**RAFAY AAMIR GULL**

**BSEE19047**

**POWER ELECTRONICS A2**

**House Load:** Approx. 9kW (800-1000 units approx.)  
**Solar System Installed:** 10KW

**Required Essentials:**

1. **Solar invertor:** Inverex Fronius 10kw SYMO 10.0-3-M
   * Max Efficiency 98.2%
   * Support Multiple Parallel
   * Zero Export
   * AC Coupled
   * Safe
   * 2 MPPT
   * Internal SPD
   * Six Time of Use Sting
   * High Power Factor
   * Touch Screen Display
   * High Surge Endurance
   * Support Generator Connection
   * **Price = Rs. 445, 980.00/-**

[Click here to buy](https://solartrade.pk/product/inverex-fronius-10kw-symo-10-0-3-m/)

1. **Solar Panels:** Jinko 400W Cheetah Mono Solar Panel

* No of Panels: 25
* Power: 400/405 W
* Vmax(p-p): 40.5 V
* Imax(p-p): 9.40 A
* Efficiency: 19.88%
* Size: 2008 x 1002 x 40 mm
* Weight: 22.5 kg
* Price per panel: Rs 20,800/-
* Total Price: Rs 520,000/-

[Click here to buy](https://solarshop.pk/product/jinko-400w-cheetah-mono-solar-panel/)

1. **PV Combiner Box:**

* No of Boxes: 2
* 2-WAY INPUT | 1-WAY OUTPUT
* Maximum Voltage 1000V
* Max DC short circuit current 15A (changeable)
* Maximum Current Output 32A
* Dimensions: 292x220x120mm
* Price = Rs. 33,500/-

[Click here to buy](https://voltaconsolar.com/solar-string-box-2way-in-1way-out-1000v.html)

1. **Solar Charge Controller:**

* No of Controllers: 1 piece
* Price = Rs. 3,000/-

[Click here to buy](https://www.daraz.pk/products/i143944026-s1305196343.html?aff_trace_key=23f0a0a86c794c8dabc087a2919c7349-1648745168793-00255-_7d9bi)

1. **Shoto (2V 1,000Ah) Dry Cell Battery**

* Total number of batteries: 5
* Price per battery: Rs. 72,000
* Total Price: Rs. 360,000  
   [Click here to buy](https://solarshop.pk/product/2v-1000ah-dry-agm-cell-shoto/)

1. **Solar Mount**

* Roof Measurement = 23.5 x 50 foot
* Size of mount: 25 × 16 × 2

