

SMART INVERTER

OFF-GRID SNV-GFW SERIES | Wallmount 0.5KVA - 2KVA

ICA Solar GFW series products are on the basis of green energy use and equipment electricity need for remote area, combing the electricity characteristics of household appliances, communication station equipment and computer peripheral equipment. They have the fuction of enery conservation and environment protection. They adopt MCU control techniqute, having various kinds of function such as multi-setting mode, MPPT control, voltage stabilization on line, short-circuit protection, inverter frequency adaptive, output overload, batter charging management, monitoring etc. ICA Solar GFW series products are the ideal power supply delivered with excellent performance, high stability, high reliability and practical applicability.

Features:

Multi-Setting:

- PV priority mode or AC priority mode
- Choose the charging current based on the configured capacity of the battery

High Reliability: Double MCU Digital Control

Isolated and Pure Sine Wave Technology

- Independent MPPT (Maximum Power Point Tracking) control microprocessor system
- Independent inverter microprocessor control system

Frequency Auto Adaptive

Intelligent No-Load Auto Shutdown Technology (Optional)

Intelligent Monitoring (RS232, USB, OR SNMP CARD, Optional)



ICA solar

S M A R T **I N V E R T E R** OFF-GRID SNV-GFW SERIES 0.5KVA - 2 KVA **TECHNICAL SPECIFICATION**

MODEL	GFW524	GFW1024 GFW1048	GFW1548	GFW2048
POWER	500W	1000W	1500W	2000W
BATTERY VOLTAGE	24Vdc	24Vdc / 48Vdc	48Vdc	
WORKING MODE		PV/AC Pr	iority	
PV INPUT				
MAX. INPUT VOLTAGE (VOC)	30V (Standard)/	60V (Standard)/	95V (S	itandard)/
	60V (Optional)	120V (Optional) 180V (Optional)		(Optional)
SUGGESTED VOLTAGE RANGE	15~23Vdc (Standard)/	30~23Vdc (Standard)/	60~75Vdc (Standard)/	
	15~45Vdc (Optional)	15~45Vdc (Optional) 15~45Vdc (Optional) 60~140Vdc (Optional)		dc (Optional)
PV CURRENT	≤40A	≤ 60A	≤60A	≤80A
MAX. CHARGE CURRENT		50A		65A
RECOMMENDED PV CONFIGURATION	700W	1400W	2800W	2800W
CONVERSION EFFICIENCY		98%		
DISPLAY				
PANEL INDICATOR		LCD + LE	D	
		0.150/06/0.242/06	(high and limit)	
AC INPUT RANGE (BYPASS MODE)		0~156VAC / 0~312VAC		A.C.
RATED INPUT VOLTAGE RATED INPUT FREQUENCY	100V / 110V / 115V / 120V / 200V / 220V / 230V / 240 VAC			
INPUT PF (AC/DC)	50HZ / 60HZ ± 5 HZ (AUTO-SENSE) ≥98%			
MAX. CHARGE CURRENT	1~20A Settable	20A Settable		30A Settable
EFFICIENY (MAINS MODE)	T ZOA Settable	≥96%		
	110% 255s transfer to bypass model; 120% 60s transfer to bypass model; 150% 10s transfer to bypass model;			
OVERI OAD	110% 255s transfer to by	pass model: 120% 60s transfer to	bypass model: 150%	10s transfer to bypass mod
OVERLOAD SHORT CIRCUIT PROTECTION	110% 255s transfer to by	pass model; 120% 60s transfer to Input Fu		10s transfer to bypass moo
SHORT CIRCUIT PROTECTION	110% 255s transfer to by	·		10s transfer to bypass moo
SHORT CIRCUIT PROTECTION		Input Fu	se	
SHORT CIRCUIT PROTECTION INVERTER MODE OUTPUT VOLTAGE		Input Fu 110V / 115V / 120V / 200V / 220'	se / / 230V / 240 VAC ±2%	
SHORT CIRCUIT PROTECTION INVERTER MODE OUTPUT VOLTAGE OUTPUT FREQUENCY		Input Fu 110V / 115V / 120V / 200V / 220 50 / 60 Hz ±1% freque	se / / 230V / 240 VAC ±2% ency load more	
SHORT CIRCUIT PROTECTION INVERTER MODE OUTPUT VOLTAGE OUTPUT FREQUENCY WAVE FORM DISTORTION		Input Fu 110V / 115V / 120V / 200V / 220 50 / 60 Hz ±1% freque Linear Load	<pre>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>></pre>	
