Kinglong New Energy Technology Co. Ltd.

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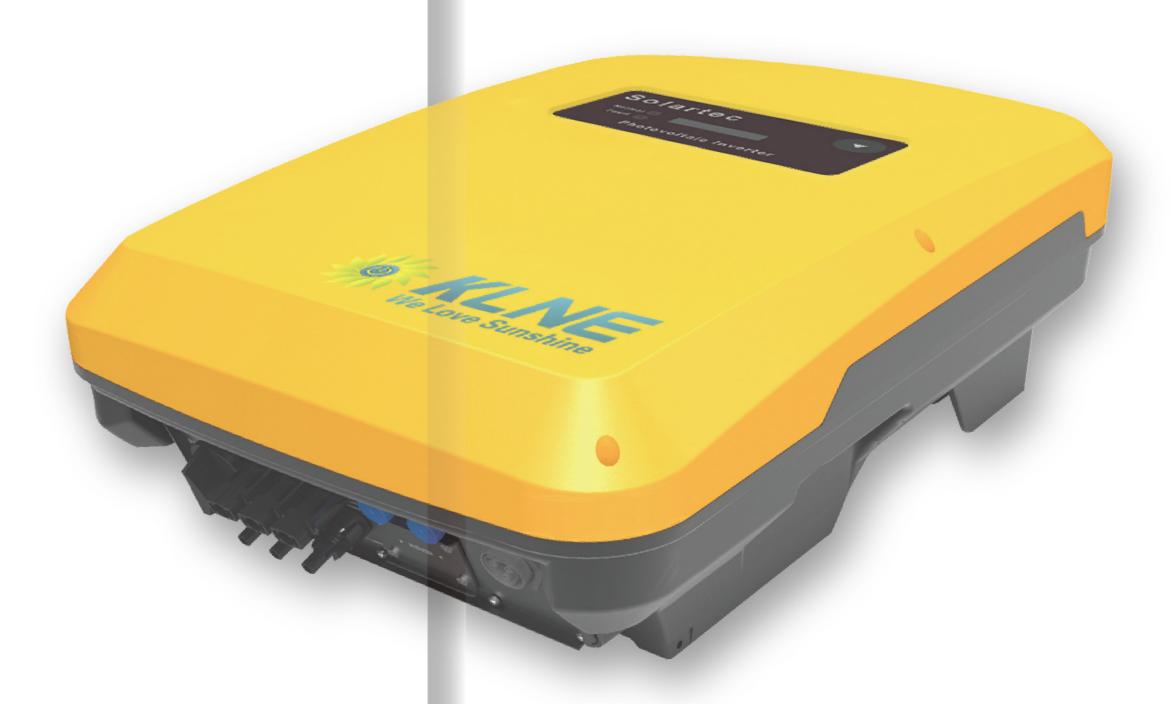
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We Love Sunshine

We are dedicated to research in new energy conversion and control technology, the development and market promotion of relevant products and providing perfect solutions for application in new energy projects.



Our Company

Beijing Kinglong New Energy Technology Co. Ltd. ('KLNE') is an international PV enterprise which is located in Beijing and dedicated to the research and development, production and marketing of solar PV inverters. A Sino – US joint venture company formed in 2009, we have grown rapidly and gone from strength to strength.

KLNE employs international top-level talent and the leading power equipment manufacturers in China with extensive experience in product design, implementation and engineering service. We are fast, responsive and provide internationally certified products which can meet the requirements of the biggest and most demanding markets.

The main products of KLNE are the 'Sunteams' series, the 'Solartec' series of user grid-connected inverters and the 'Solartec Central' series of central grid-connected inverters. Our products have passed international certifications such as CE, VDE, TUV, ENEL, ETL, G83/G59, AS4777 / AS3100 and others.

KLNE is a customer-centric company, focusing on customer satisfaction throughout the whole supplier/customer relationship of enquiry, sale and after sales support. We are always trying to improve ourselves. We are working everyday toward the establishment of a brand defined by high performance reliable products coupled with high quality service.

