



## ABOUT US

**Exaltation Enterprises** is a professional, full-service construction & Electrical firm focused on delivering quality and performance in the built environment.

We proudly share the passion and forward thinking of our clients, focusing together on making a positive impact in our communities nationwide.

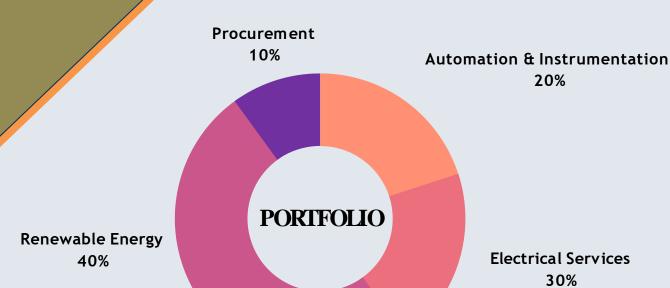
#### Mission

Our mission is to create, and maintain a company that can be proud of its operation, its people, and its contribution to, and place in, our society.

**Specializes in Design Built** Solar & Turnkey Solutions

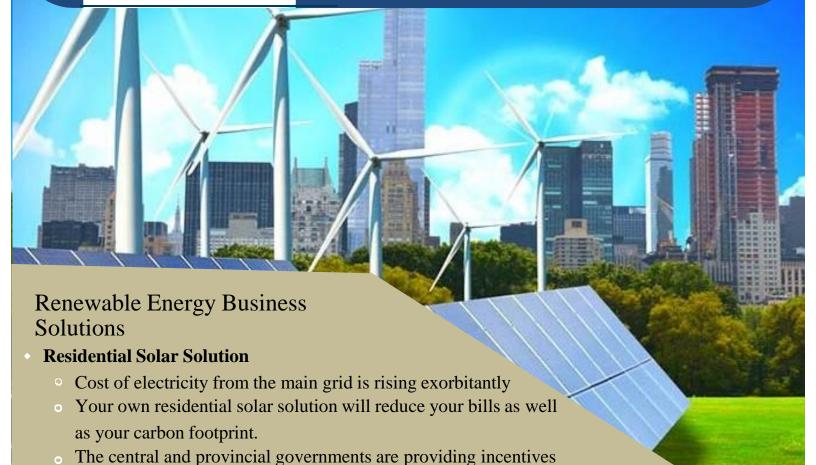
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## RENEWABLE **ENERGY**



like tax relief to solar power producers. Installing a residential solar solution will grow the value of

your home.

#### **Commercial Solar Solution**

• Exaltation Enterprises has been in the business of providing solar systems in Pakistan long enough and knows it well enough to suggest/provide a good solution for varying need to commercial ventures such as organizations, educational institutions, hospitals etc.

#### **Solar Energy In Agriculture**

- Solar tubewell for irrigation
- Solar-powered pump for community water supply
- Solar-powered system for farm-houses
- Solar Chakki

#### **Industrial Solar**

- solution Food
- **Industry Textile**
- **Industry Cement**
- Industry Metals &
- Chemicals

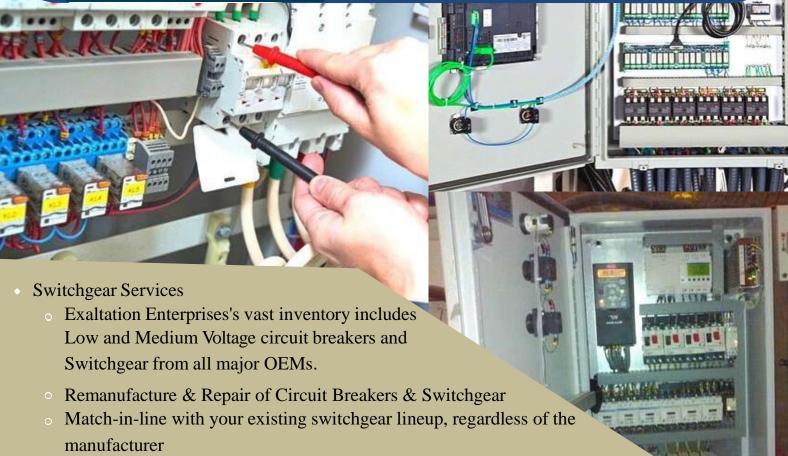
**PVC & Plastic Industry** 

#### Solar & Wind Power Consultancy

- Service A highly skilled team of
- professionals Best quality resources Project completion within a fixed time
- frame
- Os-site inspection The solar system's structural, electrical & engineering designing according to users' specifications



## **Electrical ServiceS**



- Electric Pole Services
  - Erection/Installation of LT/HT Poles.

