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Solarix FORTE Series
8/11 kW
SOLAR INVERTER

Pure sinewave output
Full compatibility with all kinds of electrical devices, the ideal solution for your critical applications.

Wide input voltage range (90–280 VAC)
The ability to work online in electrical household appliancesat voltages between 90-280VAC, in computer applications at voltages between 170-280VAC without switching to the battery.

Intelligent charging technology for optimal battery performance
Since it charges the battery with the 3-step battery charging algorithm, it extends the battery life, reduces your operating costs and provides savings.

High performance microprocessor
Thanks to the digital structure and high speed of the CPU-controlled control board is provides full protection by performing the protection functions of the Solar Inverter such as overload, short circuit, low-high voltage and over-temperature in a timely manner, thus ensuring that the Solar Inverter has a stable and reliable structure.

RS-232 & USB communication port
To allow for unattended Solar Inverter to shutdown/start-up and status monitoring, connect the communication cable one end to the USB/RS-232 port and the other to the communication port of your PC. With the monitoring software installed, you can schedule Solar Inverter shutdown/start-up and monitor Solar Inverter status through.

Dry contact
The dry contact alarms can adjust from the front panel. It could be used to deliver signal to external device as scada when battery voltage reaches warning level.

BMS(Battery managemeny System) Features
Thanks to this feature, which is a kind of battery safety system, it is ensured that thebatteries are kept in safe conditions. Thanks to this system, which controls and manages battery packs consisting of one or more cells during charging and discharging, the lifespan of your batteries is extended. Thanks to this feature, you can charge Lithium batteries with FORTE Series inverters.

Parallel function (Optional)
It has the ability to parallelize up to 6 units. Paralleling can be done in 3 different ways as single phase parallel, 3 phase balanced and unbalanced parallel. This feature is described in more detail below.

Wi-Fi communication
Solarix FORTE Series solar inverter can be controlled by our special program that you can download to your android and İOS phones thanks to its Wi-Fi feature.

HMPPT
Solarix FORTE Series 8 kW solar inverters have built-in 80A HMPPT charger, 11 kW solar inverters have built-in 150A HMPPT charger.

Configure AC/Solar Charger priority
Configurable AC/Solar Charger priority via LCD settings.

Configurable battery charging current
Configurable battery charging current based on applications via LCD setting

Generator Function
Capability to generator power.

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Product Overview

1. LCD Display

2. Status indicator
3. Function keys
4. Settings LEDs
5. On/Off switch
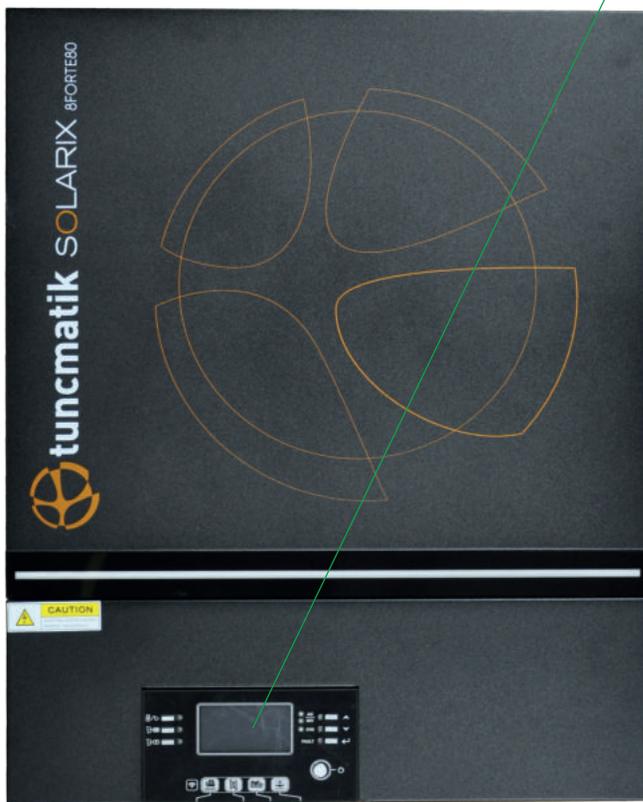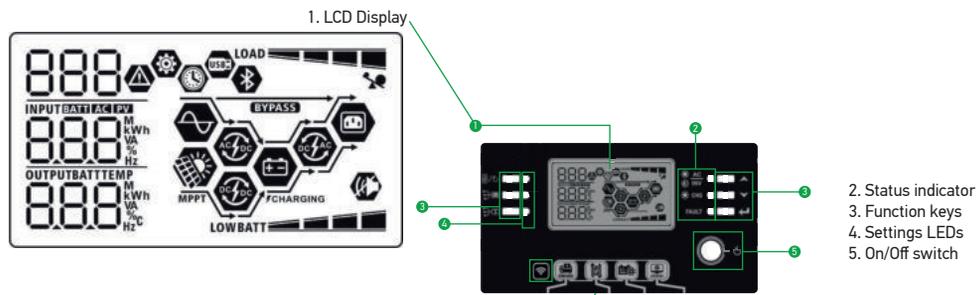
Remote LCD panel
communication port

