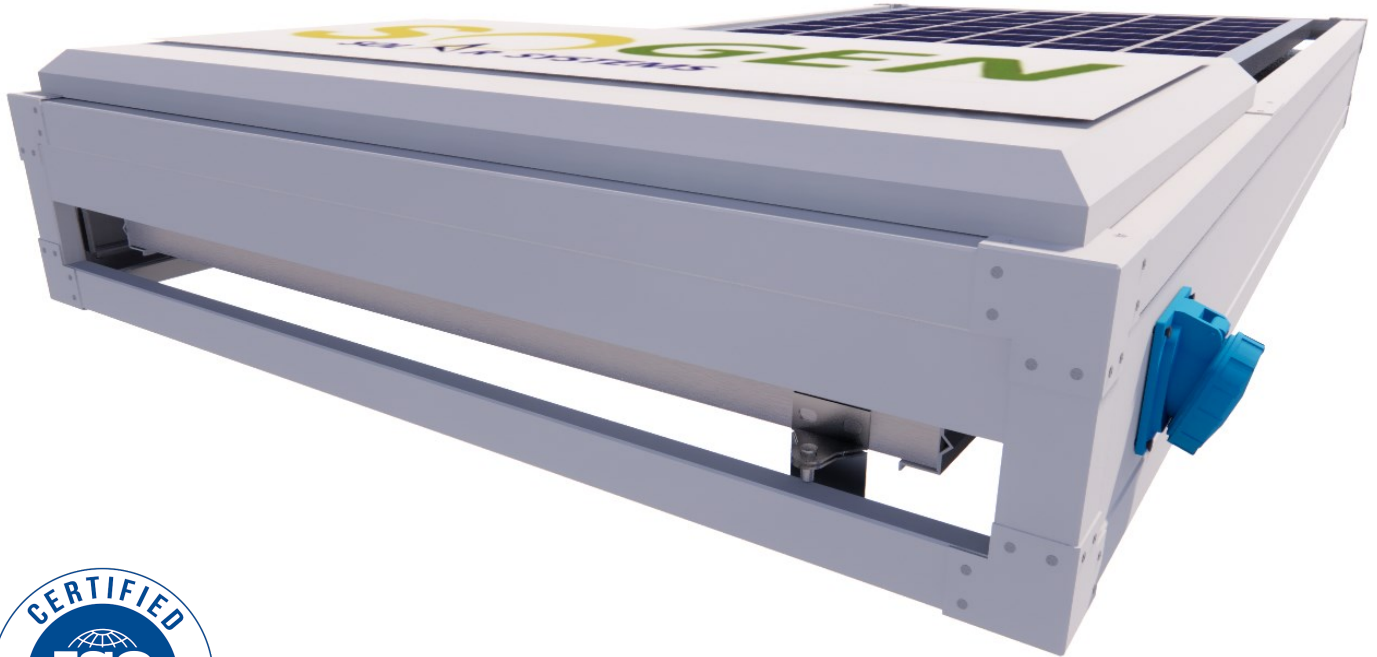


MODULAR STRUCTURE



SGN-MF1000AD
(1000Wp-1,2kWe-220Ah)



MODULAR STRUCTURE

Technical Specifications

1 PHASE AC INLET- Standard

2(1X16A 1P)	Plug-1 Network (Optional)
2(1X16A 1P)	Plug-2 Generator (Optional)
230/240VAC 6kA 1P+N+PE	Surge Protection Switch
2(1X16A 1P)	Moulded Case Circuit Breaker -bypass
2(1X16A 1P)	Moulded Case Circuit Breaker -1 Network (Optional)
2(1X16A 1P)	Moulded Case Circuit Breaker -2 Generator (Optional)
2(1X16A 1P)	Automatic Transfer Power Contactor -1 Network (Optional)
2(1X16A 1P)	Automatic Transfer Power Contactor -1 Generator (Optional)

1 PHASE AC OUTLET- Standard

2(1X16A 1P)	Plug-1 bypass
2(1X16A 1P)	Plug-1 Current Supply
2(1X16A 1P)	Plug-1 Current Supply (Optional)
230/240 6kA 1P+N+PE	Surge Protection Switch
2(1X16A 1P)	Moulded Case Circuit Breaker -bypass
2(1X16A 1P)	Moulded Case Circuit Breaker -1 Current Supply (Optional)
2(1X16A 1P)	Moulded Case Circuit Breaker -2 Current Supply (Optional)

