

You see the sunrise daily
We see an infinite source of power



G-Vertor | RECon Line Solar Inverter

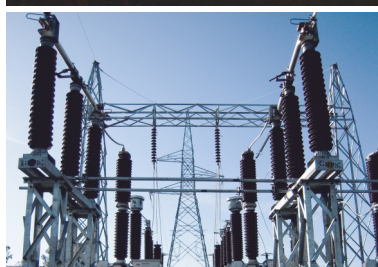
Larsen & Toubro is a multi-billion dollar technology, engineering, construction, manufacturing and services conglomerate with global operations having seven decades of sustained leadership in its major business lines. L&T offers India's widest range of LV and MV switchgear. For solar photovoltaic (PV) plants, it has a range of robust, cost-effective solutions. L&T has installed some of India's largest PV plants.

Drawing from our extensive experience in solar power and power electronics, we bring to your solar plant a state-of-the-art Solar Grid Inverter. This high-performance solar inverter offers 99.3% efficiency. It has a high capacity that gives your solar installation increased levels of productivity. Its modular design makes it easy to install, operate and maintain, increasing its durability and efficiency over the entire lifecycle of your project. Despite India's tough conditions, our solar grid inverter performs at consistently high levels, as it is specifically engineered for India's harsh environment. What's more, easy availability of spares and prompt service maximize uptime of your solar plant.

More advantages from L&T G-Vertor

- 99.3% efficiency of solar modules
- Maximum performance in all operating conditions, in-built MPPT
- Suitable for a harsh environment (-10°C to +55°C)
- Low auxiliary power consumption
- Easy to install, operate and maintain
- Scalability

L&T's G-Vertor RECon Line complies with the specifications laid down by the Ministry of New and Renewable Energy (MNRE) under the National Solar Mission for Solar Projects.



Enhanced reliability, year on year

The L&T G-Vertor RECon Line is designed to provide the highest levels of reliability at all times. Moreover, L&T also provides impeccable service support across the country, ensuring the highest level of up-time, throughout the working life of the inverter.

Features that ensure high reliability:

Lifecycle Services

- Annual Maintenance Contract
- Operations & maintenance services
- Spares support
- Service centres countrywide
- Upgrades & migration services
- Training services
- Remote monitoring and assistance

Compact and Modular Design

- Fast and easy installation
- Effective design for thermal management
- Efficient utilization of space
- Design suitable for easy maintenance

Communication Capabilities

- Ethernet / RS-485 / RS-232 / USB
- Internal memory storage

Grid Compatibility

- Compliant to Indian grid code
- Auto power factor correction
- Power management functions

Specifications

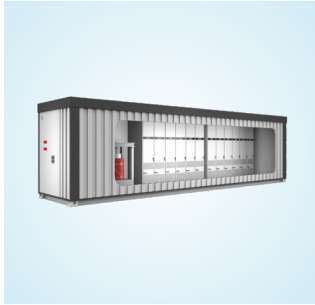
RECon Line Central Inverters				
RECon 2.30H1		409	818	1227
Input (DC)				
Suggested DC power	kWp	495	990	1485
Rated input current	A	650	1300	1950
Max. input voltage in open circuit	V	1000	1000	1000
MPPT range*	V	600 - 885	600 - 885	600 - 885
Output (AC)				
Rated output voltage	V	400	400	400
Frequency	Hz	50	50	50
Rated power	kW	409	818	1227
Rated current	A	590	1180	1770
Power factor range	-	-0.9 to + 0.9	-0.9 to + 0.9	-0.9 to + 0.9
Total harmonic distortion	%	<3	<3	<3
Auxiliary power				
Auxiliary supply voltage range (UPS)	V	195 - 253	195 - 253	195 - 253
Auxiliary supply power (Operation)	W	270	540	810
Standby consumption	W	50	100	150
Efficiency				
Maximum efficiency	%	99.3	99.3	99.3
Euro efficiency	%	98.7	98.7	98.7
Mechanical details				
Dimensions (WxHxD)	mm	1100x2200x800	2200x2200x800	3300x2200x800
Weight	kg	750	1500	2250
Protection class	-	IP 20	IP 20	IP 20
Temperature				
Operating Ambient temperature range (Nom. Rating)	°C	-10°C/ +50°C	-10°C/ +50°C	-10°C/ +50°C
Protection & Monitoring Features				
Configuration	Master-Slave / Multi-Master			
In-built features	<div><div><ul style="list-style-type: none">• Anti-Islanding• Surge Protection• Grid Monitoring</div><div><ul style="list-style-type: none">• Negative Pole Grounding• AC and DC side Protection• Input String Monitoring</div></div>			
Power management functions	<div><div><ul style="list-style-type: none">• Insulation monitor• HVRT / LVRT• ZVRT</div><div><ul style="list-style-type: none">• Power factor Control• Grid Fault Support• Power / Frequency Control</div></div>			
Communication / Interfaces				
Local user interface	Touch screen display			
Communication	RS232, RS485, USB, Ethernet			
Compliances				
EMC	IEC 61000 – 6 – 2 / IEC 61000 – 6 – 4			
Electrical Safety	IEC 62103/ IEC 62109-1&2			
Anti-Islanding Protection	IEEE 1547 / UL1741 / IEC 62116			
Euro Efficiency	IEC 61683: 1999-11			
Environmental Testing	IEC 60068 -2/ IEC 62093			

* Extended MPPT range available with appropriate O/P voltages and power

Balance of Systems (BOS)

L&T delivers high-efficiency power evacuation systems on concept-to-commissioning basis for utility-scale solar PV plants. Its BOS solutions comprise HV/MV switchboards, RMUs, relays, transformers, meters, SCADA and control systems. L&T designs, engineers, manufactures, tests and installs electrical systems, electrical protection and control systems and civil installations adhering to prevailing electrical standards.

Other Solar Solutions



g-RayStation -
Outdoor Substation

It is a "plug & play" - Container based compact substation equipped with inverters, transformer, medium voltage switchgear, metering, surge arresters, protection and control equipments, auxiliary power and control system.



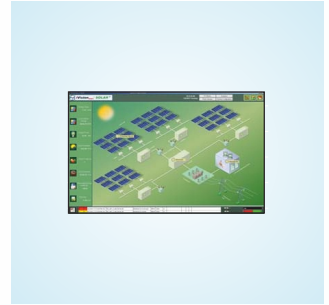
g-RayBox -
String Monitoring Box

L&T's **g-RayBox** allows the monitoring of the performance of each string of the PV plant through high accuracy direct current measurement.



g-RayCon -
Solar Controller

The **g-RayCon** is a comprehensive industrialized solution for monitoring & data acquisition of the complete solar PV plant, seamlessly integrating with the subsystems in the plant.



iVision_{max}-Solar -
Solar SCADA

It is a cost effective tool which continuously controls and monitors the plant, thereby resulting in lower downtime and enhanced improvement of the plant's overall profitability.



Control & Automation

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