capacitor discharge	Discharges to <30 V in <10 sec	
Surge protection (UL1449)	6.5 kA, upgradeable to 40 kA at single 8/20µS impulse	
Max. voltage	1000 V dc	
Max input current	30 A (per string)	
Fuses	15 A (30 A compatible)	
Conductor size	14-6 AWG (CU only)	
Termination type	Spring clamp, with lever	
PV output	2 MPPT	
Max. current	80 A / MPPT	
Conductor size	8-2/0 AWG (90 C tested)	
Lug type	Box lug terminal block	
Control power	Self-Powered (PV) (Standard)	
Power consumption	11 W from PV	
Min. start up voltage	200 V	
Operating voltage	125 V	
Rapid shutdown control	Remote contact closure or voltage source	
Conductor size	22-14 AWG (stranded or solid)	
Enclosure		
Enclosure type	Polycarbonate	Powder coated CRS
Enclosure rating	NEMA 4X	NEMA 3R/4
Dimensions H x W x D (nominal)	18 in. x16 in. x 10 in.	20 in. x16 in. x 8 in.
Net weight (approx.)	26 lb.	34 lb.
Mounting angle	Any	
Operating temperature	-40 C to 60 C (-40 F to 140 F)	
Storage temperature	-40 C to 85 C (-40 F to 185 F), non-operating	
Certifications	UL1741 (690.11, 690.12, 1699B) (Q4, 2016) CSA. C22.2 107.1, AE-004-2015 (Q4, 2016)	
Warranty	7 years	

**Fronius Canada Ltd.**  
 2875 Argentia Road, Units 4, 5 & 6  
 Mississauga, ON L5N 8G6  
 Canada  
 pv-sales-canada@fronius.com  
 905-288-2100  
 www.fronius.ca