

BAHRIA COLLEGE ISLAMABAD
TECHNICAL SPECIFICATION OF SOLAR PANEL

INSTALLATION OF SOLAR PANEL 30 KV WITH 30 KV INVERTER - BOYS WING					
S.NO	DESCRIPTION	BRAND	QUANTITY	UNIT PRICE	TOTAL PRICE
1.	<p><u>SOLAR PANEL</u></p> <p>Brand: A Grade Tier-1 Power: 570 – 595 KW N Type TUV certified and 12 years Manufacturing warranty & 30 year performance warranty</p>				
2.	<p><u>INVERTER</u></p> <p>Product Power: 30 KV Type: On-grid Brand: 1 x Growatt (high MPPT, Official warranty 05 years) with built in SPD</p>				
3.	<p><u>STRUCTURE</u></p> <p>Standard elevated L2 ready frames for ground mounted rust free. Galvanized 145SWG</p>				
4.	<p><u>DC WIRE:</u></p> <p>XLPO, Single Core, Red or Black, Pakistan Cable, FAST Cable, insulation, Fire retardant, UV protected brand</p>				
5	<p><u>AC WIRE</u></p> <p>AC power cable from Solar inverter to main DB (Distribution Board) and DC wires, Earthing wires, PVC conduit (water grade), Best PVC Trunking, Lighting Arrestor, Four Earthing rods and 'U' clamps, Disconnect Switch, DB Boxes and all related accessories.</p>				
6	<p>UPVC Pipes including sockets, tees, elbows, bends etc. UPVC ducts Screws (High Quality) Rowel Plugs Cable Ties Galvanized Nuts/ Bolts Rowel Bolts Ducts, cable tray with complete accessories</p>				

7	<p><u>SAFETY EQUIPMENTS:</u></p> <p>AC MCB 63A AC MCCB 200A AC SPD 60K DC MCB 2 Pole Breaker 63A, 100 V DC SPD 40K Brand (CNC, CHINT) quantity as per system required Distribution box for AC & DC safeties (Premium Quality) All breaker/ SPD fire retardant & up to system rating.</p>				
8	<p><u>INSTALLATION</u></p> <p>Check feasibility, system designing, project execution, quality checks</p>				
9	Complete Standard installation, testing & commissioning				
10	Transportation				
11	<p><u>EARTHING</u></p> <p>Lightning arrestor antenna (brass) 4ft copper rod with size base (brass) earthing copper rod & U clamp, boring work where necessary.</p>				
12.	Net Metering				

BAHRIA COLLEGE ISLAMABAD
TECHNICAL SPECIFICATION OF SOLAR PANEL

INSTALLATION OF SOLAR PANEL 30 KV WITH 30 KV INVERTER - GIRLS WING					
S.NO	DESCRIPTION	BRAND	QUANTITY	UNIT PRICE	TOTAL PRICE
1.	<p><u>SOLAR PANEL</u></p> <p>Brand: A Grade Tier-1 Power: 570 – 595 KW N Type TUV certified and 12 years Manufacturing warranty & 30 year performance warranty</p>				
2.	<p><u>INVERTER</u></p> <p>Product Power: 30 KV Type: On-grid Brand: 1 x Growatt (high MPPT, Official warranty 05 years) with built in SPD</p>				
3.	<p><u>STRUCTURE</u></p> <p>Standard elevated L2 ready frames for ground mounted rust free. Galvanized 145SWG</p>				
4.	<p><u>DC WIRE:</u></p> <p>XLPO, Single Core, Red or Black, Pakistan Cable, FAST Cable, insulation, Fire retardant, UV protected brand</p>				
5	<p><u>AC WIRE</u></p> <p>AC power cable from Solar inverter to main DB (Distribution Board) and DC wires, Earthing wires, PVC conduit (water grade), Best PVC Trunking, Lighting Arrestor, Four Earthing rods and 'U' clamps, Disconnect Switch, DB Boxes and all related accessories.</p>				
6	<p>UPVC Pipes including sockets, tees, elbows, bends etc. UPVC ducts Screws (High Quality) Rowel Plugs Cable Ties Galvanized Nuts/ Bolts Rowel Bolts Ducts, cable tray with complete accessories</p>				