BMS communication port: CAN and RS232 or RS485

USB communication port

RS-232 communication port

Dry contact

Solar Panel 1 Output

Solar Panel 1 Input

Solar Panel 2 Output

Solar Panel 2 Input
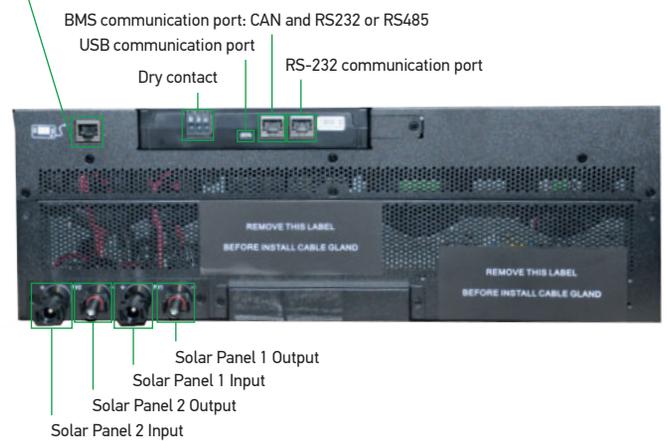
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BMS Communication & Portable Control Unit

RS-232 communication to PC

Remote Communication

USB communication to PC
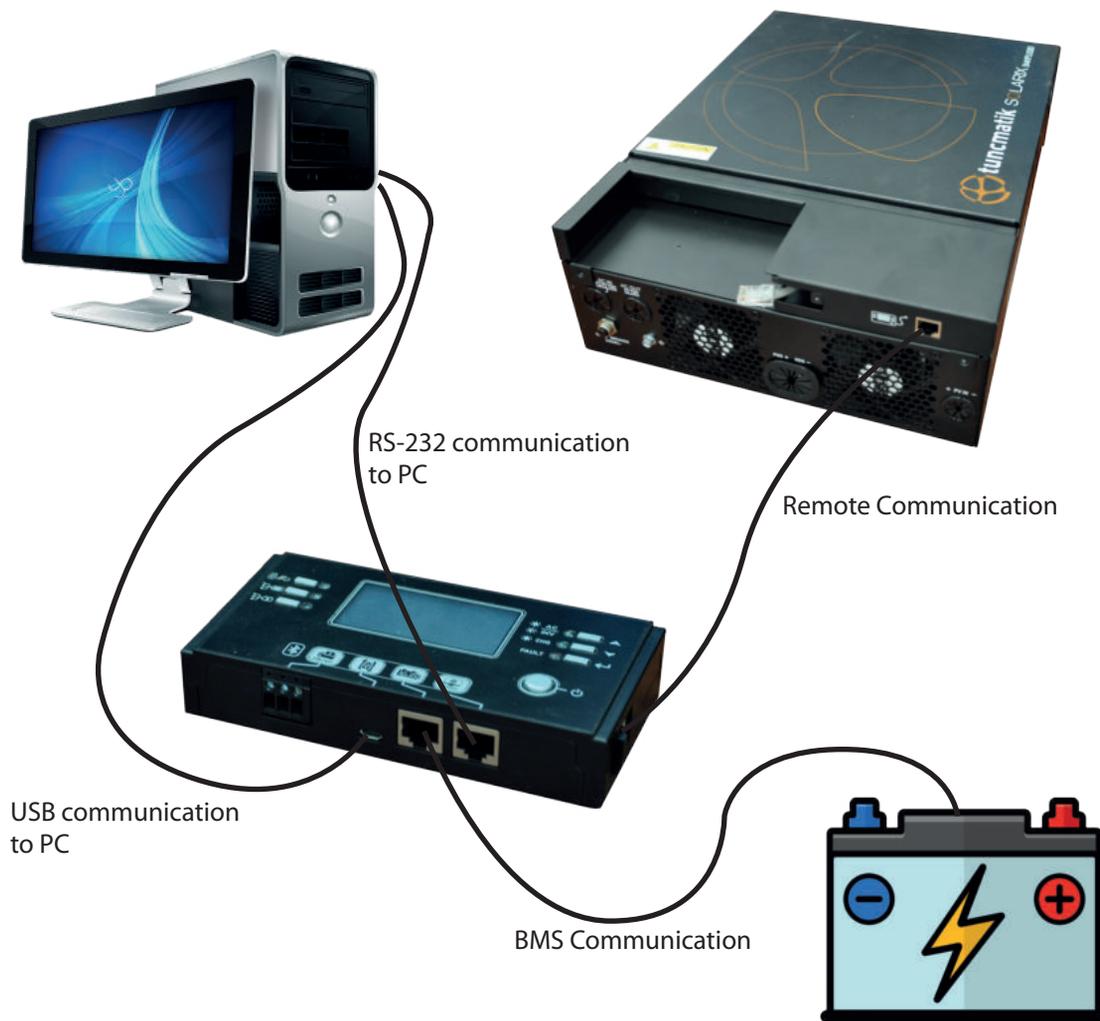
BMS Communication

