

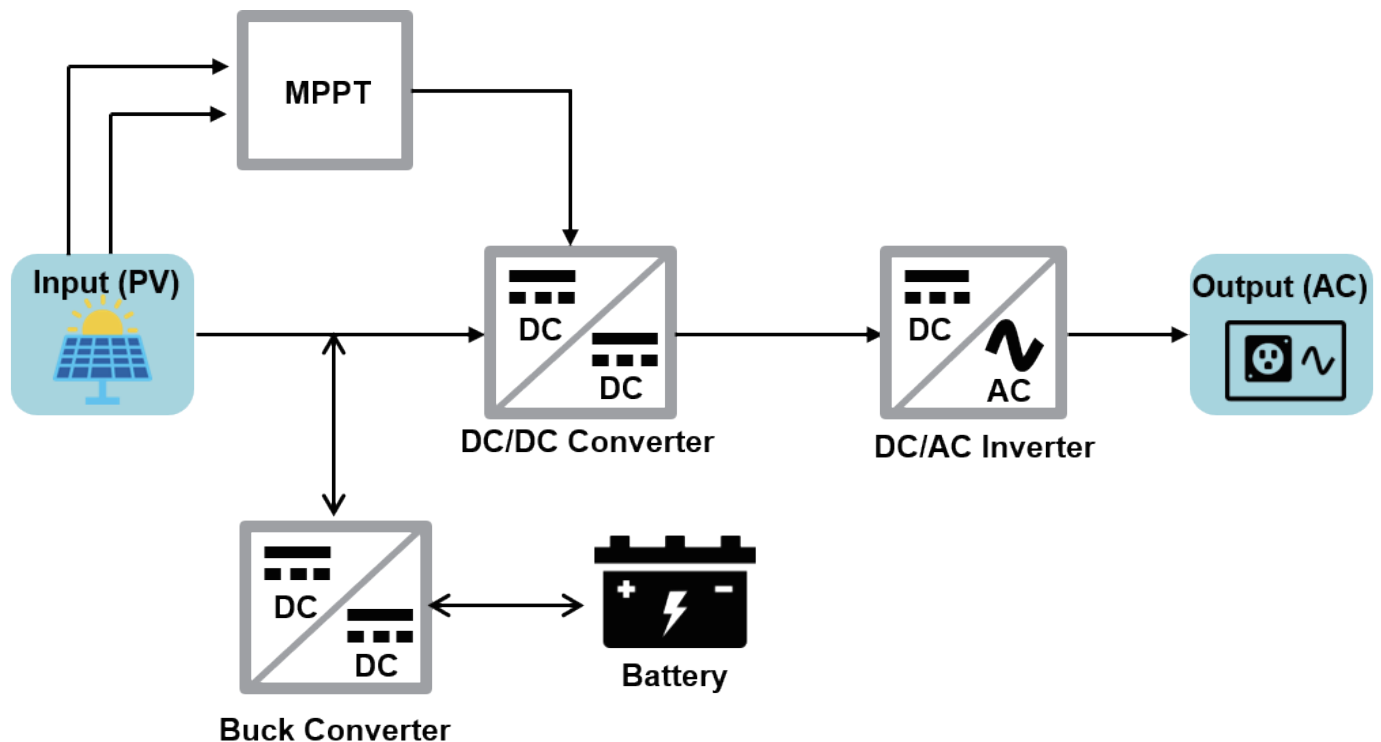
Solar Inverter Solutions

Renewable energy power management



Photovoltaic (PV) technology is one of the most advanced technologies in the renewable energy sector today. PV panel power input in the form of direct current (DC) is converted to alternative current (AC) by using solar inverters. To enhance efficiency and performances, it is crucial to choose qualified topologies and the right power devices compatible with PV inverter designs. PANJIT offers highly-efficient power semiconductor products for PV inverter applications.

➤ Photovoltaic Inverter System Block



➤ Recommended Products

PANJIT power semiconductor products are designed to optimize application performances with high SOA and avalanche capabilities. PANJIT offers robust and reliable MOSFETs, FREDs, SiC diodes, and IGBTs for PV inverters.

Product Category	Product Family	Series	Key Specification	Package
DC-DC Converter				
High Voltage MOSFET	Super Junction MOSFET	PJM series	600V / R _{DS(ON)} 40 ~ 190mΩ	TO-247AD-3LD
			650V / R _{DS(ON)} 20 ~ 180mΩ	
IGBT	High Speed Field Stop Trench	PTG series	650V / 40 ~ 75A	TO-247-3L
			1200V / 40 ~ 75A	
FRED	Low Trr	PSD Series	600V / 30 ~ 60A	TO-247AD-2LD TO-247AD-3LD
			1200V / 30 ~ 60A	
SiC Diode	Low Qc	PCD series	650V / 20 ~ 40A	TO-247AD-2LD TO-247AD-3LD
			1200V / 20 ~ 40A	
DC-AC Inverter				
IGBT	High Speed Field Stop Trench	PTG series	650V / 40 ~ 100A	TO-247-3L, TO-247-PLUS
			1200V / 15 ~ 75A	
High Voltage MOSFET	Super Junction MOSFET	PJM series	600V / R _{DS(ON)} 40 ~ 190mΩ	TO-247AD-3LD
			650V / R _{DS(ON)} 20 ~ 180mΩ	
DC-DC Buck Converter				
High Voltage MOSFET	Super Junction MOSFET	PJM series	600V / R _{DS(ON)} 40 ~ 190mΩ	TO-247AD-3LD
			650V / R _{DS(ON)} 20 ~ 180mΩ	
MV MOSFET	SGT MOSFET	PSM series	100V / <3.3mΩ	TO-220AB TO-LL
			150V / <7.5mΩ	