SHORT CIRCUIT PROTECTION INVERTER MODE OUTPUT VOLTAGE OUTPUT FREQUENCY WAVE FORM DISTORTION PV-AC TRANSFER TIME	100V /	Input Fu 110V / 115V / 120V / 200V / 220 50 / 60 Hz ±1% freque Linear Load 5 ms typical value	se / / 230V / 240 VAC ±2% ency load more ≤5% ; max 8 ms	5 Settable
SHORT CIRCUIT PROTECTION INVERTER MODE OUTPUT VOLTAGE OUTPUT FREQUENCY WAVE FORM DISTORTION PV-AC TRANSFER TIME MAX. EFFICIENCY	100V / ≥78%	Input Fu 110V / 115V / 120V / 200V / 220 50 / 60 Hz ±1% freque Linear Load 5 ms typical value ≥82%	se / / 230V / 240 VAC ±2% ency load more ≤5% ; max 8 ms ≥85%	o Settable ≥85%
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SHORT CIRCUIT PROTECTION INVERTER MODE OUTPUT VOLTAGE OUTPUT FREQUENCY WAVE FORM DISTORTION PV-AC TRANSFER TIME MAX. EFFICIENCY INVERTER OVERLOAD NO-LOAD OFF SHORT CIRCUIT PROTECTION	100V / ≥78%	Input Fu 110V / 115V / 120V / 200V / 220 50 / 60 Hz ±1% freque Linear Load 5 ms typical value ≥82% pass model; 120% 60s transfer t	<pre>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>></pre>	o Settable ≥85%
SHORT CIRCUIT PROTECTION INVERTER MODE OUTPUT VOLTAGE OUTPUT FREQUENCY WAVE FORM DISTORTION PV-AC TRANSFER TIME MAX. EFFICIENCY INVERTER OVERLOAD NO-LOAD OFF SHORT CIRCUIT PROTECTION BATTERIES	100V / ≥78%	Input Fu 110V / 115V / 120V / 200V / 220 50 / 60 Hz ±1% freque Linear Load 5 ms typical value ≥82% pass model; 120% 60s transfer t Settable (<3% load) au System automatica	<pre>se // 230V / 240 VAC ±2% ency load more <5% ; max 8 ms ≥85% o bypass model; 150% ccess in ≤2 min lly shut down</pre>	o Settable ≥85%
SHORT CIRCUIT PROTECTION INVERTER MODE OUTPUT VOLTAGE OUTPUT FREQUENCY WAVE FORM DISTORTION PV-AC TRANSFER TIME MAX. EFFICIENCY INVERTER OVERLOAD NO-LOAD OFF SHORT CIRCUIT PROTECTION BATTERIES DOD	100V / ≥78%	Input Fu	<pre>se // 230V / 240 VAC ±2% ency load more <55% ; max 8 ms <85% o bypass model; 150% ccess in ≤2 min lly shut down lt 1.8V / cell</pre>	o Settable ≥85%
SHORT CIRCUIT PROTECTION INVERTER MODE OUTPUT VOLTAGE OUTPUT FREQUENCY WAVE FORM DISTORTION PV-AC TRANSFER TIME MAX. EFFICIENCY INVERTER OVERLOAD NO-LOAD OFF SHORT CIRCUIT PROTECTION BATTERIES DOD EOD	100V / ≥78%	Input Fu	Se / / 230V / 240 VAC ±2% ency load more ≤5% ; max 8 ms ≥85% o bypass model; 150% ccess in ≤2 min Ily shut down It 1.8V / cell DV, default 1.75V / cell	o Settable ≥85%
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SHORT CIRCUIT PROTECTION INVERTER MODE OUTPUT VOLTAGE OUTPUT FREQUENCY WAVE FORM DISTORTION PV-AC TRANSFER TIME MAX. EFFICIENCY INVERTER OVERLOAD NO-LOAD OFF SHORT CIRCUIT PROTECTION BATTERIES DOD EOD EQUALIZING CHARGE VOLTAGE FLOATING CHARGE VOLTAGE RESTRORATION POINT OF OVERVOLTAGE	100V / ≥78%	Input Fu	se 1/230V/240 VAC ±2% ency load more $\leq 5\%$; max 8 ms $\geq 85\%$ o bypass model; 150% ccess in ≤ 2 min Ily shut down It 1.8V / cell V, default 1.75V / cell V, default 2.35V / cell	o Settable ≥85%
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SHORT CIRCUIT PROTECTION INVERTER MODE OUTPUT VOLTAGE OUTPUT FREQUENCY WAVE FORM DISTORTION PV-AC TRANSFER TIME MAX. EFFICIENCY INVERTER OVERLOAD NO-LOAD OFF SHORT CIRCUIT PROTECTION BATTERIES DOD EOD EQUALIZING CHARGE VOLTAGE FLOATING CHARGE VOLTAGE RESTRORATION POINT OF OVERVOLTAGE OTHERS SURGE PROTECTION	100V / ≥78% 110% 255s transfer to by	Input Fu	se $1/230V/240 VAC \pm 2\%$ ency load more $\leq 5\%$; max 8 ms $\geq 85\%$ o bypass model; 150% ccess in ≤ 2 min Ily shut down It 1.8V / cell V, default 1.75V / cell V, default 2.35V / cell V, default 2.27V / cell al	6 Settable ≥85% 1s transfer to bypass mod 62.0V
