



SHIFTING THE LIMITS

# FRONIUS GALVO

/ The future of residential solar has arrived - The revolutionary new Fronius Galvo



/ Fast PC board replacement



/ SnapINverter Mounting system



/ Wi-Fi\* on board



/ Arc Fault Circuit Interruption



/ Smart Grid Ready



/ Fronius introduces the brand new Fronius Galvo! The Fronius Galvo is the first and only Wi-Fi\* enabled, super lightweight residential inverter that disrupts the residential solar market by providing a list of features never before seen in the solar industry. With the revolutionary Fronius SnapINverter hinge mounting system, which allows for a single person installation in record time, it is no wonder that installers are demanding the Fronius Galvo more than any other string inverter currently available. The Fronius Galvo provides an extra wide voltage window allowing for utmost flexibility in string design. The industry leading Fronius Service Provider program allows full service in less than 15 minutes by one installer with one truck roll.

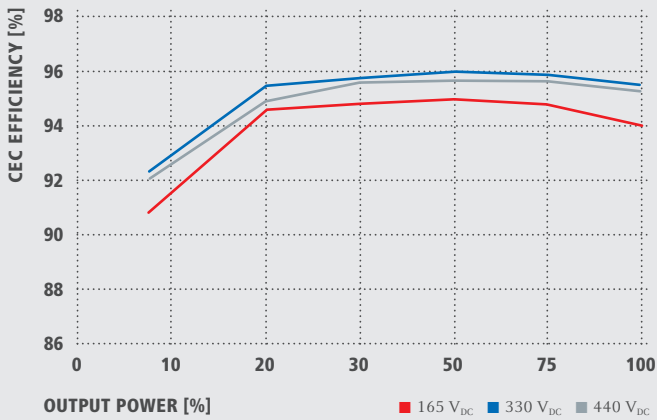
/ System owners are amazed by the attractive new low-profile design, integrated Wi-Fi\* with included Fronius Solar.web monitoring portal and Fronius smart phone app, the touch sensitive display, and quiet high-performance. The new Fronius Galvo creates convenience and sets the industry standard in installation, service and overall ownership.

## TECHNICAL DATA FRONIUS GALVO

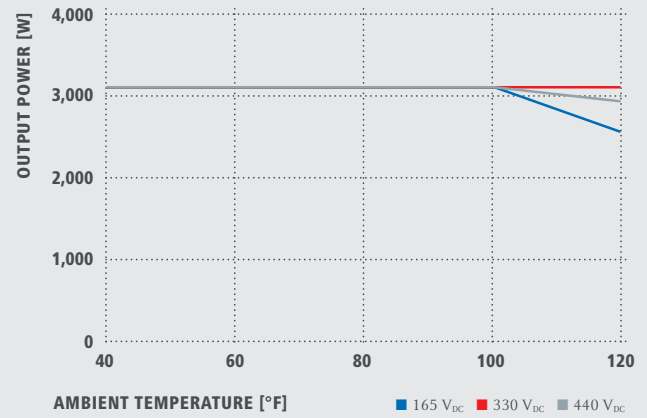
INPUT DATA		GALVO 1.5-1	GALVO 2.0-1	GALVO 2.5-1	GALVO 3.1-1
Recommended PV Power (kWp)		1.2 - 2.4	1.6 - 3.2	2.0 - 3.8	2.5 - 4.5
Max. usable input current	208 V	13.4 A	17.0 A	16.1 A	18.7 A
	220 V	13.4 A	17.9 A	16.1 A	20.0 A
	240 V	13.4 A	17.9 A	16.1 A	20.0 A
Max. array short circuit current		16.7 A	22.4 A	20.1 A	25.0 A
Nominal input voltage		260 V		330 V	
Min./Max. input voltage		120 V / 420 V		165 V / 550 V	
DC startup voltage		140 V		185 V	
MPP Voltage Range		120 V - 335 V		165 V - 440 V	
Admissible conductor size (DC)		AWG 14 to AWG 6 - CU / AWG 6 - AL - solid			
Number of DC input terminals		3x DC+ and 3x DC- screw terminals for solid copper or aluminium and stranded / fine stranded copper			
OUTPUT DATA		GALVO 1.5-1	GALVO 2.0-1	GALVO 2.5-1	GALVO 3.1-1
AC nominal output power		1,500 VA	2,000 VA	2,500 VA	3,100 VA
Max. output power		1,500 VA	2,000 VA	2,500 VA	3,100 VA
Max. output current	208 V	8.2 A	9.1 A	13.7 A	14.1 A
	220 V	7.7 A	9.1 A	12.9 A	14.1 A
	240 V	7.1 A	9.1 A	11.8 A	14.1 A
Admissible conductor size (AC)		AWG 14 to AWG 6 - CU / AWG 6 - AL - solid			
Max. output overcurrent protection		20 A			
Grid connection		208, 220 and 240 V			
Frequency		60 Hz			
Frequency range		59.3 to 60.5 Hz			
Total harmonic distortion		< 4 %			
Power factor range		0.85 - 1 ind./cap			

\*The term Wi-Fi is a registered trademark of the Wi-Fi Alliance.

