

Three Phase String Inverter

SUN-70/75/80/90/100/110K-G03



Max. 6 MPP trackers, Max. efficiency up to 98.8%



Zero export application, VSG application



String intelligent monitoring (optional)



Wide output voltage range



Anti-PID function (Optional)



Type II DC/AC SPD

Deye

Stock Code: 605117.SH

Model	SUN-70K-G03	SUN-75K-G03	SUN-80K-G03	SUN-90K-G03	SUN-100K-G03	SUN-110K-G03
PV String Input Data						
Max. PV Input Power (kW)	91	97.5	104	135	150	150
Max. PV Input Voltage (V)	1000					
Start-up Voltage (V)	250					
MPPT Voltage Range (V)	200-850					
Rated PV Input Voltage (V)	600					
Max. Operating PV Input Current (A)	40+40+40+40			40+40+40+40+40+40		
Max. Input Short Circuit Current (A)	60+60+60+60			60+60+60+60+60+60		
No. of MPP Trackers/ No. of Strings per MPP Tracker	4/4+4+4+4			6/4+4+4+4+4+4		
AC Output Side						
Rated AC Output Active Power (kW)	70	75	80	90	100	110
Max. AC Output Apparent Power (kVA)	77	82.5	88	99	110	121
Rated AC Output Current (A)	106.1/101.5	113.6/108.7	121.2/115.9	136.4/130.4	151.5/144.9	166.7/159.4
Max. AC Output Current (A)	116.7/111.6	125/119.6	133.3/127.5	150/143.5	166.7/159.4	183.3/175.4
Rated Output Voltage/Range (V)	220/380V, 230/400V 0.85Un-1.1Un					
Grid Connection Form	3L/N/PE					
Rated Output Grid Frequency/Range(Hz)	50/45-55, 60/55-65					
Power Factor Adjustment Range	0.8 leading to 0.8 lagging					
Total Current Harmonic Distortion THDi	<3%					
DC Injection Current	<0.5%In					
Efficiency						
Max. Efficiency	98.7%			98.8%		
Euro Efficiency	98.1%			98.2%		
MPPT Efficiency	>99%					
Equipment Protection						
DC Polarity Reverse Connection Protection	Yes					
AC Output Overcurrent Protection	Yes					
AC Output Overvoltage Protection	Yes					
AC Output Short Circuit Protection	Yes					
Thermal Protection	Yes					
DC Terminal Insulation Impedance Monitoring	Yes					
DC Component Monitoring	Yes					
Ground Fault Current Monitoring	Yes					
Power Network Monitoring	Yes					
Island Protection Monitoring	Yes					
Earth Fault Detection	Yes					
Overvoltage Load Drop Protection	Yes					
Residual Current (RCD) Detection	Yes					
Surge Protection Level	TYPE II(DC), TYPE II(AC)					
Interface						
Communication Interface	RS485/RS232					
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)					
General Data						
Operating Temperature Range (°C)	-25 to +65°C, >45°C Derating					
Permissible Ambient Humidity	0-100%					
Permissible Altitude (m)	4000m					
Noise (dB)	≤55					
Ingress Protection(IP) Rating	IP 65					
Inverter Topology	Non-Isolated					
Over Voltage Category	OVC II(DC), OVC III(AC)					
Cabinet Size (WxHxD mm)	824×516×312.7 (Excluding Connectors and Brackets)					
Weight (kg)	81					
Warranty	5 Years					
Type of Cooling	Intelligent Air Cooling					
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105					
Safety EMC/Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2					

EU Declaration of Conformity

Product: **Grid-connected PV Inverter**

Models: SUN-70K-G03;SUN-75K-G03;SUN-80K-G03;SUN-90K-G03;SUN-100K-G03;SUN-110K-G03;

SUN-70K-G03P3-EU-BM4;SUN-75K-G03P3-EU-BM4;SUN-80K-G03P3-EU-BM4;

SUN-90K-G03P3-EU-BM4;SUN-100K-G03P3-EU-BM6;SUN-110K-G03P3-EU-BM6;

Name and address of the manufacturer: Ningbo Deye Inverter Technology Co., Ltd.

No. 26 South YongJiang Road, Daqi, Beilun, NingBo, China

This declaration of conformity is issued under the sole responsibility of the manufacturer. Also this product is under manufacturer's warranty.

This declaration of conformity is not valid any longer: if the product is modified, supplemented or changed in any other way, as well as in case the product is used or installed improperly.

The object of the declaration described above is in conformity with the relevant Union harmonization legislation: The Low Voltage Directive (LVD) 2014/35/EU;the Electromagnetic Compatibility (EMC) Directive 2014/30/EU;the restriction of the use of certain hazardous substances (RoHS) Directive 2011/65/EU.