C.T / P.T / Isolator and Surge arrestor

• Earthing/Grounding of poles, transformers and related equipment.

• Installation and Commissioning of APF/ MCC / Generator Sync Panel

Installation of Light Poles /Solar Street Lights

• Installation of Variable Frequency Driver Panels

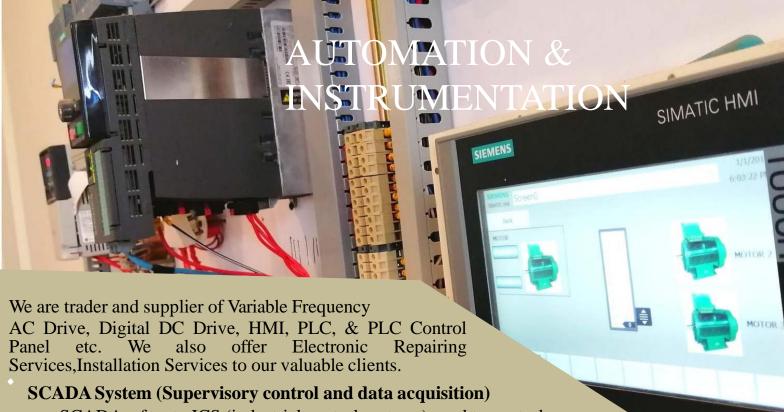
- Decorative poles with lighting
- Installation of Aerial Bundled Cables and other conductors

#### Turnkey Solutions:

- Design and Installation of Electrical Distribution Panel
- Load calculation / installtion of the electrical wiring of Residential and commercial buildings.
- Energy Efficient Lighting Solutions
- Retrofit expertise (Lighting retrofits, Switchgear, panelboard, Motor control panels, Chillers,
   Boilers, Ductwork, Building controls, Electrical boxes and More



## AUTOMATION & INSTRUMENTATION



SCADA refers to ICS (industrial control systems) used to control infrastructure processes, facility-based processes, or industrial processes.

- The apparatus used by a human operator; all the processed data are presented to the operator
- A supervisory system that gathers all the required data about the process
  Remote Terminal Units (RTUs) connected to the sensors of the process, which helps convert the sensor signals to the digital data and send the data to the supervisory stream
- Programmable Logic Controller (PLCs) used as field devices
- Communication infrastructure connects the Remote Terminal Units to the supervisory system
- The HMI, or Human Machine Interface, is an apparatus that gives the processed data to the human operator. A human operator uses HMI to control processes.
- PLC & DCS Installation, Programming and Start-Up
- **Services Configuration of AC / DC Drives**
- **Installation and Calibration of Field/ Process**
- **Instrument Process instrumentation and control**
- drawings
  - **On-site troubleshooting**
  - Wireless communication system to remote monitoring application and Start-Up Services. IoT based smart Automation.

## TYPES OF INVERTORS



#### **On-Grid Inverter**

A solar inverter, converts the variable direct current (DC) output of a photovoltaic (PV) solar panel into a utility frequency alternating current (AC) that can be fed into a commercial electrical grid.

#### **Grid Tied Inverter**

A grid-tie inverter converts direct current (DC) into an alternating current (AC) suitable for injecting into an electrical power grid, normally 120 V RMS at 60 Hz or 240 V RMS at 50 Hz.

#### Off- Grid Inverter

An off-grid inverter needs a battery bank to function. Here's how it works: your solar panels feed DC power into the batteries. Then your inverter takes that power and "inverts" it, creating AC power for your home. This works essentially like a miniature power grid.

#### **Variable Frequency Drive**

A variable frequency drive (VFD) is a type of motor controller that drives an electric motor by varying the frequency and voltage of its power supply. The VFD also has the capacity to control ramp-up and ramp-down of the motor during start or stop, respectively.

#### **Hybrid Inverter**

A hybrid inverter, otherwise known as a hybrid grid-tied inverter or a battery-based inverter, combines two separate components—a solar inverter and a battery inverter—into a single piece of equipment.

