

# KOL.SAT



**KOLSAT GP - Hybrid Inverter**  
1000W with Controller System  
(UPS Function)

# KOLSAT



## Product : NK-GP1000

Product Size: 355mm×175mm×210mm

Shell Material: Iron

Color: Blue+cream-Coloured

Product N.W.: 12kg

Packing size: 400mm×220mm×285mm

QTY/CTN: 1PCS

G.W./CTN: 12.75kg

N.W. Of 30A solar controller: 1.05Kg

### Technical Specification:

#### • Input Features:

DC voltage range: DC20V-DC31V  
Over voltage protection: DC32±1V  
Over voltage recovery: DC30±0.5V  
Low voltage protection: DC20±1V  
Low voltage recovery: DC25±0.5V  
AC input voltage: AC145±5V- AC275±5V  
AC frequency: Automatically tracking and adaptive

#### • Output Features:

AC voltage in AC mode: 220V±10% (AVR function)  
Frequency in AC mode: 50Hz±5Hz/60Hz±5Hz  
AC voltage in inverter mode: 220V±10%  
Frequency in inverter mode: 50Hz±0.5Hz  
Output waveform: Pure sine wave  
Waveform distortion: ≤5%  
Switch time: 4ms  
No-load loss: ≤10W  
Rated power: 1000W  
Peak power: 3 times of rated power for 1 second  
Transfer efficiency: >85%

### • Charging Features

Battery type: Maintenance free lead-acid battery  
Battery Voltage: 24V DC  
Charging current: 15A  
Charging time: 8h ≥90% (80A maintenance free lead-acid battery)  
Floating charge voltage: 27.6VDC±0.3V  
Over-charge voltage: 28.2V  
AC input voltage: 145VAC±5V-275VAC±5V

### • Protection Features

DC low voltage protection: DC20±1V  
DC over voltage protection: DC32±1V  
Over-heat protection: 90±10°C  
AC input low voltage protection: 145VAC±5V  
AC input over voltage protection: 275VAC±5V  
Short-circuit protection: Flashing and shut down after 1S.  
Over-load protection: 120% of rated power, restart after 30S  
150% of rated power, shut down after 10S  
200% of rated power, shut down after 1S

### • Features of Solar Controller

Solar panel input range: DC30V-DC50V  
The rated voltage of solar input: DC36V  
Rated power of solar input: 1080W  
Floating charge voltage: 27.6V  
Charging current: 30A  
Charge efficiency: >96%

# NK-GP1000



# KOL.SAT



**KOLSAT GP - Hybrid Inverter**  
2000W with Controller System  
(UPS Function)

# KOLSAT



## ■Product Data: NK-GP2000

**Product Size:** 490mm×235mm×420mm

**Max. Product size:** 490mm×235mm×485mm  
(including wheels)

**Shell Material:** Iron

**Color:** Cream-Coloured

**Product N.W:** 27.4kg (with controller)

**Packing size:** 585mm×355mm×630mm

**QTY/CTN:** 1PCS

**G.W./CTN:** 38kgs

**N.W. Of 50A solar controller:** 1.45Kg

### • Technical Parameters

#### Input Features:

DC voltage range: DC40V-DC62V

Over voltage protection: DC62±2V

Over voltage recovery: DC59±1V

Low voltage protection: DC40±2V

Low voltage recovery: DC50±2V

AC input voltage: AC145±5V- AC275±5V

AC frequency: Automatically tracking and adaptive

#### • Output Features:

AC voltage in AC mode: 220V±10% (AVR function)

Frequency in AC mode: 50Hz±5Hz/60Hz±5Hz

AC voltage in inverter mode: 220V±10%

Frequency in inverter mode: 50Hz±0.5Hz

Output waveform: Pure sine wave

Waveform distortion: ≤5%

Switch time: 4ms

No-load loss: ≤40W

Rated power: 2000W

Peak power: 3 times of rated power for 1 second

Transfer efficiency: >85%

### • Charging Features

Battery type: Maintenance free lead-acid battery

Battery Voltage: 48V DC

Charging current: 15A

Charging time: 8h ≥90% (80A maintenance free lead-acid battery)

Floating charge voltage: 55.2 VDC±0.8V

Over-charge voltage: 56.4V

AC input voltage: 145VAC±5V-275VAC±5V

### • Protection Features

DC low voltage protection: DC40±2V

DC over voltage protection: DC62±2V

Over-heat protection: 90±10°C

AC input low voltage protection: 145VAC±5V

AC input over voltage protection: 275VAC±5V

Short-circuit protection: Flashing and shut down after 1S.

