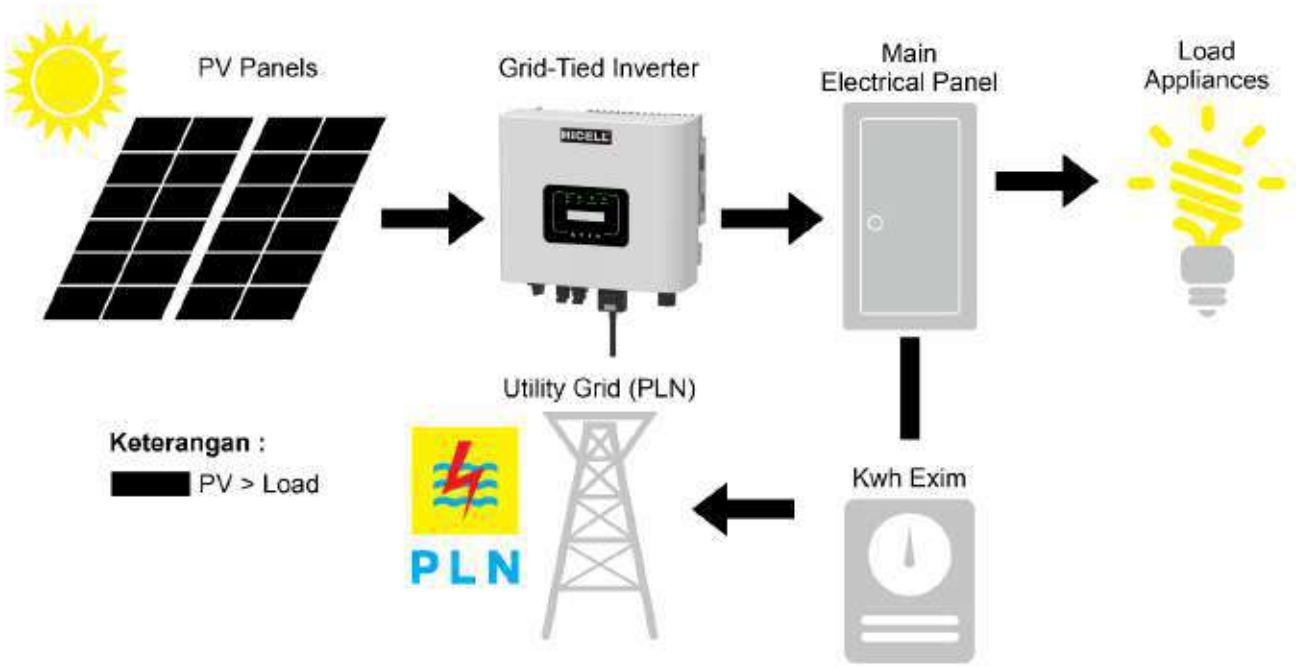
HiCELL ONGRID (Tanpa Baterai)

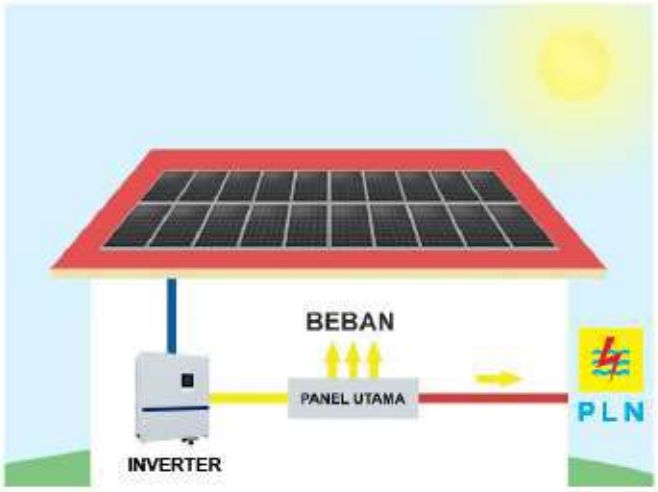


Cara Kerja Sistem Ongrid

1. Solar Panel merubah sinar matahari menjadi arus listrik DC.
2. Inverter merubah arus listrik DC menjadi arus listrik AC, yang sinkron ke jaringan listrik.
3. Listrik AC dikirim ke panel listrik utama yang terhubung langsung ke jaringan.
4. KWh Exim menghitung kelebihan energi yang dihasilkan oleh sistem PV, akan dikirim kembali ke jaringan listrik dan otomatis mengurangi beban listrik tertagih.