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Products



Solar grid-connected power generation is the way of the future. Not only does it enable people and businesses to generate their own electricity and save money (and contribute to a cleaner, greener environment), it also enables them to funnel excess electricity generated into their local power grid. This helps reduce power consumption from public power grids, reducing the pollution created from power plants.

At the core of any PV system is the inverter. The inverter contains the technology to convert the DC current generated from the solar panels into the AC current which has the matching frequency, phase and voltage of the power grid.

The main products of KLNE are the 'Sunteams' series, the 'Solartec' series of grid-connected inverters and the 'Solartec Central' series of central grid-connected inverters. Together these ranges can meet the varying demands of different customers.

- Performance to international standard levels and beyond
- High quality and excellent value for money
- CE VDE TUV ENEL ETL and G83&G59 certifications
- Australian certification (AS4777 / AS 3100)

Service

KLNE not only provides products of high quality and great value for money, we also provide professional services for our clients.

- 1. Technical support pre-build. We can provide professional advice and direction on PV generation systems at the planning stage of any solar power generation installation.
- 2. Field technical support. We can provide installation direction, operating advice and service through local qualified personnel.
- 3. After sales service. We provide a 7 years guarantee on our products and local technical support by qualified personnel.
- 4. Special Development. KLNE can provide development services specifically tailored to meet clients' requirements on individual projects.

Grid-connected inverters Model Solartec 1500

The KLNE Solartec series of small grid-connected inverter works in the 1KW-5KW power range and is mainly applied in a small home grid-connected PV power generation system.

Features

- The maximum efficiency of the inverter can reach 96.5%
- MPPT efficiency: 99.5%
- Non-fan design
- Internal GFCI device
- Built-in leakage current protection device
- IP65 protection
- Transformer-less design
- Integrated DC switch
- RS232 & RS485 communication
- Meets RoHS
- Designed for hanging with simple and easy installation
- LCD backlight can be easily turned on by pressing a button so that users can read it easily.



Specifications

Specifications	Solartec 1500	Specifications	Solartec 1500
Input data		DC switch	Yes
Max. DC power	1750W	Short-circuit proof	Yes
Max. DC voltage	450V	Ground fault monitoring	Yes
Recommended system voltage	360V	Grid monitoring	Yes
System start-up voltage	150V	Over-voltage protection	Yes
Full load voltage range MPPT	200V-360V	Over-current protection	Yes
PV voltage range MPPT	110V-430V	Active anti-islanding	Yes
Shutdown voltage	70V	Ground fault current detection	Yes
Max. input current	9A	General data	
DC voltage ripple	< 5%	Dimensions(width x height x depth)	360/500/155
Number of MPP trackers	1	Weight	14 kg
Max. number of strings	1		-25°C to +60°C (Powe
Output data		Ambient temperature	derating above 45 C)
Nominal AC output	1500W	Working altitude	<3000M
Max.AC power	1650W	Noise development	<30 dB (A)
Max. output current	9A	Power Consumption Night	< 0.2W
THD of AC current	< 3%	Power Consumption Standby	4W
Nominal grid voltage range	220V/230V/240V	Topological structure	transformerless
Nominal grid frequency	50Hz	Cooling	free convection
Power factor (cos φ)	0.99	IP degree of protection	IP65
Number of feed-in phases	single-phase	Features	
Efficiency		On/off mode	Auto
Max. efficiency	96.5%	DC connections	MC4
Euro efficiency	95.0%	AC connections	plug connector
MPPT efficiency	99.5%	Display	LCD/LED
Device protection		Accessory interfaces	RS485/RS232
		Standard warranty	7 years
Reverse polarity protection	short-circuit diode	Certificates	CE/VDE/AS/ ENEL/G83/CGC

The KLNE Solartec series of small grid-connected inverter works in the 1KW-5KW power range and is mainly applied in a small home grid-connected PV power generation system.