Over-load protection: 120% of rated power, restart after 30S

150% of rated power, shut down after 10S

200% of rated power, shut down after 1S

### • Features of Solar Controller

Solar panel input range: DC60V-DC100V

The rated voltage of solar input: DC72V

Rated power of solar input: 3600W

Floating charge voltage: 58V

Charging current: 50A

Charge efficiency: >96%

# NK-GP2000



# KOL.SAT



**KOLSAT GP - Hybrid Inverter**  
3000W with Controller System  
(UPS Function)

# KOLSAT



## ■Product Data: NK-GP3000

Product Size: 490mm×235mm×420mm

Max. Product size: 490mm×235mm×485mm  
(including wheels)

Shell Material: Iron

Color: Cream-Coloured

Product N.W: 42.6kg (with controller)

Packing size: 585mm×355mm×630mm

QTY/CTN: 1PCS

G.W./CTN: 53.2kgs

### • Technical Parameters

#### • Input Features:

DC voltage range: DC40V-DC62V

Over voltage protection: DC62±2V

Over voltage recovery: DC59±1V

Low voltage protection: DC40±2V

Low voltage recovery: DC50±2V

AC input voltage: AC145±5V- AC275±5V

AC frequency: Automatically tracking and adaptive

#### • Output Features:

AC voltage in AC mode: 220V±10% (AVR function)

Frequency in AC mode: 50Hz±5Hz/60Hz±5Hz

AC voltage in inverter mode: 220V±10%

Frequency in inverter mode: 50Hz±0.5Hz

Output waveform: Pure sine wave

Waveform distortion: ≤5%

Switch time: 4ms

No-load loss: ≤50W

Rated power: 3000W

Peak power: 3 times of rated power for 1 second

Transfer efficiency: >85%

### • Charging Features

Battery type: Maintenance free lead-acid battery

Battery Voltage: 48V DC

Charging current: 15A

Charging time: 8h ≥90% (80A maintenance free lead-acid battery)

Floating charge voltage: 55.2 VDC±0.8V

Over-charge voltage: 56.4V

AC input voltage: 145VAC±5V-275VAC±5V

### • Protection Features

DC low voltage protection: DC40±2V

DC over voltage protection: DC62±2V

Over-heat protection: 90±10°C

AC input low voltage protection: 145VAC±5V

AC input over voltage protection: 275VAC±5V

Short-circuit protection: Flashing and shut down after 1S.

Over-load protection: 120% of rated power, restart after 30S

150% of rated power, shut down after 10S

200% of rated power, shut down after 1S

### • Features of Solar Controller

Solar panel input range: DC60V-DC100V

The rated voltage of solar input: DC72V

Rated power of solar input: 4320W

Floating charge voltage: 58V

Charging current: 60A

Charge efficiency: >96%

# NK-GP3000



# KOL.SAT



**KOLSAT GP - Hybrid Inverter**  
5000W with Controller System  
(UPS Function)

# KOLSAT



## ■Product Data: NK-GP5000

**Product Size:** 550mm×260mm×480mm  
**Max. Product size:** 550mm×260mm×535mm  
(including wheels)  
**Shell Material:** Iron  
**Color:** Cream-Coloured  
**Product N.W:** 65kg (with controller)  
**Packing size:** 630mm×345mm×680mm  
**QTY/CTN:** 1PC  
**G.W./CTN:** 75kgs  
**N.W. Of 60A solar controller:** 1.45Kg

### • Technical Parameters

#### • Input Features:

DC voltage range: DC80V-DC128V  
Over voltage protection: DC128±4V  
Over voltage recovery: DC122±2V  
Low voltage protection: DC80±4V  
Low voltage recovery: DC102±2V  
AC input voltage: AC145±5V- AC275±5V  
AC frequency: Automatically tracking and adaptive