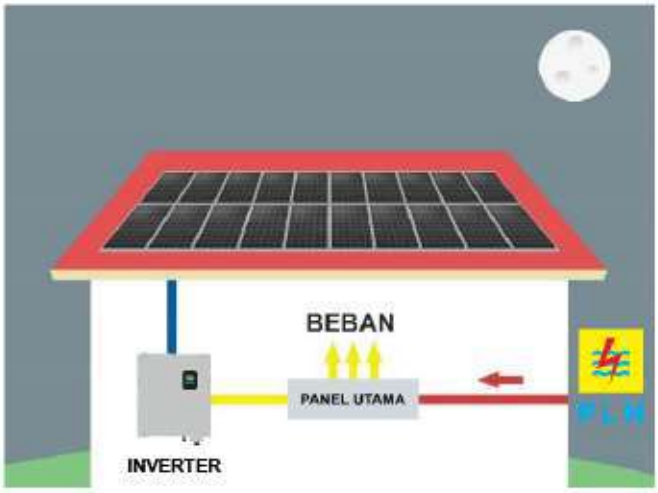
Cuaca Cerah

Kelebihan energi matahari akan diekspor ke jaringan listrik.



Cuaca Berawan / Malam

Energi matahari tidak mencukupi, sisa energi akan diimpor dari jaringan listrik.



ONGRID Inverter

String Inverter & Microinverter

Inverter merupakan alat converter listrik yang mengubah arus DC (Direct Current) menjadi arus AC (Alternating Current), hasil dari arus AC tersebut memiliki voltase dan frekuensi tertentu sesuai kebutuhan beban.

Penggunaan inverter dapat ditemukan di berbagai peralatan elektronik, mulai dari yang kecil seperti komputer sampai pada sistem PLTS yang memiliki arus listrik yang lebih tinggi.

ONGRID String Inverter 3 kW – 7,5 kW

1 phase

Feature Highlights:

- ✓ Wifi Plugin (included)
- ✓ Up to 2 MPPT Module Level Monitoring
- ✓ IP65 Protection Degree
- ✓ Zero Export Application (optional)
- ✓ Wide Output Range Voltage

ONGRID String Inverter 6 kW - 30 kW

3 phase

Feature Highlights:

- ✓ Wifi Plugin (included)
- ✓ 2 MPPT Module Level Monitoring
- ✓ IP65 Protection Degree
- ✓ Zero Export Application (optional)
- ✓ Wide Output Range Voltage

ONGRID String Inverter 50 kW – 60 kW

3 phase

Feature Highlights:

- ✓ Wifi Plugin (included)
- ✓ 4 MPPT Module Level Monitoring
- ✓ IP65 Protection Degree
- ✓ Zero Export Application (optional)
- ✓ Wide Output Range Voltage

ONGRID String Inverter 80 kW - 100 kW

3 phase

Feature Highlights:

- ✓ Wifi Plugin (included)
- ✓ 6 MPPT Module Level Monitoring
- ✓ IP65 Protection Degree
- ✓ Zero Export Application (optional)
- ✓ Wide Output Range Voltage

ONGRID Microinverter 1 kW

1 phase

Feature Highlights:

- ✓ Wifi Plugin (included)
- ✓ 2 MPPT Module Level Monitoring
- ✓ IP67 Protection Degree
- ✓ Easy Cable Management

ONGRID Microinverter 2 kW

1 phase

Feature Highlights:

- ✓ Wifi Plugin (included)
- ✓ 4 MPPT Module Level Monitoring
- ✓ IP67 Protection Degree
- ✓ Max. DC input current of 13A, adapt to 550W PV module
- ✓ Wide Output Range Voltage
- ✓ Easy Cable Management

