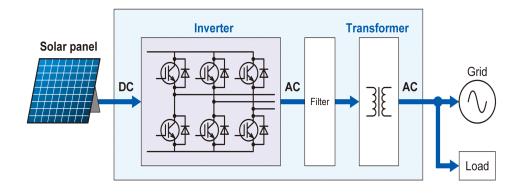


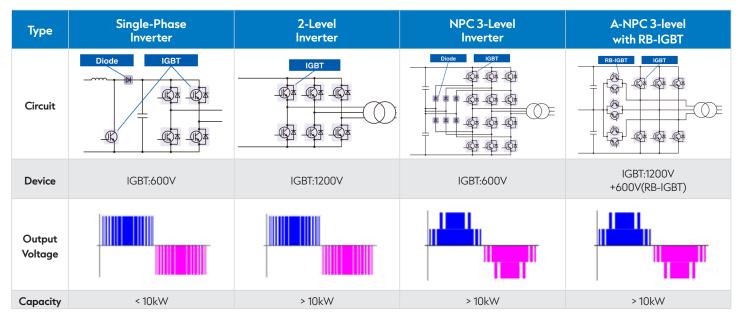


Solar

Power conditioners are necessary to convert solar-panel generated DC power into the AC power needed for residential consumption and for the recovery of the power to power company power systems.



Conversion Circuit Example





IGBT Modules for Solar Inverters

2-Level Inverters

2 level topology (condition: Vdc rating = 450V, Vdc max = 850V)

PCS	Device Rating	IGBT V Series	IGBT X Series	Number of Parallel
10kW	1200V/40A	-	FGW40XS120C	1
15kW	1200V/50A	6MBI50VA-120-50 6MBI50VW-120-50	-	1
20kW	1200V/75A	2MBI75VA-120-50 6MBI75VA-120-50 6MBI75VW-120-50	FGW75XS120C	1
30kW	1200V/100A	2MBI100VA-120-50 6MBI100VA-120-50 6MBI100VW-120-50 6MBI100VB-120-50 6MBI100VX-120-50	2MBI100XAA120-50 6MBI100XAE120-50 6MBI100XBA120-50 6MBI100XXA120-50	1
	1200V/150A	2MBI150VA-120-50 2MBI150VB-120-50 6MBI150VB-120-50 6MBI150VX-120-50	2MBI150XAA120-50 6MBI150XBA120-50 6MBI150XXA120-50	1
	1200V/180A	6MBI180VB-120-50 6MBI180VX-120-50	- 2MBI200XBE120-50	1
50kW	1200V/200A	2MBI200VB-120-50 2MBI200VH-120-50	2MBI200XBE120-50 2MBI200XAA120-50 6MBI200XBA120-50 6MBI200XBE120-50 6MBI200XXA120-50 6MBI200XXE120-50	1
	1200V/300A	2MBI300VD-120-50 2MBI300VH-120-50 2MBI300VE-120-50 2MBI300VN-120-50	2MBI300XBE120-50 2MBI300XHA120-50 2MBI300XNA120-50	1
100kW	1200V/450A	2MBI450VH-120-50 2MBI450VE-120-50 2MBI450VN-120-50	2MBI450XEE120-50 2MBI450XHA120-50 2MBI450XNA120-50	1
125kW	1200V/600A	2MBI600VE-120-50 2MBI600VN-120-50 2MBI600VXA-120E-50	2MBI600XDE120-50 2MBI600XHA120-50 2MBI600XEE120-50 2MBI600XNG120-50	1
	1200V/900A	2MBI900VXA-120E-50 2MBI900VXA-120P-50	2MBI900XXA120P-50	1
250kW	1200V/1200A	-	2MBI1200XXE120P-50	1
	1200V/1400A	2MBI1400VXB-120E-50 2MBI1400VXB-120P-50	2MBI1400XXB120P-50	1
	1200V/900A x 2p	2MBI900VXA-120E-50 2MBI900VXA-120P-50	2MBI900XXA120P-50	2
5001744	1200V/1800A	-	2MBI900XXA120P-50	1
500kW	1200V/1200A x 2p	-	2MBI1200XXE120P-50	2
	1200V/1400A x2p	2MBI1400VXB-120E-50 2MBI1400VXB-120P-50	2MBI1400XXB120P-50	2
	1200V/900A x 4p	2MBI900VXA-120E-50 2MBI900VXA-120P-50	2MBI900XXA120P-50	4
1000kW	1200V/1200A x 4p	-	2MBI1200XXE120P-50	4
	1200V/1400A x 4p	2MBI1400VXB-120E-50 2MBI1400VXB-120P-50	2MBI1400XXB120P-50	4





NPC 3 Level Inverter

A-NPC 3 level topology (condition: Vdc rating = 450V, Vdc max = 850V)

PCS	Device Rating	IGBT V Series	IGBT X Series
15kW	1200V/50A	12MBI50VN-120-50 12MBI50VX-120-50	1
20kW	1200V/75A	12MBI75VN-120-50 12MBI75VX-120-50	1
30kW	1200V/100A	12MBI100VN-120-50 12MBI100VX-120-50	1
50kW	1200V/300A 1200V/340A	4MBI300VG-120R-50 4MBI340VF-120R-50	1
100kW	1200V/400A 1200V/450A	4MBI400VF-120R-50 4MBI450VB-120R1-50 2MBI450VH-120-50 2MBI450VH-120F-50	1
125kW	1200V/300A ×2p 1200V/650A	4MBI300VG-120R-50 4MBI650VB-120R1-50	2 1
250kW	1200V/300A ×4p 1200V/900A 1200V/600A (for 1500VDC)	4MBI300VG-120R-50 4MBI900VB-120R1-50 4MBI900VB-120RA-50 4MBI600VC-120-50	4 1 1 1
500kW	1200V/900A ×2p 1200V/600A ×2p (for 1500VDC)	4MBI900VB-120R1-50 4MBI900VB-120RA-50 4MBI600VC-120-50	2
1000kW	11200V/900A ×4p 1200V/600A ×4p (for 1500VDC)	4MBI900VB-120R1-50 4MBI900VB-120RA-50 4MBI600VC-120-50	4