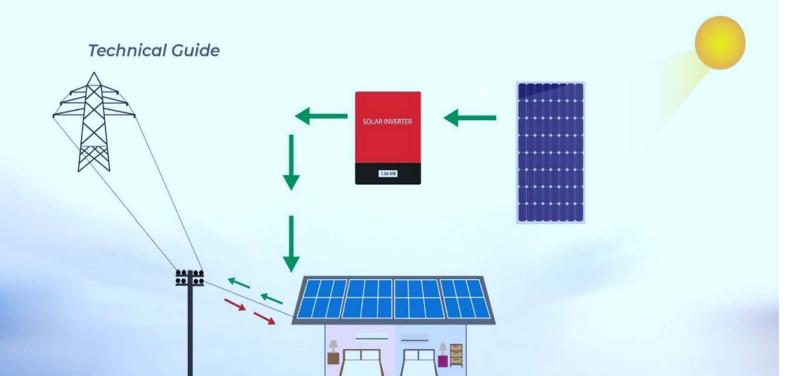




# WHAT WE OFFER

## **On-Grid Solar System**

A grid inter-tied solar power system is directly connected to the traditional electric utility company. Grid inter-tied systems allow the homeowners to get power from either the solar system or the utility grid. Switching between the solar system and the grid is seamless.

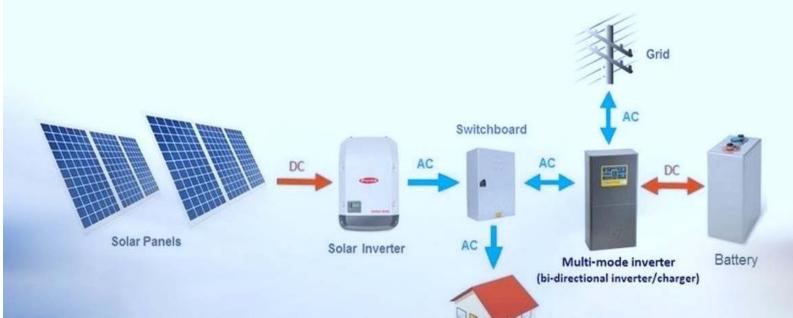




### **Hybrid Solar System**

Hybrid solar systems generate power in the same way as a common grid-tie solar system but use special hybrid inverters and batteries to store energy for later use. This ability to store energy enables most hybrid systems to also operate as a backup power supply during a blackout, similar to a UPS system.

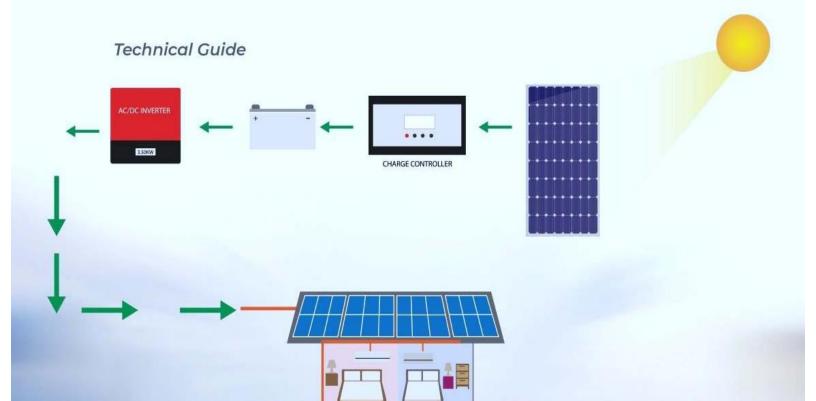
#### Technical Guide





## **Off-Grid Solar System**

An off-grid system is completely disconnected from the traditional electric power grid. Without a connection to the utility grid, batteries are essential to balance periods of excess production and excess demand.