ONGRID String Inverter, 1 Phase 3kW - 7,5 kW

Model	SI-3K-1PH	SI-4K-1PH	SI-5K-1PH	SI-7.5K-1PH
Input Side				
Max. DC Input Power (kW)	3.9	5.2	6.5	9.8
Max. DC Input Voltage (V)	550			
Start-up DC Input Voltage (V)	80			
MPPT Operating Range (V)	70~500			
Max. DC Input Current (A)	13	13+13	13+13	13+26
Max. Short Circuit Current (A)	19.5	19.5+19.5		19.5+39
Number of MPPT / Strings per MPPT	1 / 1	2 / 1		2 / 1+2
Output Side				
Rated Output Power (kW)	3	4	5	7.5
Max. Active Power (kW)	3.3	4.4	5.5	8.25
Nominal Output Voltage / Range (V)	L/N/PE 220V/187V-242V, 230V/ 195.5V-253V (Optional)			
Rated Grid Frequency (Hz)	50 / 60 (Optional)			
Operating Phase	Single phase			
Rated AC Grid Output Current (A)	13	17.4	21.7	32.6
Max. AC Output Current (A)	14.3	19.1	23.9	35.9
Output Power Factor	0.8 leading to 0.8 lagging			
Grid Current THD	<3%			
DC Injection Current (mA)	<0.5%			
Grid Frequency Range	47~52 or 57~62 (Optional)			
Efficiency				
Max. Efficiency	97.5%			97.7%
Euro Efficiency	97.3%			97.5%
MPPT Efficiency	>99%			
Protection				
DC Reverse-Polarity Protection	Yes			
AC Short Circuit Protection	Yes			
AC Output Overcurrent Protection	Yes			
Output Overvoltage Protection	Yes			
Insulation Resistance Protection	Yes			
Ground Fault Monitoring	Yes			
Anti-islanding Protection	Yes			
Temperature Protection	Yes			
Integrated DC Switch	Yes			
Remote software upload	Yes			
Remote change of operating parameters	Yes			
Surge protection	DC Type II / AC Type II			
General Data				
Size (mm) (WxHxD)	280×272.5×184	330×323×190		330×410×198.5
Weight (kg)	4.8	7.5		15.7
Topology	Transformerless			
Internal Consumption	<1W (Night)			
Running Temperature	-25~65℃, >45℃ derating			
Ingress Protection	IP65			
Noise Emission (Typical)	<25 dB			
Cooling Concept	Natural cooling			
Max. Operating Altitude Without Derating	2000m			
Warranty	5 years			
Grid Connection Standard	CEI 0-21, VDE-AR-N 4105, NRS 097, IEC 62116, IEC 61727, G99, G98, VDE 0126-1-1, RD 1699, C10-11			
Operating Surroundings Humidity	0-100%			
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2			
Features				
DC Connection	MC-4 mateable			
AC Connection	IP65 rated plug			
Display	LCD1602			
Interface	RS485/RS232/Wifi/LAN			

ONGRID String Inverter, 3 Phase 6kW - 30 kW

Model	SI-6K-3PH	SI-10K-3PH	SI-15K-3PH	SI-20K-3PH	SI-30K-3PH
Input Side					
Max. DC Input Power (kW)	7.8	13	19.5	26	39
Max. DC Input Voltage (V)	1000				
Start-up DC Input Voltage (V)	140		250		
MPPT Operating Range (V)	120~850		200~850		
Max. DC Input Current (A)	13+13		13+26	32+32	40+40
Max. Short Circuit Current (A)	19.5+19.5		19.5+39	48+48	60+60
Number of MPPT / Strings per MPPT	2 / 1		2/1+2	2 / 2	2 / 3
Output Side					
Rated Output Power (kW)	6	10	15	20	30
Max. Active Power (kW)	6.6	11	16.5	22	33
Nominal Output Voltage / Range (V)	3L/N/PE 380V/323V-418V, 400V/340V-440V				
Rated Grid Frequency (Hz)	50 / 60 (Optional)				
Operating Phase	Three phase				
Rated AC Grid Output Current (A)	8.7	14.5	21.7	29	43.5
Max. AC Output Current (A)	9.6	15.9	23.9	31.9	47.9
Output Power Factor	0.8 leading to 0.8 lagging				
Grid Current THD	<3%				
DC Injection Current (mA)	<0.5%				
Grid Frequency Range	47~52 or 57~62 (Optional)				
Efficiency					
Max. Efficiency	98.3%		98.5%	98.6%	
Euro Efficiency	97.5%			97.8%	
MPPT Efficiency	>99%				
Protection					
DC Reverse-Polarity Protection	Yes				
AC Short Circuit Protection	Yes				
AC Output Overcurrent Protection	Yes				
Output Overvoltage Protection	Yes				
Insulation Resistance Protection	Yes				
Ground Fault Monitoring	Yes				
Anti-islanding Protection	Yes				
Temperature Protection	Yes				
Integrated DC Switch	Yes				
Remote software upload	Yes				
Remote change of operating parameters	Yes				
Surge protection	DC Type II / AC Type II				
General Data					
Size (mm) (WxHxD)	330×457×185		333x472x202	330×508×206	362×577×215
Weight (kg)	10		15	20.8	25.5
Topology	Transformerless				
Internal Consumption	<1W (Night)				
Running Temperature	-25~65℃, >45℃ derating				
Ingress Protection	IP65				
Noise Emission (Typical)	<25 dB			<45 dB	
Cooling Concept	Natural cooling			Smart cooling	
Max. Operating Altitude Without Derating	2000m				
Warranty	5 years				
Grid Connection Standard	CEI 0-21, VDE-AR-N 4105, NRS 097, IEC 62116, IEC 61727, G99, G98, VDE 0126-1-1, RD 1699, C10-11				
Operating Surroundings Humidity	0-100%				
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				
Features					
DC Connection	MC-4 mateable				
AC Connection	IP65 rated plug				
Display	LCD1602				
Interface	RS485/RS232/Wifi/LAN				

Note : Model, varian, harga dan spesifikasi dapat berubah sewaktu-waktu tanpa pemberitahuan.