Bluetooth Communication
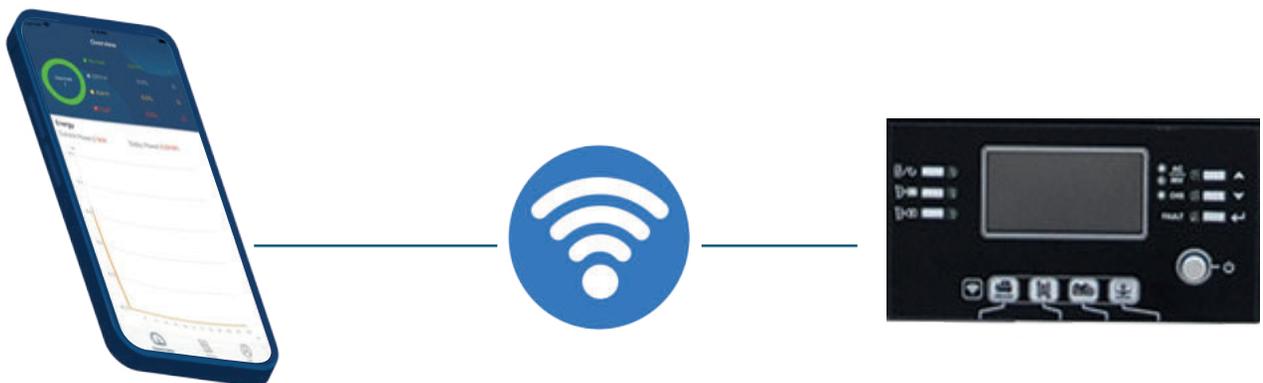
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Paralel Operation
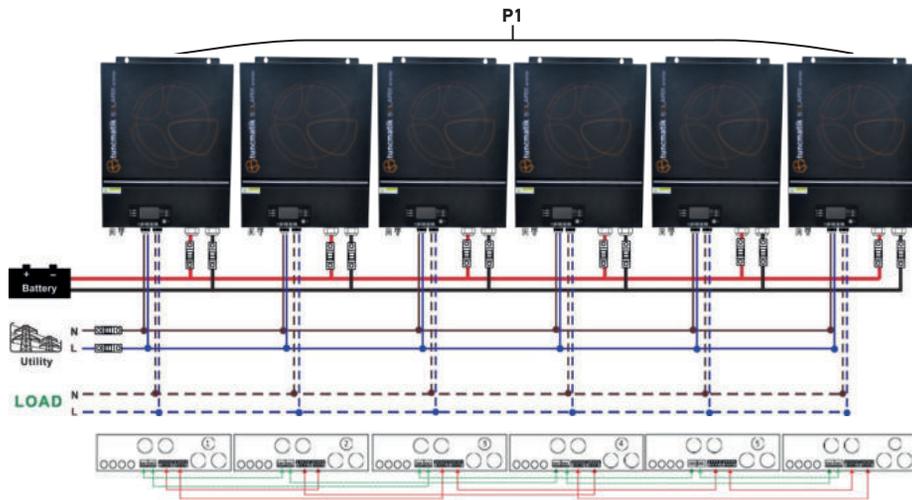