1 PHASE SOLAR INVERTER (230/240 VAC 1P 50/60Hz - 24VDC/48VDC) -(Available)

Continuous Working (Load Condition)	1,2kWe
Instant Peak Resistance	2,2kWe
2(1X16A +/- 1P)	AC Moulded Case Circuit Breaker
Amps @ 230VAC	16A
	Intranet Remote Monitoring Module (Optional)
2(1X50A +/- 1P)	Battery Charge Controller (Available-including)

SOLAR TYPE BATTERY - (Available)

Amp @ 12VDC Solar gel	Pieces 110Ah=24Vdc 220Ah/ C10
4(1X50A +/- 2x2P)	DC Moulded Case Circuit Breaker

PHOTOVOLTAIC SOLAR PANEL (320/335Wp) - (Available)

Total input (kiloWatt)	1kWp PP/MP – with MC4 Connection
120/150VDC 6kA +/- PE	Surge Protection Switch
2(1X16A +/- 1P)	DC Moulded Case Circuit Breaker
4mm2 0.6/1Kv LSFOH PV-1	Solar Power Cable

TRANSPORTATION DIMENSION

INSTALLATION DIMENSION- (Optional)

Height	200mm
Length T.Bady	2.200mm
Width T.Bady	1.100mm
Weight T.Bady	110kg Battery Excluded



MODULAR STRUCTURE



Product capacity:

3 LED indoor & outdoor lighting fixtures

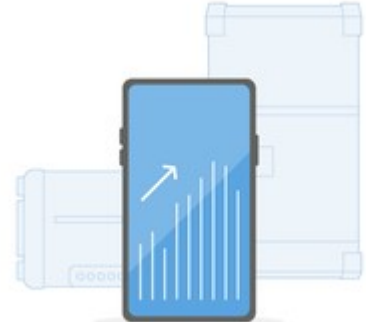
1 Piece 300W refrigerator

1 x 300W electronic device

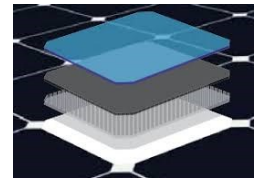
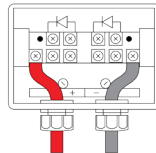
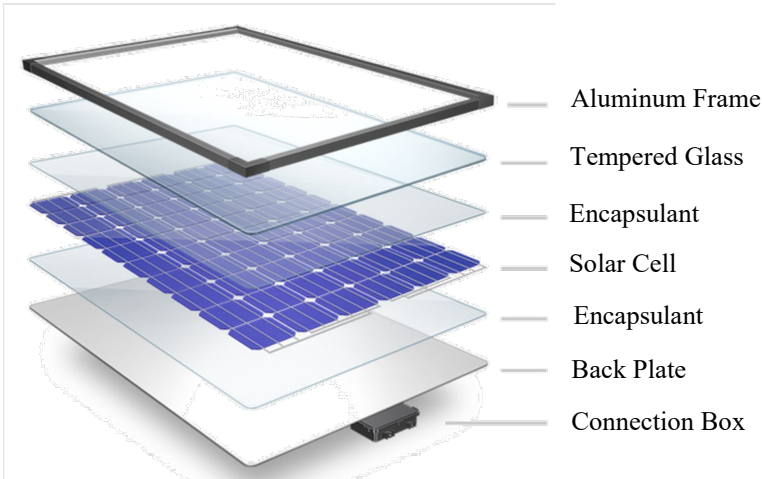
with socket outlet in feeding capacity