Features

- The maximum efficiency of the inverter can reach 96.5%
- MPPT efficiency: 99.5%
- Non-fan design
- Internal GFCI device
- Built-in leakage current protection device
- IP65 protection
- Transformer-less design
- Integrated DC switch
- RS232 & RS485 communication
- Meets RoHS
- Designed for hanging with simple and easy installation
- LCD backlight can be easily turned on by pressing a button so that users can read it easily.



Specifications

Specifications	Solartec 2000	Specifications	Solartec 2000
Input data		DC switch	Yes
Max. DC power	2320W	Short-circuit proof	Yes
Max. DC voltage	500V	Ground fault monitoring	Yes
Recommended system voltage	383V	Grid monitoring	Yes
System start-up voltage	150V	Over-voltage protection	Yes
Full load voltage range MPPT	250V-400V	Over-current protection	Yes
PV voltage range MPPT	110V-480V	Active anti-islanding	Yes
Shutdown voltage	70V	Ground fault current detection	Yes
Max. input current	10A	General data	
DC voltage ripple	< 5%	Dimensions(width x height x depth)	360/500/155
Number of MPP trackers	1	Weight	14 kg
Max. number of strings	1		-25°C to +60°C (Power
Output data		Ambient temperature	derating above 45°C)
Nominal AC output	2000W	Working altitude	<3000M
Max.AC power	2200W	Noise development	<30 dB (A)
Max. output current	12A	Power Consumption Night	< 0.2W
THD of AC current	< 3%	Power Consumption Standby	5W
Nominal grid voltage range	220V/230V/240V	Topological structure	transformerless
Nominal grid frequency	50Hz	Cooling	free convection
Power factor (cos φ)	0.99	IP degree of protection	IP65
Number of feed-in phases	single-phase	Features	
Efficiency		On/off mode	Auto
Max. efficiency	96.5%	DC connections	MC4
Euro efficiency	95.5%	AC connections	plug connector
MPPT efficiency	99.5%	Display	LCD/LED
Device protection		Accessory interfaces	RS485/RS232
		Standard warranty	7 years
Reverse polarity protection	short-circuit diode	Certificates	CE/VDE/AS/ ENEL/G83/CGC

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The KLNE Solartec series of small grid-connected inverter works in the 1KW-5KW power range and is mainly applied in a small home grid-connected PV power generation system.

Features

- The maximum efficiency of the inverter can reach 96.6%
- MPPT efficiency: 99.5%
- Non-fan design
- Internal GFCI device
- Built-in leakage current protection device
- IP65 protection
- Transformer-less design
- Integrated DC switch
- RS232 & RS485 communication
- Meets RoHS
- Designed for hanging with simple and easy installation
- LCD backlight can be easily turned on by pressing a button so that users can read it easily.



Specifications

Specifications	Solartec 2500	Specifications	Solartec 2500
Input data		DC switch	Yes
Max. DC power	2890W	Short-circuit proof	Yes
Max. DC voltage	500V	Ground fault monitoring	Yes
Recommended system voltage	383V	Grid monitoring	Yes
System start-up voltage	150V	Over-voltage protection	Yes
Full load voltage range MPPT	235V-400V	Over-current protection	Yes
PV voltage range MPPT	110V-480V	Active anti-islanding	Yes
Shutdown voltage	70V	Ground fault current detection	Yes
Max. input current	13A	General data	
DC voltage ripple	< 5%	Dimensions(width x height x depth)	360/500/155
Number of MPP trackers	1	Weight	14 kg
Max. number of strings	2		-25℃ to +60℃ (Power
Output data		Ambient temperature	derating above 45°C)
Nominal AC output	2500W	Working altitude	<3000M
Max.AC power	2750W	Noise development	<30 dB (A)
Max. output current	16A	Power Consumption Night	< 0.2W
THD of AC current	< 3%	Power Consumption Standby	5W
Nominal grid voltage range	220V/230V/240V	Topological structure	transformerless
Nominal grid frequency	50Hz	Cooling	free convection
Power factor (cos φ)	0.99	IP degree of protection	IP65
Number of feed-in phases	single-phase	Features	
Efficiency		On/off mode	Auto
Max. efficiency	96.6%	DC connections	MC4
Euro efficiency	95.5%	AC connections	plug connector
MPPT efficiency	99.5%	Display	LCD/LED
Device protection		Accessory interfaces	RS485/RS232
		Standard warranty	7 years
Reverse polarity protection	short-circuit diode	Certificates	G83/CE