Single Phase Parallel
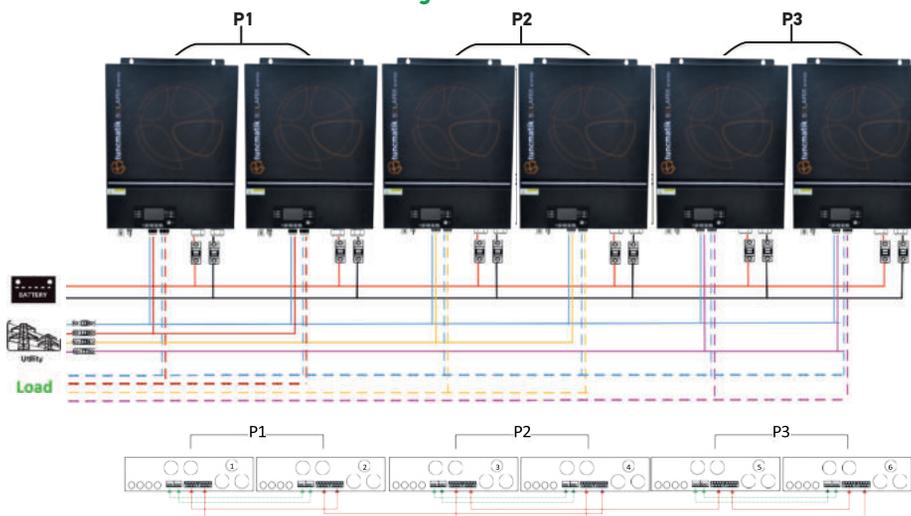
3 Phase Parallel (Balanced)
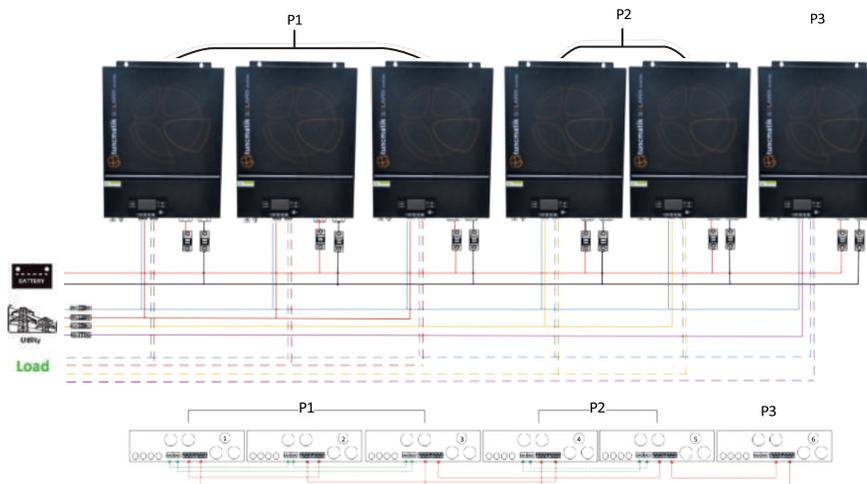
3 Phase Parallel (Unbalanced)