MultiPlus
500 / 800 / 1200 / 1600 VA



MODULAR STRUCTURE



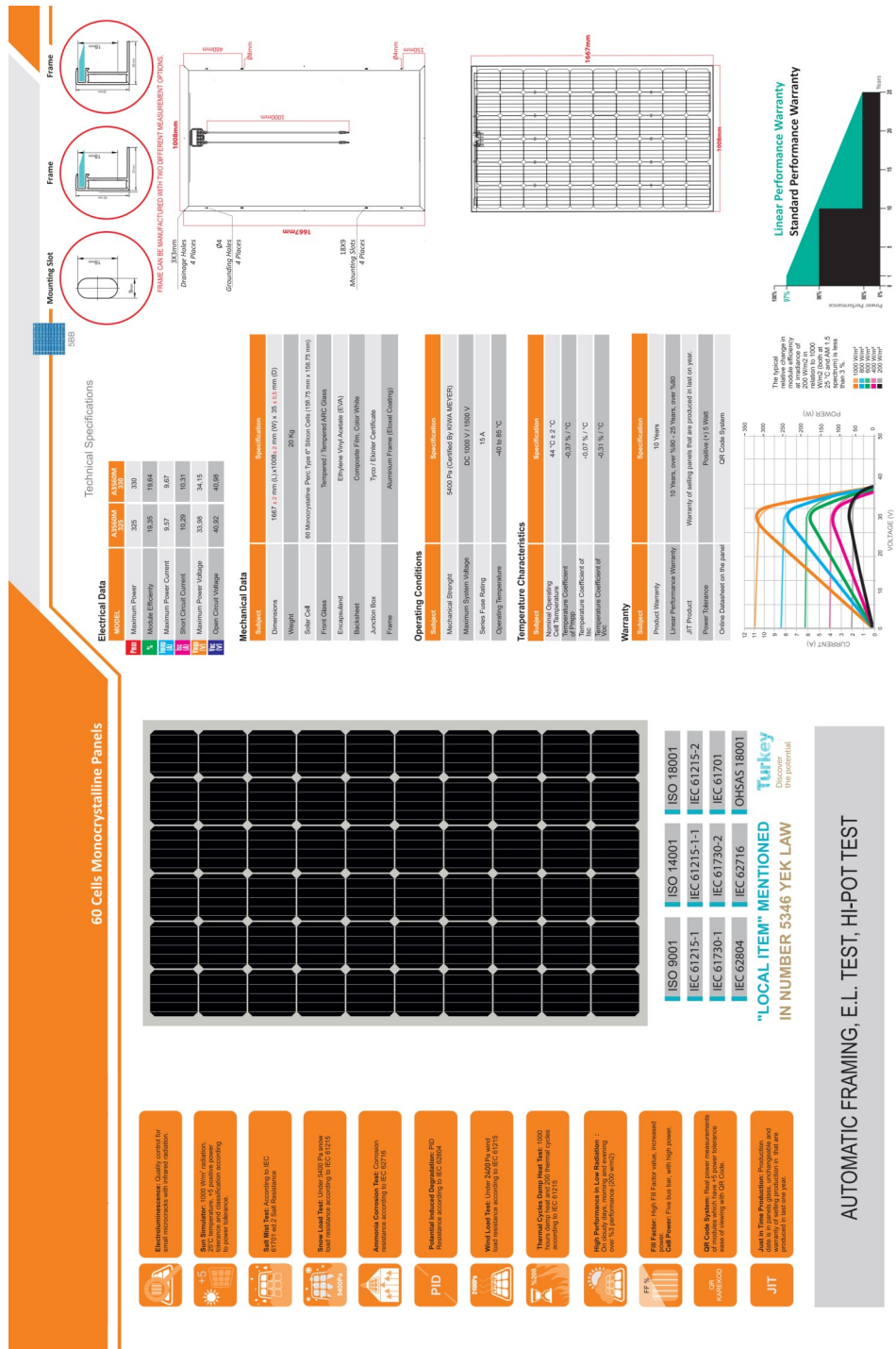
Item 1: Production detail of photovoltaic solar panel

MODULAR STRUCTURE



MODULAR STRUCTURE

Product details



Item 2: Photovoltaic solar panel detail used for SGN-MF1000/.../7000AD



MODULAR STRUCTURE

Product details

[illegible]