The KLNE Solartec series of small grid-connected inverter works in the 1KW-5KW power range and is mainly applied in a small home grid-connected PV power generation system.

Features

- The maximum efficiency of the inverter can reach 96.6%
- MPPT efficiency: 99.5%
- Non-fan design
- Internal GFCI device
- Built-in leakage current protection device
- IP65 protection
- Transformer-less design
- Integrated DC switch
- RS232 & RS485 communication
- Meets RoHS
- Designed for hanging with simple and easy installation
- LCD backlight can be easily turned on by pressing a button so that users can read it easily.



Specifications

Specifications	Solartec 3000	Specifications	Solartec 3000
Input data		DC switch	Yes
Max. DC power	3160W	Short-circuit proof	Yes
Max. DC voltage	500V	Ground fault monitoring	Yes
Recommended system voltage	383V	Grid monitoring	Yes
System start-up voltage	150V	Over-voltage protection	Yes
Full load voltage range MPPT	250V-400V	Over-current protection	Yes
PV voltage range MPPT	110V-480V	Active anti-islanding	Yes
Shutdown voltage	70V	Ground fault current detection	Yes
Max. input current	13A	General data	
DC voltage ripple	< 5%	Dimensions(width x height x depth)	360/500/155
Number of MPP trackers	1		14 kg
Max. number of strings	2		-25℃ to +60℃(Powe
Output data		Ambient temperature	derating above 45°C)
Nominal AC output	2800W	Working altitude	<3000M
Max.AC power	3000W	Noise development	<30 dB (A)
Max. output current	16A	Power Consumption Night	< 0.2W
THD of AC current	< 3%	Power Consumption Standby	5W
Nominal grid voltage range	220V/230V/240V	Topological structure	transformerless
Nominal grid frequency	50Hz	Cooling	free convection
Power factor (cos φ)	0.99	IP degree of protection	IP65
Number of feed-in phases	single-phase	Features	
Efficiency		On/off mode	Auto
Max. efficiency	96.6%	DC connections	MC4
Euro efficiency	95.5%	AC connections	plug connector
MPPT efficiency	99.5%	Display	LCD/LED
Device protection		Accessory interfaces	RS485/RS232
		Standard warranty	7 years
Reverse polarity protection	short-circuit diode	Certificates	CE/VDE/AS/ ENEL/G83/CGC

The KLNE Solartec series of small grid-connected inverter works in the 1KW-5KW power range and is mainly applied in a small home grid-connected PV power generation system.

Features

- The maximum efficiency of the inverter can reach 97.5%
- MPPT efficiency: 99.5%
- Non-fan design
- Internal GFCI device
- Built-in leakage current protection device
- IP65 protection
- Transformer-less design
- Integrated DC switch
- RS232 & RS485 communication
- Meets RoHS
- Designed for hanging with simple and easy installation
- LCD backlight can be easily turned on by pressing a button so that users can read it easily.