7	<p><u>SAFETY EQUIPMENTS:</u></p> <p>AC MCB 63A AC MCCB 200A AC SPD 40K DC MCB 2 Pole Breaker 63A, 100 V DC SPD 60K Brand (CNC, CHINT) quantity as per system required Distribution box for AC & DC safeties (Premium Quality) All breaker/ SPD fire retardant & up to system rating.</p>				
8	<p><u>INSTALLATION</u></p> <p>Check feasibility, system designing, project execution, quality checks</p>				
9	Complete Standard installation, testing & commissioning				
10	Transportation				
11	<p><u>EARTHING</u></p> <p>Lightning arrestor antenna (brass) 4ft copper rod with size base (brass) earthing copper rod & U clamp, boring work where necessary.</p>				
12.	Net Metering				

BAHRIA COLLEGE ISLAMABAD
TECHNICAL SPECIFICATION OF SOLAR PANEL

INSTALLATION OF SOLAR PANEL 60 KV WITH 70 KV INVERTER - ADMIN BLOCK					
S.NO	DESCRIPTION	BRAND	QUANTITY	UNIT PRICE	TOTAL PRICE
1.	<p><u>SOLAR PANEL</u></p> <p>Brand: A Grade Tier-1 Power: 570 – 595 KW N Type TUV certified and 12 years Manufacturing warranty & 30 year performance warranty</p>				
2.	<p><u>INVERTER</u></p> <p>Product Power: 70 KV Type: On-grid Brand: 1 x Growatt (high MPPT, Official warranty 05 years) with built in SPD</p>				
3.	<p><u>STRUCTURE</u></p> <p>Standard elevated L2 ready frames for ground mounted rust free. Galvanized 145SWG</p>				
4.	<p><u>DC WIRE:</u></p> <p>XLPO, Single Core, Red or Black, Pakistan Cable, FAST Cable, insulation, Fire retardant, UV protected brand</p>				
5	<p><u>AC WIRE</u></p> <p>AC power cable from Solar inverter to main DB (Distribution Board) and DC wires, Earthing wires, PVC conduit (water grade), Best PVC Trunking, Lighting Arrestor, Four Earthing rods and 'U' clamps, Disconnect Switch, DB Boxes and all related accessories.</p>				
6	<p>UPVC Pipes including sockets, tees, elbows, bends etc. UPVC ducts Screws (High Quality) Rowel Plugs Cable Ties Galvanized Nuts/ Bolts Rowel Bolts Ducts, cable tray with complete accessories</p>				

7	<p><u>SAFETY EQUIPMENTS:</u></p> <p>AC MCB 63A AC MCCB 200A AC SPD 60K DC MCB 2 Pole Breaker 63A, 100 V DC SPD 40K Brand (CNC, CHINT) quantity as per system required Distribution box for AC & DC safeties (Premium Quality) All breaker/ SPD fire retardant & up to system rating.</p>				
8	<p><u>INSTALLATION</u></p> <p>Check feasibility, system designing, project execution, quality checks</p>				
9	Complete Standard installation, testing & commissioning				
10	Transportation				
11	<p><u>EARTHING</u></p> <p>Lightning arrestor antenna (brass) 4ft copper rod with size base (brass) earthing copper rod & U clamp, boring work where necessary.</p>				
12.	Net Metering				

BAHRIA COLLEGE ISLAMABAD
TECHNICAL SPECIFICATION OF SOLAR PANEL

INSTALLATION OF SOLAR PANEL 25 KV WITH 30 KV INVERTER - SPECIAL CHILDREN SCHOOL					
S.NO	DESCRIPTION	BRAND	QUANTITY	UNIT PRICE	TOTAL PRICE
1.	<p><u>SOLAR PANEL</u></p> <p>Brand: A Grade Tier-1 Power: 570 – 595 KW N Type TUV certified and 12 years Manufacturing warranty & 30 year performance warranty</p>				
2.	<p><u>INVERTER</u></p> <p>Product Power: 30 KV Type: On-grid Brand: 1 x Growatt (high MPPT, Official warranty 05 years) with built in SPD</p>				
3.	<p><u>STRUCTURE</u></p> <p>Standard elevated L2 ready frames for ground mounted rust free. Galvanized 145SWG</p>				
4.	<p><u>DC WIRE:</u></p> <p>XLPO, Single Core, Red or Black, Pakistan Cable, FAST Cable, insulation, Fire retardant, UV protected brand</p>				
5	<p><u>AC WIRE</u></p> <p>AC power cable from Solar inverter to main DB (Distribution Board) and DC wires, Earthing wires, PVC conduit (water grade), Best PVC Trunking, Lighting Arrestor, Four Earthing rods and 'U' clamps, Disconnect Switch, DB Boxes and all related accessories.</p>				
6	<p>UPVC Pipes including sockets, tees, elbows, bends etc. UPVC ducts Screws (High Quality) Rowel Plugs Cable Ties Galvanized Nuts/ Bolts Rowel Bolts Ducts, cable tray with complete accessories</p>				

