

# ECPC 50-US



## LEADING - EDGE TECHNOLOGY

### Overview

Large capacity all-in-one hybrid inverter for commercial application, supporting up to 600kW system capacity

### Features



All-in-one hybrid inverter



Seamless on/off grid transfer



Programmable working mode



Supports remote control of DG

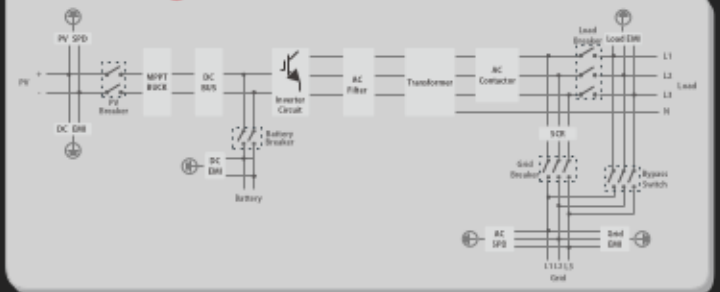


Touchscreen LCD



Quadruple capacity by paralleling 4 units

### Block Diagram



# ECPC 50-US Datasheet

## AC (Grid-connected)

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Apparent power: 55kVA  
Rated power: 50kW  
Rated voltage: 240V or 480V  
Rated current: 72A  
Voltage range: 360V-440V  
Rated frequency: 50/60Hz  
Frequency range: 45-55/55-65 Hz  
THDI: <3%  
PF: 0.8lagging~0.8leading  
AC connection: 3/N/PE  
AC input: 100kVa

## AC (Off-grid)

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Apparent power: 55kVA  
Rated power: 50kW  
Rated voltage: 240V or 480V  
Rated current: 72A  
THDU:  $\leq 2\%$  linear  
Rated frequency: 50/60Hz  
Overload capability: 110%-10 mins 120% - 1 min

## DC(Battery and PV)

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Max. PV open-circuit voltage: 1000V DC  
Max. PV power: 75kWp  
PV MPPT voltage range: 480V - 800V DC  
Battery voltage range at Max. charge power: 500V-600V  
Battery voltage range: 352-600V  
Max. charge power: 75kW  
Max. discharge power: 55kW  
Max. charge current: 150A  
Max. discharge current: 156A

## General Information

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Protection degree: IP20  
Noise emission: <65dB(A)@1m  
Operating temperature: -25 °C ~ +55 °C  
Cooling: Forced-air  
Relative humidity: 0-95% non-condensing  
Maximum altitude: 6000m (derate over 3000m)  
Dimension (W/H/D): 950/1850/750mm  
Weight: 610 kg  
Build-in transformer: Yes  
Transfer between on/off grid: Automatic $\leq 10$ ms  
Standby consumption: <30W  
Certificate: UL-1741

## Communication

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Display: Touch screen  
Communication: RS485/CAN

*\*Battery voltage is determined by the following equation:*

$$V_{min} = 352 \times V_n/V_1, V_{Max} = (V_{mpp} - 100) \times V_n/V_2, V_{Max} < 600VDC$$

*V1 is battery cell discharge cut-off voltage, V2 is battery cell boost charge voltage, Vn is battery cell nominal voltage*