Specifications

Specifications	Solartec 3600	Specifications	Solartec 3600
Input data		DC switch	Yes
Max. DC power	4150W	Short-circuit proof	Yes
Max. DC voltage	550V	Ground fault monitoring	Yes
Recommended system voltage	383V	Grid monitoring	Yes
System start-up voltage	150V	Over-voltage protection	Yes
Full load voltage range MPPT	230V-440V	Over-current protection	Yes
PV voltage range MPPT	110V-530V	Active anti-islanding	Yes
Shutdown voltage	70V	Ground fault current detection	Yes
Max. input current	18A	General data	
DC voltage ripple	< 5%	Dimensions(width x height x depth)	360/500/155
Number of MPP trackers	1	Weight	14 kg
Max. number of strings	3		-25°C to +60°C (Power
Output data		Ambient temperature	derating above 45°C)
Nominal AC output	3600W	Working altitude	<3000M
Max.AC power	3600W	Noise development	<30 dB (A)
Max. output current	16A	Power Consumption Night	< 0.2W
THD of AC current	< 3%	Power Consumption Standby	5W
Nominal grid voltage range	220V/230V/240V	Topological structure	transformerless
Nominal grid frequency	50Hz	Cooling	free convection
Power factor (cos φ)	0.99	IP degree of protection	IP65
Number of feed-in phases	single-phase	Features	
Efficiency		On/off mode	Auto
Max. efficiency	97.5%	DC connections	MC4
Euro efficiency	97.0%	AC connections	plug connector
MPPT efficiency	99.5%	Display	LCD/LED
Device protection		Accessory interfaces	RS485/RS232
		Standard warranty	7 years
Reverse polarity protection	short-circuit diode	Certificates	G83/CE

The KLNE Solartec series of small grid-connected inverter works in the 1KW-5KW power range and is mainly applied in a small home grid-connected PV power generation system.

Features

- The maximum efficiency of the inverter can reach 97.5%
- MPPT efficiency: 99.5%
- Non-fan design
- Internal GFCI device
- Built-in leakage current protection device
- IP65 protection
- Transformer-less design
- Integrated DC switch
- RS232 & RS485 communication
- Meets RoHS
- Designed for hanging with simple and easy installation
- LCD backlight can be easily turned on by pressing a button so that users can read it easily.



Specifications

Specifications	Solartec 4000	Specifications	Solartec 4000
Input data		DC switch	Yes
Max. DC power	4540W	Short-circuit proof	Yes
Max. DC voltage	550V	Ground fault monitoring	Yes
Recommended system voltage	383V	Grid monitoring	Yes
System start-up voltage	150V	Over-voltage protection	Yes
Full load voltage range MPPT	250V-440V	Over-current protection	Yes
PV voltage range MPPT	110V-530V	Active anti-islanding	Yes
Shutdown voltage	70V	Ground fault current detection	Yes
Max. input current	19A	General data	
DC voltage ripple	< 5%	Dimensions(width x height x depth)	360/500/194
Number of MPP trackers	1	Weight	18.4kg
Max. number of strings	3		-25℃ to +60℃(Powe
Output data		Ambient temperature	derating above 45°C)
Nominal AC output	4000W	Working altitude	<3000M
Max.AC power	4400W	Noise development	<30 dB (A)
Max. output current	23A	Power Consumption Night	< 0.2W
THD of AC current	< 3%	Power Consumption Standby	5W
Nominal grid voltage range	220V/230V/240V	Topological structure	transformerless
Nominal grid frequency	50Hz	Cooling	free convection
Power factor (cos φ)	0.99	IP degree of protection	IP65
Number of feed-in phases	single-phase	Features	
Efficiency		On/off mode	Auto
Max. efficiency	97.5%	DC connections	MC4
Euro efficiency	97.0%	AC connections	plug connector
MPPT efficiency	99.5%	Display	LCD/LED
Device protection		Accessory interfaces	RS485/RS232
		Standard warranty	7 years
Reverse polarity protection	short-circuit diode	Certificates	CE/VDE/AS/ ENEL/G59/CGC

The KLNE Solartec series of small grid-connected inverter works in the 1KW-5KW power range and is mainly applied in a small home grid-connected PV power generation system.

Features

- The maximum efficiency of the inverter can reach 97.6%
- MPPT efficiency: 99.5%
- Non-fan design
- Internal GFCI device
- Built-in leakage current protection device
- IP65 protection
- Transformer-less design
- Integrated DC switch
- RS232 & RS485 communication
- Meets RoHS
- Designed for hanging with simple and easy installation
- LCD backlight can be easily turned on by pressing a button so that users can read it easily.