#### • Output Features:

AC voltage in AC mode: Same as AC input voltage  
Frequency in AC mode: 50Hz±5Hz/60Hz±5Hz  
AC voltage in inverter mode: 220V±10%  
Frequency in inverter mode: 50Hz±0.5Hz  
Output waveform: Pure sine wave  
Waveform distortion: ≤5%  
Switch time: 4ms  
No-load loss: ≤100W  
Rated power: 6000W  
Peak power: 3 times of rated power for 1 second  
Transfer efficiency: >85%

### • Charging Features

Battery type: Maintenance free lead-acid battery  
Battery Voltage: 9V DC  
Charging current: 15A  
Charging time: 8h ≥90% (80A maintenance free lead-acid battery)  
Floating charge voltage: 110.4 VDC±1.6V  
Over-charge voltage: 112.4V  
AC input voltage: 145VAC±5V-275VAC±5V

### • Protection Features

DC low voltage protection: DC80±4V  
DC over voltage protection: DC128±4V  
Over-heat protection: 90±10°C  
AC input low voltage protection: 145VAC±5V  
AC input over voltage protection: 275VAC±5V  
Short-circuit protection: Flashing and shut down after 1S.  
Over-load protection: 120% of rated power, restart after 30S  
150% of rated power, shut down after 10S  
200% of rated power, shut down after 1S

### • Features of Solar Controller

Solar panel input range: DC90V-DC144V  
The rated voltage of solar input: DC144V  
Rated power of solar input: 8640W  
Floating charge voltage: 116V  
Charging current: 60A  
Charge efficiency: >96%

# NK-GP5000



# KOL.SAT



**KOLSAT GP - Hybrid Inverter**  
6000W with Controller System  
(UPS Function)

# KOLSAT



## ■Product Data: NK-GP6000

Product Size: 550mm×260mm×480mm

Max. Product size: 550mm×260mm×535mm  
(including wheels)

Shell Material: Iron

Color: Cream-Coloured

Product N.W: 65kg (with controller)

Packing size: 630mm×345mm×680mm

QTY/CTN: 1PC

G.W./CTN: 75kgs

N.W. Of 60A solar controller: 1.45Kg

### • Technical Parameters

#### • Input Features:

DC voltage range: DC80V-DC128V

Over voltage protection: DC128±4V

Over voltage recovery: DC122±2V

Low voltage protection: DC80±4V

Low voltage recovery: DC102±2V

AC input voltage: AC145±5V- AC275±5V

AC frequency: Automatically tracking and adaptive

#### • Output Features:

AC voltage in AC mode: Same as AC input voltage

Frequency in AC mode: 50Hz±5Hz/60Hz±5Hz

AC voltage in inverter mode: 220V±10%

Frequency in inverter mode: 50Hz±0.5Hz

Output waveform: Pure sine wave

Waveform distortion: ≤5%

Switch time: 4ms

No-load loss: ≤100W

Rated power: 6000W

Peak power: 3 times of rated power for 1 second

Transfer efficiency: >85%

### • Charging Features

Battery type: Maintenance free lead-acid battery

Battery Voltage: 9V DC

Charging current: 15A

Charging time: 8h ≥90% (80A maintenance free lead-acid battery)

Floating charge voltage: 110.4 VDC±1.6V

Over-charge voltage: 112.4V

AC input voltage: 145VAC±5V-275VAC±5V

### • Protection Features

DC low voltage protection: DC80±4V

DC over voltage protection: DC128±4V

Over-heat protection: 90±10°C

AC input low voltage protection: 145VAC±5V

AC input over voltage protection: 275VAC±5V

Short-circuit protection: Flashing and shut down after 1S.

Over-load protection: 120% of rated power, restart after 30S

150% of rated power, shut down after 10S

200% of rated power, shut down after 1S

### • Features of Solar Controller

Solar panel input range: DC90V-DC144V

The rated voltage of solar input: DC144V

Rated power of solar solar input: 8640W

Floating charge voltage: 116V

Charging current: 60A

Charge efficiency: >96%

# NK-GP6000