ONGRID String Inverter, 3 Phase 50kW - 100 kW

Model	SI-50K-3PH	SI-60K-3PH	SI-70K-3PH	SI-80K-3PH	SI-100K-3PH
Input Side					
Max. DC Input Power (kW)	65	78	91	104	150
Max. DC Input Voltage (V)	1000				
Start-up DC Input Voltage (V)	250				
MPPT Operating Range (V)	200~850				
Max. DC Input Current (A)	40+40+40+40				40+40+40+40+40+40
Max. Short Circuit Current (A)	60+60+60+60				60+60+60+60+60+60
Number of MPPT / Strings per MPPT	4 / 3		4 / 4		6 / 4
Output Side					
Rated Output Power (kW)	50	60	70	80	100
Max. Active Power (kW)	55	66	77	88	110
Nominal Output Voltage / Range (V)	3L/N/PE 380V/323V-418V, 400V/340V-440V				
Rated Grid Frequency (Hz)	50 / 60 (Optional)				
Operating Phase	Three phase				
Rated AC Grid Output Current (A)	72.4	87	101.5	115.9	144.9
Max. AC Output Current (A)	79.7	95.7	111.6	127.5	159.4
Output Power Factor	0.8 leading to 0.8 lagging				
Grid Current THD	<3%				
DC Injection Current (mA)	<0.5%				
Grid Frequency Range	47~52 or 57~62 (Optional)				
Efficiency					
Max. Efficiency	98.7%				
Euro Efficiency	98%		98.3%		
MPPT Efficiency	>99%				
Protection					
DC Reverse-Polarity Protection	Yes				
AC Short Circuit Protection	Yes				
AC Output Overcurrent Protection	Yes				
Output Overvoltage Protection	Yes				
Insulation Resistance Protection	Yes				
Ground Fault Monitoring	Yes				
Anti-islanding Protection	Yes				
Temperature Protection	Yes				
Integrated DC Switch	Yes				
Remote software upload	Yes				
Remote change of operating parameters	Yes				
Surge protection	DC Type II / AC Type II				
General Data					
Size (mm) (WxHxD)	647.5×537×303.5		838×568×323		
Weight (kg)	44.5		73.7		
Topology	Transformerless				
Internal Consumption	<1W (Night)				
Running Temperature	-25~65℃, >45℃ derating				
Ingress Protection	IP65				
Noise Emission (Typical)	<45 dB		<55 dB		
Cooling Concept	Smart cooling				
Max. Operating Altitude Without Derating	2000m				
Warranty	5 years				
Grid Connection Standard	CEI 0-21, VDE-AR-N 4105, NRS 097, IEC 62116, IEC 61727, G99, G98, VDE 0126-1-1, RD 1699, C10-11				
Operating Surroundings Humidity	0-100%				
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				
Features					
DC Connection	MC-4 mateable				
AC Connection	IP65 rated plug				
Display	LCD1602				
Interface	RS485/RS232/Wifi/LAN				

ONGRID Microinverter, 1 Phase 1 kW - 2 kW

Model	MI-1000	MI-2000
Input Data (DC)		
Recommended input Power (STC)	210~600W (2 Pieces)	210~600W (4 Pieces)
Maximum input DC Voltage	60V	
MPPT Voltage Range	25~55V	
Operating DC Voltage Range	20~60V	
Max. DC Short Circuit Current	19.5A×2	19.5A×4
Max. input Current	13A×2	13A×4
Number of MPPT / Strings per MPPT	2 / 1	4 / 1
Output Data (AC)		
Rated output Power	1000W	2000W
Rated output Current	4.4A	8.7A
Nominal Voltage / Range (this may vary with grid standards)	220V/187~242V	220V/176~242V
Nominal Frequency / Range	50 / 60Hz	
Extended Frequency / Range	47.5~51.5Hz	
Power Factor	>0.99	
Maximum units per branch	5	3
Efficiency		
CEC Weighted Efficiency	95%	
Peak Inverter Efficiency	96.5%	
Static MPPT Efficiency	99%	
Night Time Power Consumption	50mW	
Mechanical Data		
Ambient Temperature Range	-40~65℃	
Size (mm) (Without mounting bracket and cable) (W×H×D)	212×230×40	267×300×42
Weight (kg)	3.15	5.2
Cooling Concept	Natural cooling	
Enclosure Environmental Rating	IP67	
Features		
Compatibility	Compatible with 60~72 cell PV modules	
Communication	Power line / WIFI / Zigbee	
Warranty	10 years	

Note : Model, varian, harga dan spesifikasi dapat berubah sewaktu-waktu tanpa pemberitahuan.