Specifications

Specifications	Solartec 4600	Specifications	Solartec 4600
Input data		DC switch	Yes
Max. DC power	4770W	Short-circuit proof	Yes
Max. DC voltage	550V	Ground fault monitoring	Yes
Recommended system voltage	383V	Grid monitoring	Yes
System start-up voltage	150V	Over-voltage protection	Yes
Full load voltage range MPPT	280V-440V	Over-current protection	Yes
PV voltage range MPPT	110V-530V	Active anti-islanding	Yes
Shutdown voltage	70V	Ground fault current detection	Yes
Max. input current	18A	General data	
DC voltage ripple	< 5%	Dimensions(width x height x depth)	360/500/194
Number of MPP trackers	1	Weight	18.4kg
Max. number of strings	3		-25°C to +60°C (Power
Output data		Ambient temperature	derating above 45°C)
Nominal AC output	4600W	Working altitude	<3000M
Max.AC power	4600W	Noise development	<30 dB (A)
Max. output current	23A	Power Consumption Night	< 0.2W
THD of AC current	< 3%	Power Consumption Standby	6W
Nominal grid voltage range	220V/230V/240V	Topological structure	transformerless
Nominal grid frequency	50Hz	Cooling	free convection
Power factor (cos φ)	0.99	IP degree of protection	IP65
Number of feed-in phases	single-phase	Features	
Efficiency		On/off mode	Auto
Max. efficiency	97.6%	DC connections	MC4
Euro efficiency	97.0%	AC connections	plug connector
MPPT efficiency	99.5%	Display	LCD/LED
Device protection		Accessory interfaces	RS485/RS232
		Standard warranty	7 years
Reverse polarity protection	short-circuit diode	Certificates	VDE0126/CE

The KLNE Solartec series of small grid-connected inverter works in the 1KW-5KW power range and is mainly applied in a small home grid-connected PV power generation system.

Features

- The maximum efficiency of the inverter can reach 97.6%
- MPPT efficiency: 99.5%
- Non-fan design
- Internal GFCI device
- Built-in leakage current protection device
- IP65 protection
- Transformer-less design
- Integrated DC switch
- RS232 & RS485 communication
- Meets RoHS
- Designed for hanging with simple and easy installation
- LCD backlight can be easily turned on by pressing a button so that users can read it easily.



Specifications

Specifications	Solartec 5000	Specifications	Solartec 5000
Input data		DC switch	Yes
Max. DC power	5200W	Short-circuit proof	Yes
Max. DC voltage	550V	Ground fault monitoring	Yes
Recommended system voltage	383V	Grid monitoring	Yes
System start-up voltage	150V	Over-voltage protection	Yes
Full load voltage range MPPT	280V-440V	Over-current protection	Yes
PV voltage range MPPT	110V-530V	Active anti-islanding	Yes
Shutdown voltage	70V	Ground fault current detection	Yes
Max. input current	19A	General data	
DC voltage ripple	< 5%	Dimensions(width x height x depth)	360/500/194
Number of MPP trackers	1	Weight	18.4kg
Max. number of strings	3		-25°C to +60°C (Powe
Output data		Ambient temperature	derating above 45°C
Nominal AC output	4900W	Working altitude	<3000M
Max.AC power	4900W	Noise development	<30 dB (A)
Max. output current	23A	Power Consumption Night	< 0.2W
THD of AC current	< 3%	Power Consumption Standby	6W
Nominal grid voltage range	220V/230V/240V	Topological structure	transformerless
Nominal grid frequency	50Hz	Cooling	free convection
Power factor (cos φ)	0.99	IP degree of protection	IP65
Number of feed-in phases	single-phase	Features	
Efficiency		On/off mode	Auto
Max. efficiency	97.6%	DC connections	MC4
Euro efficiency	97.0%	AC connections	plug connector
MPPT efficiency	99.5%	Display	LCD/LED
Device protection		Accessory interfaces	RS485/RS232
		Standard warranty	7 years
Reverse polarity protection	short-circuit diode	Certificates	CE/VDE/AS/ ENEL/G59/CGC

