



# Certificate of Compliance

**Certificate:** 70218631

**Master Contract:** 259077

**Project:** 80066848

**Date Issued:** 2020-12-18

**Issued to:** Altenergy Power System Inc.  
No.1 Yatai Road  
Jiaxing, Zhejiang, 314050  
CHINA  
**Attention:** Kevin Lu

*The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only*



**Issued by:** Rohana Yang  
Rohana Yang

## PRODUCTS

CLASS 5311 09 - POWER SUPPLIES - Distributed Generation Power Systems Equipment

CLASS 5311 89 - POWER SUPPLIES - Distributed Generation Power Systems Equipment - Certified to U.S. Standards

APsmart Rapid shutdown System:

Model	Attenuators	Initiation Device	System Ratings
Type-A	RSD-S-PLC-A	Transmitter-PLC	System voltage 1000Vdc, Attenuators Input: 8~80Vdc, 15Amax per module, 15A max input short circuit. Attenuators Output: 8~80Vdc, 15Amax, 800W max per module. Rapid shutdown time limit 15s. Initiated by the loss of AC power
Type-B	RSD-S-PLC-B	Transmitter-PLC	System voltage 1500Vdc, Attenuators Input: 8~80Vdc, 15Amax per module, 15A max input short circuit. Attenuators Output: 8~80Vdc, 15Amax, 800W max per module. Rapid shutdown time limit 15s. Initiated by the loss of AC power



**Certificate:** 70218631  
**Project:** 80066848

**Master Contract:** 259077  
**Date Issued:** 2020-12-18

Type-C	RSD-S-PLC-A	Transmitter-PLC-PCBA	System voltage 1000Vdc, Attenuators Input: 8~80Vdc, 15Amax per module, 15A max input short circuit. Attenuators Output: 8~80Vdc, 15Amax, 800W max per module. Rapid shutdown time limit 15s. Initiated by the loss of AC power
Type-D	RSD-S-PLC-B	Transmitter-PLC-PCBA	System voltage 1500Vdc, Attenuators Input: 8~80Vdc, 15Amax per module, 15A max input short circuit. Attenuators Output: 8~80Vdc, 15Amax, 800W max per module. Rapid shutdown time limit 15s. Initiated by the loss of AC power

Model	Attenuators	Initiation Device	Inverter	System Ratings
APsmart's RSD system, PVRSS: Sunspec	Altenergy Power System Inc. RSD-S-PLC-A RSD-S-PLC-B RSD-D-15-1000 RSD-D-20-1000 RSD-D-25-1000 RSD-D-15-1500 RSD-D-20-1500 RSD-D-25-1500	Altenergy Power System Inc. Transmitter-PLC Transmitter-PLC-PCBA  Zhejiang Twinsel Electronic Technology Co., Ltd. PV-SY020-PLC PV-SY020-PCBA	SHANGHAI CHINT POWER SYSTEMS CO., LTD. CPS SCA60KTL-DO/US-480 CPS SCA50KTL-DO/US-480 CPS SCA25KTL-DO-R/US-480 CPS SCA20KTL-DO-R/US-480 CPS SCA25KTL-DO/US-208	1000 Vdc maximum system voltage. Rapid shutdown time limit 30s with inverter.  Initiated by the loss of AC power
	Zhejiang Twinsel Electronic Technology Co., Ltd. PV-SY020-A PV-SY020	Baoding Yitong PV Science & Technology Co., Ltd. Transmitter-PLC Transmitter-PLC-PCBA	Delta Electronics (Shanghai) Co., Ltd. M10-4-TL-US M10-TL-US M8-TL-US M6-TL-US M5-TL-US M4-TL-US E8-TL-US E6-TL-US E4-TL-US	600 Vdc maximum system voltage. Rapid shutdown time limit 30s with inverter.  Initiated by the loss of AC power
	Baoding Yitong PV Science & Technology Co., Ltd. YT-RSD-P-1000 YT-RSD-P-1500		Solectria Renewables, LLC PVI 50TL-480 PVI 60TL-480 PVI 20TL-480-R PVI 25TL-480-R PVI 25TL-208	1000 Vdc maximum system voltage. Rapid shutdown time limit 30s with inverter.  Initiated by the loss of AC power



**Certificate:** 70218631  
**Project:** 80066848

**Master Contract:** 259077  
**Date Issued:** 2020-12-18

		Initiation Device is integrated in the Inverter, designed and manufactured by Fronius International GmbH	Fronius International GmbH Fronius Symo Advanced 10.0-3 208-240 Fronius Symo Advanced 12.0-3 208-240	600 Vdc maximum system voltage.  Rapid shutdown time limit 30s with inverter.  Initiated by the loss of AC power
			Fronius International GmbH Fronius Symo Advanced 15.0-3 480 Fronius Symo Advanced 20.0-3 480 Fronius Symo Advanced 22.7-3 480 Fronius Symo Advanced 24.0-3 480	1000 Vdc maximum system voltage.  Rapid shutdown time limit 30s with inverter  Initiated by the loss of AC power
			Fronius International GmbH Primo GEN24 3.8 208-240 Primo GEN24 5.0 208-240 Primo GEN24 6.0 208-240	600 Vdc maximum system voltage.  Rapid shutdown time limit 30s with inverter.  Initiated by external buttons with signal wire connected to the WSD interface of the Inverter.

Model	Attenuators	Initiation Device	Inverter	System Ratings
APsmart Rapid shutdown System, PVRSS: Sunspec	Altenergy Power System Inc. RSD-S-PLC-A RSD-S-PLC-B RSD-D-15-1000 RSD-D-20-1000 RSD-D-25-1000 RSD-D-15-1500 RSD-D-20-1500 RSD-D-25-1500  Zhejiang Twinsel Electronic Technology Co.,	Altenergy Power System Inc. Transmitter-PLC	Manufacturer: SolaX Power Network Technology (Zhe jiang) Co., Ltd.  Family series (1) Models: A1-Hybrid-6.0-US, A1-Hybrid-7.0-US, A1-Hybrid-7.6-US, A1-Hybrid-8.6-US;  Family series (2) Models: A1-6.0-US, A1-7.0-US, A1-7.6-US, A1-8.6-US	600 Vdc maximum system voltage. Rapid shutdown time limit 30 s with inverter.  Family series (1) Initiated by external emergency button with signal wire connected to the Inverter's ELV circuit.



**Certificate:** 70218631  
**Project:** 80066848

**Master Contract:** 259077  
**Date Issued:** 2020-12-18

	Ltd. PV-SY020-A; PV-SY020;  Baoding Yitong PV Science & Technology Co., Ltd. YT-RSD-P-1000; YT-RSD-P-1500;			Family series (2) Initiated by the loss of AC Grid.
--	---	--	--	---

Note:

1. For details related to rating, size, configuration, etc., reference should be made to the CSA Certification Record, Certificate of Compliance Annex A, or the Descriptive Report.
2. Photovoltaic Rapid Shutdown Function has also been evaluated according to NEC-2017 and NEC-2020 Section 690.12 applicable requirement.

**APPLICABLE REQUIREMENTS**

UL Std. No. 1741-Second Edition - Inverters, Converters, Controllers and Interconnection System Equipment for Use With Distributed Energy Resources (February 15, 2018)

CSA C22.2 No. 330-17 - Photovoltaic rapid shutdown systems