SHORT CIRCUIT PROTECTION INVERTER MODE OUTPUT VOLTAGE OUTPUT FREQUENCY WAVE FORM DISTORTION PV-AC TRANSFER TIME MAX. EFFICIENCY INVERTER OVERLOAD NO-LOAD OFF SHORT CIRCUIT PROTECTION BATTERIES DOD EOD EQUALIZING CHARGE VOLTAGE FLOATING CHARGE VOLTAGE RESTRORATION POINT OF OVERVOLTAGE OTHERS SURGE PROTECTION EMC	100V / ≥78% 110% 255s transfer to by	Input Fu 110V / 115V / 120V / 200V / 220 50 / 60 Hz ±1% freque Linear Load 5 ms typical value ≥82% pass model; 120% 60s transfer t Settable (<3% load) a System automatica 1.75~2.2V, defau VRLA AGM Battery: 1.60~2.0 VRLA AGM Battery: 2.3~2.5 VRLA AGM Battery: 2.2~2.3 31.0V Cptiona EN62040 - 2:2006:EN61000-3-2	se 1/230V/240 VAC ±2% ency load more $\leq 5\%$; max 8 ms $\geq 85\%$ o bypass model; 150% ccess in ≤ 2 min Ily shut down It 1.8V / cell V, default 1.75V / cell V, default 2.35V / cell V, default 2.27V / cell al	6 Settable ≥85% 1s transfer to bypass mod 62.0V
SHORT CIRCUIT PROTECTION INVERTER MODE OUTPUT VOLTAGE OUTPUT FREQUENCY WAVE FORM DISTORTION PV-AC TRANSFER TIME MAX. EFFICIENCY INVERTER OVERLOAD NO-LOAD OFF SHORT CIRCUIT PROTECTION BATTERIES DOD EQUALIZING CHARGE VOLTAGE FLOATING CHARGE VOLTAGE RESTRORATION POINT OF OVERVOLTAGE RESTRORATION POINT OF OVERVOLTAGE SURGE PROTECTION EMC IP CLASS	100V / ≥78% 110% 255s transfer to by	Input Fu 110V / 115V / 120V / 200V / 2200 50 / 60 Hz ±1% freque Linear Load 5 ms typical value ≥82% rpass model; 120% 60s transfer t Settable (<3% load) au	se $1/230V/240 VAC \pm 2\%$ ency load more $\leq 5\%$; max 8 ms $\geq 85\%$ o bypass model; 150% ccess in ≤ 2 min Ily shut down It 1.8V / cell IV, default 1.75V / cell V, default 2.35V / cell V, default 2.27V / cell al :2006:EN61000-3-3:20	6 Settable ≥85% 1s transfer to bypass mod 62.0V
SHORT CIRCUIT PROTECTION INVERTER MODE OUTPUT VOLTAGE OUTPUT FREQUENCY WAVE FORM DISTORTION PV-AC TRANSFER TIME MAX. EFFICIENCY INVERTER OVERLOAD NO-LOAD OFF SHORT CIRCUIT PROTECTION BATTERIES DOD EQUALIZING CHARGE VOLTAGE FLOATING CHARGE VOLTAGE RESTRORATION POINT OF OVERVOLTAGE GTHERS SURGE PROTECTION EMC IP CLASS OPERATING TEMPERATURE	100V / ≥78% 110% 255s transfer to by	Input Fu 110V / 115V / 120V / 200V / 220 50 / 60 Hz ±1% freque Linear Load 5 ms typical value ≥82% pass model; 120% 60s transfer t Settable (<3% load) a System automatica URLA AGM Battery: 2.3–2.5 VRLA AGM Battery: 2.3–2.5 VRLA AGM Battery: 2.2–2.3 31.0V Optiona EN62040 - 2:2006:EN61000-3-2 IP21 -10°C-45	Se // 230V / 240 VAC ±2% ency load more ≤5% ; max 8 ms ≥85% o bypass model; 150% ccess in ≤2 min Ily shut down It 1.8V / cell IV, default 1.75V / cell V, default 2.35V / cell V, default 2.27V / cell al :2006:EN61000-3-3:20 S ^o C	5 Settable ≥85% 1s transfer to bypass mod 62.0V
SHORT CIRCUIT PROTECTION INVERTER MODE OUTPUT VOLTAGE OUTPUT FREQUENCY WAVE FORM DISTORTION PV-AC TRANSFER TIME MAX. EFFICIENCY INVERTER OVERLOAD NO-LOAD OFF SHORT CIRCUIT PROTECTION BATTERIES DOD EQUALIZING CHARGE VOLTAGE FLOATING CHARGE VOLTAGE RESTRORATION POINT OF OVERVOLTAGE OTHERS SURGE PROTECTION EMC IP CLASS OPERATING TEMPERATURE RELATIVE HUMIDITY	100V / ≥78% 110% 255s transfer to by	Input Fu	Se // 230V / 240 VAC ±2% ency load more ≤5% ; max 8 ms ≥85% o bypass model; 150% ccess in ≤2 min ly shut down lt 1.8V / cell V, default 1.75V / cell V, default 2.35V / cell V, default 2.35V / cell al :2006:EN61000-3-3:20 G°C	5 Settable ≥85% 1s transfer to bypass mod 62.0V
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Specifications subject to change without prior notice

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