KLNE Monitor



The KLNE Monitor collects data from PV-inverters. The dash board offers an overview of all important real-time system data. History data is shown in charts or tables. All data is stored on the device and can be exported to a USB storage device. For further data processing, an inbuilt ftp client can send the collected data as scheduled by the user to a remote server. The 7" touch screen lets you comfortably navigate through all graphs and tables. The KLNE Monitor uses an energy saving CPU and is designed as cabinet mounted device. KLNE Monitor is a stand-alone device, no additional software installation is needded.

Fundamental Functions of KLNE Monitor Basic

Real-time operation parameters:

- Dash board for clear display of operation data
- Numerical display of all data
- Display of real time curves

Recording of inverter data

- Storage time with 8 inverters is up to 3 years
- Display of historical data
- Data export as .csv-file. Can directly be shown in Excel

Data export and data transmission

- Export directly to USB memory stick
- Data transmission via ftp to an ftp server

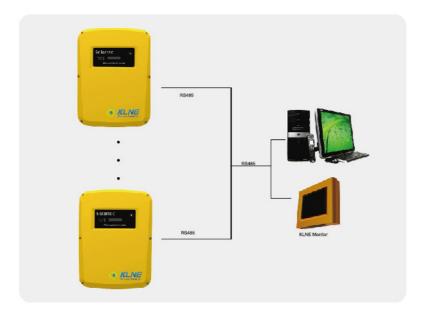
The Supported Functions of KLNE Monitor Advance

- Supports web-monitoring function
- Supports software updates via network

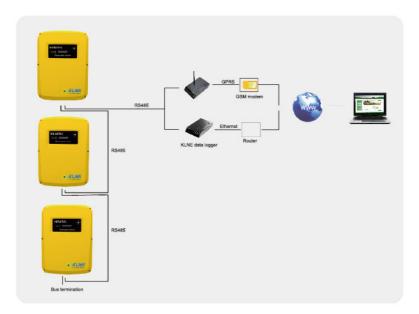


Software Specifications of KLNE Monitor Basic

Technical data	
Communication	
Inverter communication	RS485
PC communication	USB 1.1
Ethernet	RJ45 , 10M/100M adaptive
Max. number of KLNE Devices	
Inverters	8
Power supply	
Power supply	20 V _{ac} to 28 V _{ac}
Input current	< 300mA
Power consumption	5 W
Environmental conditions in operation	
Ambient temperature	0 °C 45 °C
Protection class	IP20 - IP65 if built in into IP65 case
General Data	
Dimensions (W / H / D)	274mm / 178mm / 40mm
Weight	0,8 kg
Mounting location	Indoor
Installation options	Tabletop device
Software language	German, English, Italian
Language versions (user manual)	German, English
Features	
Display	7" TFT LCD, true color (LED Backlight), resolution (800×480)
Memory	57MB (for storage)
Operation	Touch screen
Warranty	2 years
Certificates and approvals	CE/FCC
Information displayed	
General information	Date, time
Diant data	Current input/output, daily yield, total yield, specific annual yield,
Plant data	CO ₂ -savings



Local monitoring: The Solartec is connected to PC monitoring software Data Control or KLNE Monitor via RS485 port. It fulfills the simultaneous monitoring function on several inverters.



Remote monitoring: The Solartec is connected to KLNE Data Logger via RS485 port. Once the logger gets access to Internet via Ethernet or GRPS, users can monitor the running state and parameters of generating station and inverter by logging in.

System Integration Schemes

This is a single-phase grid-connected power generating system composed of multiple grid-connected inverters. This mode is mainly applied to the small or middle-scale single phase power generating systems such as BIPV and small solar power generating stations. The inverter power ranges from 1.5-5kw. Multiple inverters in parallel communicate via RS485. The inverter connected to the upper PC will allow the host to monitor the whole power generating system.