Item 3: Photovoltaic solar panel detail used for SGN-MF1250/.../8000PLUSAD



MODULAR STRUCTURE

Product details

SB BATTERY

VRLA GEL RECHARGEABLE BATTERY FOR SOLAR ENERGY
SPG110-12 R 12V110Ah

FOR HIGH RATE USE



Specification

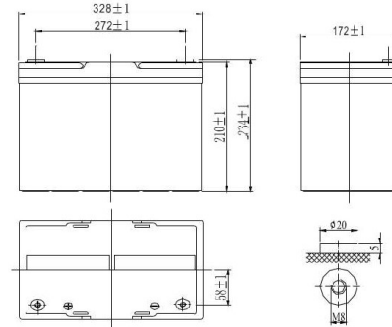
Nominal Voltage	12V
Number of cell	6
Design Life	10 years
Nominal Capacity 77°F(25°C)	
20 hour rate(5.5A, 10.5V)	110Ah
10 hour rate(10.5A, 10.5V)	105Ah
5 hour rate(19.0A, 10.5V)	95.0Ah
1 hour rate(72.6A, 9.6V)	72.6Ah
Internal Resistance	
Fully Charged battery 77°F(25°C)	4.3mOhms
Self-Discharge	
3% of capacity declined per month at 20°C(average)	
Operating Temperature Range	
Discharge	-30~60°C
Charge	-20~60°C
Storage	-30~60°C
Max. Discharge Current 77°F(25°C)	950A(5s)
Short Circuit Current	1875A
Charge Methods: Constant Voltage Charge 77°F(25°C)	
Cycle use	14.4-14.7V
Maximum charging current	30A
Temperature compensation	-30mV/°C
Standby use	13.6-13.8V
Temperature compensation	-20mV/°C

General Features

- Silica gel technology for longer cycle life and better performance at cold ambient temperatures.
- Special sheet separator and colloidal or foamed silica.
- Deep discharge cycle increased by 50% as compared with the AGM battery.
- High reliability and quality.
- Excellent recovery from deep discharge.
- Living up prevailing standards.

Dimensions and Weight

Length(mm / inch)	328/12.91
Width(mm / inch)	172/6.77
Height(mm / inch)	234/9.22
Total Height(mm / inch)	239/9.42
Approx. Weight(Kg / lbs)	37.0 / 81.4
Standard Terminal	I

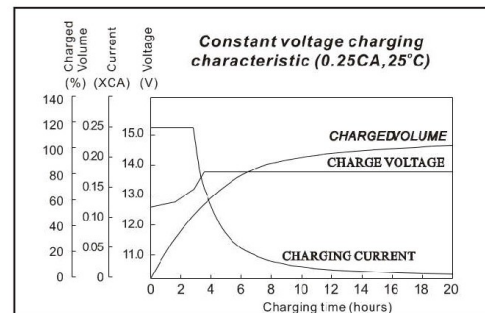
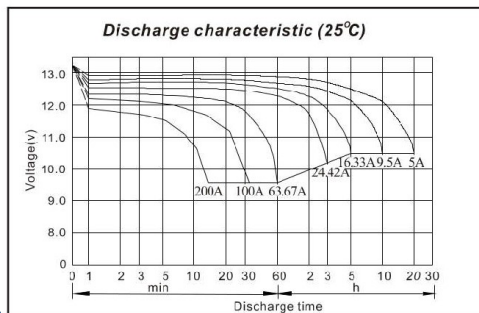


Discharge Constant Current (Amperes at 77°F25°C)

End Point Volts/Cell	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.60V	350	240	175	105	72.6	30.2	19.8	11.0	5.80
1.65V	315	219	170	102	72.5	29.9	19.4	10.8	5.70
1.70V	299	211	164	100	72.3	29.8	19.2	10.7	5.65
1.75V	266	195	155	98.0	71.5	29.7	19.0	10.5	5.50
1.80V	240	181	148	95.0	70.6	29.5	18.6	10.3	5.40

Discharge Constant Power (Watts at 77°F25°C)

End Point Volts/Cell	5min	10min	15min	30min	1h	3h	5h	10h
1.60V	577	398	310	198	130	52.4	36.5	21.2
1.65V	547	393	307	194	125	52.3	36.4	20.9
1.70V	511	383	302	189	122	52.2	36.3	20.7
1.75V	476	358	284	184	121	51.5	36.1	20.4
1.80V	427	333	267	179	119	50.9	35.5	20.0



