






# Three Phase String Inverter

SUN-33K



**Deye**

-  2 MPP trackers, Max. efficiency up to 98.6%
-  Zero export application, VSG application
-  String intelligent monitoring (optional)
-  Wide output voltage range
-  Anti-PID function (Optional)

## Technical Data

Model	SUN-33K
<b>Input Side</b>	
Max. DC Input Power (kW)	42.9
Max. DC Input Voltage (V)	1000
Start-up DC Input Voltage (V)	250
MPPT Operating Range (V)	200~850
Max. DC Input Current (A)	40+40
Max. Short Circuit Current (A)	60+60
No. of MPP Trackers	2
No. of Strings per MPP Tracker	3
<b>Output Side</b>	
Rated Output Power (kW)	33
Max. Active Power (kW)	36.3
Nominal Output Voltage / Range (V)	3L/N/PE 220/380V, 230/400V
Rated Grid Frequency (Hz)	50 / 60 (Optional)
Operating Phase	Three phase
Rated AC Grid Output Current (A)	50/47.8
Max. AC Output Current (A)	55/52.6
Output Power Factor	0.8 leading to 0.8 lagging
Grid Current THD	<3%
DC Injection Current (mA)	<0.5%
Grid Frequency Range	47~52 or 57~62 (Optional)
<b>Efficiency</b>	
Max. Efficiency	98.6%
Euro Efficiency	97.8%
MPPT Efficiency	>99%
<b>Protection</b>	
DC Reverse-Polarity Protection	Yes
AC Short Circuit Protection	Yes
AC Output Overcurrent Protection	Yes
Output Overvoltage Protection	Yes
Insulation Resistance Protection	Yes
Ground Fault Monitoring	Yes
Anti-islanding Protection	Yes
Temperature Protection	Yes
Integrated DC Switch	Yes
Remote software upload	Yes
Remote change of operating parameters	Yes
Surge protection	DC Type II / AC Type II
<b>General Data</b>	
Size (mm)	362W×577H×215D
Weight (kg)	25.5
Topology	Transformerless
Internal Consumption	<1W (Night)
Running Temperature	-25~65℃, >45℃ derating
Ingress Protection	IP65
Noise Emission (Typical)	<50 dB
Cooling Concept	Smart cooling
Max. Operating Altitude Without Derating	2000m
Warranty	5 years
Grid Connection Standard	CEI 0-21, VDE-AR-N 4105, NRS 097, IEC 62116, IEC 61727, G99, G98, VDE 0126-1-1, RD 1699, C10-11
Operating Surroundings Humidity	0-100%
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2
<b>Features</b>	
DC Connection	MC-4 mateable
AC Connection	IP65 rated plug
Display	LCD1602
Interface	RS485/RS232/Wifi/LAN