## FRONIUS GALVO 3.1-1 CEC EFFICIENCY CURVE



## FRONIUS GALVO 3.1-1 TEMPERATURE DERATING



## TECHNICAL DATA FRONIUS GALVO

GENERAL DATA	GALVO 1.5-1	GALVO 2.0-1	GALVO 2.5-1	GALVO 3.1-1
Dimensions (height x width x depth)	24.7 x 16.9 x 8.1 in.			
Weight	36.05 lbs.		36.93 lbs.	
Protection Class	NEMA 4X			
Night time consumption	< 1 W			
Inverter technology	HF transformer			
Cooling	Variable speed fan			
Installation	Indoor and outdoor installation			
Ambient operating temperature range	-40 to 122°F (-40 to 50°C)			
Permitted relative humidity	0 to 100% (non-condensing)			
Elevation	11483 ft (3500m) with a max. input voltage of 430 V DC			
Certificates and compliance with standards	UL 1741-2010, UL1998 (for functions: AFCI, GFDI and isolation monitoring), IEEE 1547-2003, IEEE 1547.1-2003, ANSI/IEEE C62.41, FCC Part 15 A & B, NEC Article 690, C22. 2 No. 107.1-01 (September 2001), UL1699B Issue 2 -2013, CSA TIL M-07 Issue 1 -2013			

EFFICIENCY	GALVO 1.5-1	GALVO 2.0-1	GALVO 2.5-1	GALVO 3.1-1
Max. efficiency	95.8 %		96.0 %	
CEC efficiency	208 V	94.0 %	94.5 %	95.0 %
	220 V	94.0 %	94.5 %	95.0 %
	240 V	94.5 %	94.5 %	95.5 %

PROTECTION DEVICES	GALVO 1.5-1	GALVO 2.0-1	GALVO 2.5-1	GALVO 3.1-1
Overload behavior	Operating point shift, power limitation			
2014 NEC Ready	Included			
DC Arc Fault Circuit Protection	Internal AFCI Type 1 (Arc Fault Circuit Interrupter); in accordance with UL1699B Issue 2 -2013 and CSA TIL M-07 Issue 1 -2013			
DC operation modes	ungrounded / neg. grounding in accordance with NEC 2014. Positive grounding in accordance with NEC 2011			
DC Ground fault detector / interrupter	Internal GFDI (Ground Fault Detector/Interruptor); in accordance with UL 1741-2010 and NEC 2014 (negative grounding)			
DC disconnect	Included			

INTERFACES	GALVO 1.5-1	GALVO 2.0-1	GALVO 2.5-1	GALVO 3.1-1
Wi-Fi* / Ethernet LAN	Fronius Solar.web / Fronius Solar.web, SunSpec Modbus TCP, JSON			
Digital inputs/outputs	6 digital configurable I/O + 4 digital inputs + 1 relay contact			
USB (A socket)	For USB sticks- updates, logging			
2x RS422 (RJ45 socket)	Fronius Solar Net, interface protocol			
Datalogger and Webserver	Included			
RS485	SunSpec Modbus RTU, SunSpec Modbus TCP and Fronius Solar API (JSON, for actual values) or meter connection (Available Fall 2014)			

/ Perfect Welding / Solar Energy / Perfect Charging

### WE HAVE THREE DIVISIONS AND ONE PASSION: SHIFTING THE LIMITS OF POSSIBILITY.

/ Whether welding technology, photovoltaics or battery charging technology – our goal is clearly defined: to be the innovation leader. With around 3,000 employees worldwide, we shift the limits of what's possible – our more than 850 active patents are testimony to this. While others progress step by step, we innovate in leaps and bounds. Just as we've always done. The responsible use of our resources forms the basis of our corporate policy.

Further information about all Fronius products and our global sales partners and representatives can be found at [www.fronius.com](http://www.fronius.com)



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