7	<p><u>SAFETY EQUIPMENTS:</u></p> <p>AC MCB 63A AC MCCB 200A AC SPD 60K DC MCB 2 Pole Breaker 63A, 100 V DC SPD 40K Brand (CNC, CHINT) quantity as per system required Distribution box for AC & DC safeties (Premium Quality) All breaker/ SPD fire retardant & up to system rating.</p>				
8	<p><u>INSTALLATION</u></p> <p>Check feasibility, system designing, project execution, quality checks</p>				
9	Complete Standard installation, testing & commissioning				
10	Transportation				
11	<p><u>EARTHING</u></p> <p>Lightning arrestor antenna (brass) 4ft copper rod with size base (brass) earthing copper rod & U clamp, boring work where necessary.</p>				
12.	Net Metering				

BAHRIA COLLEGE ISLAMABAD
TECHNICAL SPECIFICATION OF SOLAR PANEL

INSTALLATION OF SOLAR PANEL ON GIRD 70 KV WITH 80 KV INVERTER - PRIMARY WING					
S.NO	DESCRIPTION	BRAND	QUANTITY	UNIT PRICE	TOTAL PRICE
1.	<p><u>SOLAR PANEL</u></p> <p>Brand: A Grade Tier-1 Power: 570 – 595 KW N Type TUV certified and 12 years Manufacturing warranty & 30 year performance warranty</p>				
2.	<p><u>INVERTER</u></p> <p>Product Power: 100 KV Type: On-grid Brand: 1 x Growatt (high MPPT, Official warranty 05 years) with built in SPD</p>				
3.	<p><u>STRUCTURE</u></p> <p>Standard elevated L2 ready frames for ground mounted rust free. Galvanized 145SWG</p>				
4.	<p><u>DC WIRE:</u></p> <p>XLPO, Single Core, Red or Black, Pakistan Cable, FAST Cable, insulation, Fire retardant, UV protected brand</p>				
5	<p><u>AC WIRE</u></p> <p>AC power cable from Solar inverter to main DB (Distribution Board) and DC wires, Earthing wires, PVC conduit (water grade), Best PVC Trunking, Lighting Arrestor, Four Earthing rods and 'U' clamps, Disconnect Switch, DB Boxes and all related accessories.</p>				
6	<p>UPVC Pipes including sockets, tees, elbows, bends etc. UPVC ducts Screws (High Quality) Rowel Plugs Cable Ties Galvanized Nuts/ Bolts Rowel Bolts Ducts, cable tray with complete accessories</p>				

7	<p><u>SAFETY EQUIPMENTS:</u></p> <p>AC MCB 63A AC MCCB 200A AC SPD 60K DC MCB 2 Pole Breaker 63A, 100 V DC SPD 40K Brand (CNC, CHINT) quantity as per system required Distribution box for AC & DC safeties (Premium Quality) All breaker/ SPD fire retardant & up to system rating.</p>				
8	<p><u>INSTALLATION</u></p> <p>Check feasibility, system designing, project execution, quality checks</p>				
9	Complete Standard installation, testing & commissioning				
10	Transportation				
11	<p><u>EARTHING</u></p> <p>Lightning arrestor antenna (brass) 4ft copper rod with size base (brass) earthing copper rod & U clamp, boring work where necessary.</p>				
12.	Net Metering				

SUMMARY

S. No	Description	Amount (Million)
1.	Installation of Solar Panel 30 KV with 30 KV Inverter - Boys Wing	
2.	Installation of Solar Panel 30 KV with 30 KV Inverter – Girls Wing	
3.	Installation of Solar Panel 60 KV with 70 KV Inverter – Admin Block	
4.	Installation of Solar Panel 70 KV with 100 KV Inverter - Primary Wing	
5.	Installation of Solar Panel 25 KV with 30 KV Inverter – Special Children School	
Grand Total		

- NOTE:**
1. Site may be visited on any day before submission of Quotation from 0900 – 1400 hrs.
 2. Multiple power points are to be installed separately, the same will be highlighted upon visit.