SOLAR INVERTER

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MODEL		Solarix – 8 FORTE 80	Solarix – 11 FORTE 150
Capacity(VA/W)		8000VA/8000W	11000VA/11000W
INPUT (Line Mode)			
Nominal Voltage		230VAC	
Voltage Range		170-280Vac±7V (UPS) / 90-280Vac±7V (Appliances)	
Return Voltage Range		180-270Vac±7V (UPS) / 100-270Vac±7V (Appliances)	
Max AC Voltage		300Vac	
Nominal Frequency		50Hz / 60Hz (Auto detection)	
Frequency Range		40±1Hz – 65±1Hz	
Frequency Return Range		42±1Hz – 63±1Hz	
Voltage Waveform		Sinusoidal (utility or generator)	
INPUT (Inv Mode)			
Nominal DC Input Voltage		48Vdc	
Cold Start Voltage		46Vdc	
Low DC Cut–off Voltage	@ load < 20%	44Vdc	
	@ 20% ≤ load < 50%	40.8Vdc	
	@ load ≥ 50%	38.4Vdc	
High DC Cut–off Voltage		66Vdc	63Vdc
DC Voltage Accuracy		±0.3V@ no load	
THDV		<5% for linear load,<10% for non-linear load @ nominal voltage	
DC Offset		100mV	
BATTERY			
Charging Algorithm		3 Step	
AC Charging Current (Max)		120A	150A
Floating Charging Voltage		54Vdc	
Overcharge Protection		66Vdc	63Vdc
OUTPUT			
Voltage Regulation		230Vac±5%	
Frequency		50Hz or 60Hz	
Overload Protection (Inv Mode)		100ms@≥205% load;5s@≥150% load; 10s@110%~150% load	100ms@≥180% load;5s@≥120% load; 10s@105%~120% load
Efficiency (Inv Mode)		Up to 93%	
Efficiency (Line Mode)		>95% (Rated R load, battery full charged)	
Transfer Time		10ms typical (UPS); 20ms typical (Appliances)	
Surge Capacity		2 x rated power for 5 seconds	
Short Circuit Protection	Line Mode	Circuit Breaker	
	Battery Mode	Electronic Circuits	
SYSTEM FEATURES			
Parallel Operation*	Paralel kit	Yes	
	Max parallel numbers	6	
	Circulation Current under No Load Condition	Max 2A	
	Power Unbalance Ratio	<5% @ 100% Load	
	Parallel communication	Yes	
	Transfer time in parallel mode	Max 50ms	
Communication		USB/RS232/Dry Contacts/Bluetooth(Android and iOS)/ BMS Communication(CAN,RS232 or RS485)/Remote Communication	
Power Swich		DC Output (Optional)	
DC Output		12 VDC±7%, 100W (Optional)	
MPPT SOLAR CHARGE			
Max. PV Array Open Circuit Voltage		500Vdc	
Max PV Panel Power		8000W	11000W
Start-up Voltage		80Vdc ±5Vdc	
PV Array MPPT Voltage Range		90~450Vdc	
Max Charging Current		18A x 2	
ENVOROMENTAL			
Operating Temperature Range		-10°C to 50°C	
Storage temperature		-15°C~60°C	
Humidity		5% to 95% Relative Humidity (Non-condensing)	
DIMENSION & WEIGHT			
W x D x H (mm)		432.5 x 147.4 x 553.6	
Weight (kg)		18.4	
STANDARDS			
Safety Certification		CE	

*Note: Parallel feature will be disabled when only PV power is available.