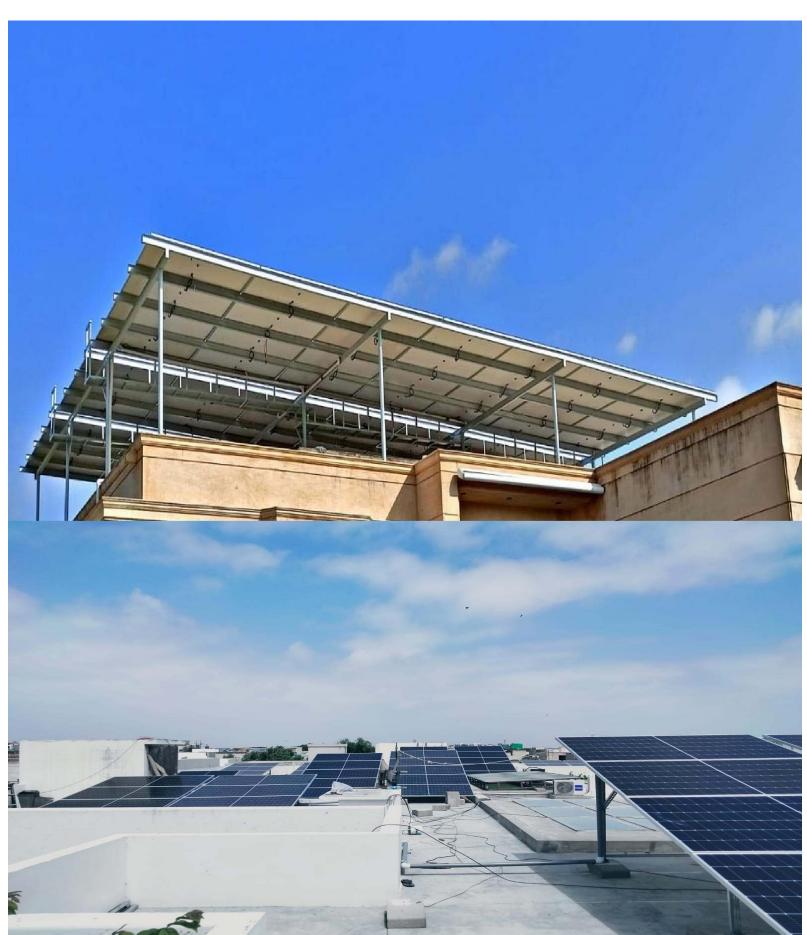








#### 40 KW ON GRID SYSTEM





#### 30 KW ON GRID SYSTEM

























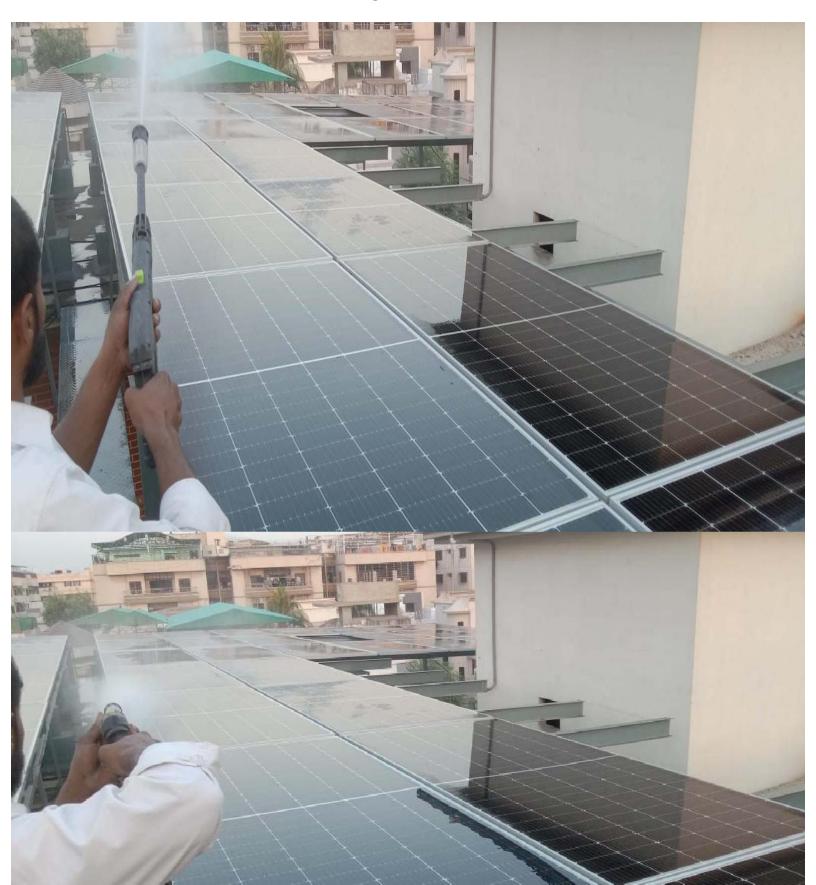
#### Cleaning Process

We keep a contract of Visit, for our customer care service, in every 3 months time. After every 15 days, the panels are passed through the cleaning process and are cleaned to maintain the efficiency of the panel.





## Cleaning Process



## **OUR PARTNERS & CUSTOMERS**















































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