References to the relevant harmonized standards used or references to the other technical specifications in relation to which conformity is declared:

LVD:	
EN 62109-1:2010	●
EN 62109-2:2011	●
EMC:	
EN IEC 61000-6-2:2019	●
EN IEC 61000-6-4:2019	●
EN IEC 61000-3-11:2019	●
EN 61000-3-12:2011	●
EN 61000-3-3:2013/A2:2021/AC:2022-01	●
EN IEC 61000-3-2:2019+A1:2021	●
EN 62920:2017/A1:2021	●

Nom et Titre / Name and Title:

Bard Dai

Senior Standard Certification Engineer

NINGBO DEYE INVERTER TECHNOLOGY CO.,LTD.

Au nom de / On behalf of:

Date / Date (yyyy-mm-dd):

Ningbo Deye Inverter Technology Co., Ltd.

2025-4-14

A / Place:

Ningbo, China

Zertifikat *Certificate*

Zertifikatsnummer Certificate No.:

R 50628718 0001

Berichtsnummer Report No.:

CN24YTZI 001

Genehmigungsinhaber License Holder:

NingBo Deye Inverter Technology
Co., Ltd.
No. 26 South YongJiang Road, Daqi,
Beilun NingBo
315800 Zhejiang
P.R. China

Fertigungsstätte Manufacturing Site:

NingBo Deye Inverter Technology
Co., Ltd.
No. 26 South YongJiang Road, Daqi,
Beilun NingBo
315800 Zhejiang
P.R. China

Prüfzeichen Test Mark:

Geprüft nach Tested according to:

IEC 62109-1:2010
IEC 62109-2:2011
EN 62109-1:2010
EN 62109-2:2011

Geräteidentifikation
Product Identification
Produkt:

PV-Inverter

Product:

(Grid-connected PV Inverter)

Modell:

Modelle sind auf nächste(r) Seite(n) gelistet

Type:
Type designation(s) are listed on the next page(s)
Technische Daten:

Refer to the next page(s)

Technical Data:

ANLAGE (Appendix): 1.0

Gültig ab:

2024-05-06

Valid from:
Zertifizierungsstelle:
Certification body:
Ausstellungsdatum:

2024-05-06

Date of issue:

Dean Cao



Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Konformität des Produktes mit den oben genannten Standards und Prüfgrundlagen. Zusätzliche Anforderungen in Ländern, in denen das Produkt in Verkehr gebracht werden soll, müssen zusätzlich betrachtet werden. Die Herstellung des zertifizierten Produktes wird überwacht.
This certificate is based on our Testing and Certification Regulation and states the conformity of the product with the standards and testing requirements as indicated above. Any additional requirements in countries where the product is going to be marketed have to be considered additionally. The manufacturing of the certified product is subject to surveillance.

TÜV Rheinland LGA Products GmbH, Tillystraße 2, 90431 Nürnberg
<http://www.tuv.com/safety> E-mail: markcheck@tuv.com

Fax: +49 221 806-3935

www.tuv.com
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Precisely Right.

Zertifikat *Certificate*

Zertifikatsnummer *Certificate No.:*

R 50628718 0001

Berichtsnummer *Report No.:*

CN24Y TZI 001

Produkt *Product:*

 PV-Inverter
 (Grid-connected PV Inverter)

Modell *Type:*
Bezeichnung *Designation:*

For models

- : 1) SUN-70K-G03
- : 2) SUN-75K-G03
- : 3) SUN-80K-G03
- : 4) SUN-90K-G03
- : 5) SUN-100K-G03
- : 6) SUN-110K-G03

PV side	:	
V _{max} PV [Vd.c.]	:	1000
Max. Input current [Ad.c.]	:	1)2)3)40+40+40+40 4)5)6)40+40+40+40+40+40
I _{sc} PV [Ad.c.]	:	1)2)3)60+60+60+60 4)5)6)60+60+60+60+60+60
MPPT Voltage Range [Vd.c.]	:	200-850
MPPT Full Power Voltage Range [Vd.c.]	:	550-850
Overvoltage Category (OVC)	:	II
On-grid AC side	:	
Rated Output Volt [Va.c.]	:	3L/N/PE, 220/380, 230/400
Rated Output Freq. [Hz]	:	50/60
Rated Output Power [kW]	:	1)70 2)75 3)80 4)90 5)100 6)110
Max. Output Apparent Power[kVA]	:	1)77 2)82.5 3)88 4)99 5)110 6)121
Rated Output Current.[Aa.c.]	:	1)106.1/101.5 2)113.6/108.7 3)121.2/115.9 4)136.4/130.4 5)151.5/144.9 6)166.7/159.4
Max. Output Current.[Aa.c.]	:	1)116.7/111.6 2)125.0/119.6 3)133.3/127.5 4)150.0/143.5 5)166.7/159.4 6)183.3/175.4
Power Factor	:	0.8 leading-0.8 lagging
Overvoltage Category (OVC)	:	III
Protective Class	:	I
Ingress Protection (IP)	:	IP65
Pollution Degree (PD)	:	PD3
Operating Temperature [°C]	:	-25 to 60, >45 derating
Altitude [m]	:	4000
Type of Inverter	:	Non isolated

Remark(s)

The installation has to be carried out according to the attached installation instruction.
 Any additional requirements in countries where the product is going to be marketed have to be considered additionally.