Item 4: Gel Battery detail used for SGN-MF1000/.../8000AD



MODULAR STRUCTURE

Product details

MultiPlus Inverter/Charger 500VA - 2000VA

12 / 24 / 48V

www.victronenergy.com



MultiPlus
500 / 800 / 1200 / 1600 VA



MultiPlus 2000 VA
(bottom cover removed)



Multifunctional, with intelligent power management

The MultiPlus is a powerful true sine wave inverter, a sophisticated battery charger that features adaptive charge technology, and a high-speed AC transfer switch in a single compact enclosure. Next to these primary functions, the MultiPlus has several advanced features, as outlined below.

Parallel operation and three phase capability

Up to six Multis can operate in parallel to achieve higher power output. In addition to parallel connection, three units can be configured for three-phase output.

PowerControl - Dealing with limited generator, shore side or grid power

With the Multi Control Panel a maximum generator or shore current can be set. The MultiPlus will then take account of other AC loads and use whatever is extra for charging, thus preventing the generator or shore supply from being overloaded.

PowerAssist - Boosting the capacity of shore or generator power

This feature takes the principle of PowerControl to a further dimension. It allows the MultiPlus to supplement the capacity of the alternative source. Where peak power is so often required only for a limited period, the MultiPlus will make sure that insufficient shore or generator power is immediately compensated for by power from the battery. When the load reduces, the spare power is used to recharge the battery.

Four stage adaptive charger and dual bank battery charging

The main output provides a powerful charge to the battery system by means of advanced 'adaptive charge' software. The software fine-tunes the three-stage automatic process to suit the condition of the battery, and adds a fourth stage for long periods of float charging. The adaptive charge process is described in more detail on the Phoenix Charger datasheet and on our website, under Technical Information. In addition to this, the MultiPlus will charge a second battery using an independent trickle charge output intended for a main engine or generator starter battery.

High start-up power

Needed to start high inrush loads such as power converters for LED lamps, halogen lamps or electric tools.

Search Mode

When Search Mode is 'on', the power consumption of the inverter in no-load operation is decreased by approx. 70%. In this mode the Multi, when operating in inverter mode, is switched off in case of no load or very low load, and switches on every two seconds for a short period. If the output current exceeds a set level, the inverter will continue to operate. If not, the inverter will shut down again.

Programmable relay

By default, the programmable relay is set as an alarm relay, i.e. the relay will de-energise in the event of an alarm or a pre-alarm (inverter almost too hot, ripple on the input almost too high, battery voltage almost too low).

Remote on / off / charger on

Three pole connector.

On-site system configuring, monitoring and control

After installation, the MultiPlus is ready to go.

Some settings can be changed with DIP switches.

500/800/1200VA models: remote switch / battery charge voltage / inverter frequency / search mode.

1600/2000VA models: battery charge voltage / search mode.

For more settings use VE-Config or the VE.Bus Smart dongle.

Remote configuring and monitoring

Install a Cerbo GX or other GX product to connect to the internet.

Operational data can be stored and displayed on our VRM (Victron Remote Management) website, free of charge.

When connected to the internet, systems can be accessed remotely, and settings can be changed.



GX Touch 50 and Cerbo GX

Provides intuitive system control and monitoring.

Besides system monitoring and control the Cerbo GX enables access to our free remote monitoring website: the VRM Online Portal.



VRM Portal

Our free remote monitoring website (VRM) will display all your system data in a comprehensive graphical format. System settings can be changed remotely via the portal. Alarms can be received by e-mail.



Item 5: Solar Inverter detail used for SGN-MF1000/.../8000AD



MODULAR STRUCTURE

Certificates

YERLİ MALİ BELGESİ

Belgenin Veriliş Tarihi : 07.12.2021 Belgenin Geçerlilik Tarihi : 07.12.2022 Belge No : 2021106287809
Üretici Ünvanı: AKIŞ SİSTEM ELEKTRİK ELEKTRONİK PANO BİLGİ İŞLEM SANAYİ İTHALAT VE İHRACAT LIMITED ŞİRKETİ
İşyeri Adresi: ÇEKİRDEKSİZ MEVKİİ POLATLI OSB 202.CAD. NO:24 POLATLI/ANKARA
Üreticinin Vergi Kimlik No: 0280055194 TC Kimlik No: MERSİS No : 0028005519400015
Telefon: 3123955901 E-posta: akissistem@akissistem.com
Faks: 3123955215 Web Adresi: www.akissistem.com
Ticaret Sicil No: 4778 Üye Sicil No: 4662
Ürün Adı: GÜNEŞ ENERJİSİ İLE ÇALIŞAN JENERATÖR
Ürün Kodu (PRODCOM/GTİP): 27.12.10.30.00 /
Teknik Özellikleri(Marka Adı, Modeli, Seri Numarası, Cinsi):
Kapasite Raporunun Tarih :08.04.2021 No : 13848 Geçerlilik Süresi :08.04.2023
Sanayi Sicil Belgesinin Tarih : 26.09.2013 No : 543980
Yerli Katkı Oranı : % 94
Ürünün Teknolojik Düzeyi (düşük/orta-düşük/orta-yüksek/yüksek)(Eurostat) : orta-yüksek

CERTIFICATE
AKIŞ SİSTEM
AKIŞ SİSTEM ELEKTRİK ELEKTRONİK PANO BİLGİ İŞLEM
SANAYİ İTHALAT VE İHRACAT LIMITED ŞİRKETİ
ÇEKİRDEKSİZ OSB MAHALLESİ 202. CADDE NO: 24 POLATLI ANKARA
ISO 9001:2015
PRODUCTION AND SALES OF DEVICES SPECIFIC TO THE SWITCHING AND PROTECTION OF ELECTRICAL CIRCUITS AND CONTROL AND DISTRIBUTION OF ELECTRICITY (LOW AND MEDIUM VOLTAGE SWITCHGEARS, PANELS OF PREFABRICATED TRANSFORMER DISTRIBUTION CENTERS, METERING BOARDS, SCADA AUTOMATION PANELS, ELECTRICAL SWITCHGEAR MATERIALS), PROJECT DESIGN AND INSTALLATION OF SOLAR POWER PLANTS, DESIGN AND PRODUCTION OF PORTABLE AND FOLDABLE SOLAR POWER SYSTEMS
This certificate is valid for 3 years on condition that surveillance audits are carried out before the period of each year in accordance with the accreditation rules. With this certificate, the holder of the certificate has been audited on the address mentioned above by TRB Certification Body in accordance with the condition and requirements of the license contract and it has been registered that the company satisfies the conditions of the standard. This certificate is valid as long as the certificate holder follows TRB certification rules and the certificate is seen as valid on www.trb.com.de web site certificate inquiry section.
Certification Number : DE-QC-1741
Date of Issue : 09.10.2020
Expiry Date : 08.10.2022
Certification Period : 3 Years (2. Year)
Printing Number : 01
General Manager
Plannenstedt 17, D-88077 Markdorf-Deutschland
Telefon: 0049-7544-7440623 Fax: 0049-7544-7440629 web: www.trb.com.de E-mail: info@trb.com.de
IAF
DAKKS
Deutsche Akkreditierungsstelle
D-ZM-19486-01-00

MARKA TESCİL BELGESİ
Marka No : 2015 63941 - Ticaret
SOGEN
SOLAR SYSTEMS
Marka Sahibi : AKIŞ SİSTEM ELEKTRİK ELEKTRONİK PANO BİLGİ İŞLEM SANAYİ İTHALAT VE İHRACAT LIMITED ŞİRKETİ

TURK PATENT
TASARIM TESCİL BELGESİ
No: 2017 04826
Tasarım Sahibi
AKIŞ SİSTEM ELEKTRİK ELEKTRONİK PANO BİLGİ İŞLEM
SANAYİ İTHALAT VE İHRACAT LIMITED ŞİRKETİ
Bu tasarımlar, 6769 sayılı Sınai Mülkiyet Kanunu kapsamında 20/07/2017 tarihinden itibaren 5 yıl süreyle korunmak üzere tescil edilmiş ve bu belge 05/01/2018 tarihinde düzenlenmiştir.
Prof. Dr. Hahip ASAN
Başkan

