

No.	Quantity	Unit	Description	Specification	Unit Cost	Total Costs
					(IQD)	(IQD)
1	1	pcs	Inverter	6000w/48V / 3ph		
2	1	pcs	agricultural inverter	15kW, designed to convert direct current (DC) from solar panels		
3	5	pcs	DC Clamp Meter	Measuring DC Current and Voltage		
4	20	pcs	Pole DC Protection Fuse	(30A / 60A) 10 for each one		
5	20	pcs	2 Pole DC Circuit Breaker	(60A / 30A) 10 for each one		
6	10	pcs	Surge protection	2Pole DC Surge Protection Device (SPD) designed to protect DC electrical systems from transient overvoltage caused by lightning strike		
7	6	pcs	2 Pole DC Circuit Breaker	(125A) to handle high currents in DC systems.		
8	20	pcs	MC4 Connectors with (+) Terminals	MC4 connectors electrical connectors used in solar systems to link solar panels together		
9	20	pcs	MC4 Connectors with (-) Terminals	MC4 connectors electrical connectors used in solar systems to link solar panels together		
10	10	pcs	Dual MC4 Connectors with (+) Terminals	connection of two solar panels or more using individual connectors joined together in a dual setup.		
11	10	pcs	Dual MC4 Connectors with (-) Terminals	connection of two solar panels or more using individual connectors joined together in a dual setup.		
12	50	Meter	DC Wire 1*10mm	Red color - electrical wire used in systems designed for high-efficiency current transmission used in solar systems		
13	50	Meter	DC Wire 1*10mm	Black Color - electrical wire used in systems designed for high-efficiency current transmission used in solar systems		
14	50	Meter	DC Wire 1*4mm	Red color - electrical wire used in systems designed for high-efficiency current transmission used in solar systems		
15	50	Meter	DC Wire 1*4mm	Black Color - electrical wire used in systems designed for high-efficiency current transmission used in solar systems		
16	25	Meter	DC Wire 1*16mm	Red color - electrical wire used in systems designed for high-efficiency current transmission used in solar systems		
17	25	Meter	DC Wire 1*16mm	Black Color - electrical wire used in systems designed for high-efficiency current transmission used in solar systems		
18	50	Meter	AC Wire 2*2.5mm - Flex	Electrical wire used in alternating current (AC) systems. features two conductors (wires), making it suitable for powering electrical loads that require alternating current.		
19	50	Meter	AC Wire 1*2.5mm (Ground)	Electrical wire used current (AC) systems. a single conductor (ground wire) with a cross-sectional area of 2.5 mm ² . This wire is primarily used as a grounding wire.		
20	50	Meter	AC Wire 1*1.5mm	Black color - electrical wire used in alternating current (AC) systems, featuring a smaller cross-sectional area.		
21	50	Meter	AC Wire 1*1.5mm	Red color - electrical wire used in alternating current (AC) systems, featuring a smaller cross-sectional area.		
22	120	pcs	Terminals (Connectors) Sizes (6mm - 10mm - 16mm - 25mm)	30 for each size - electrical connectors used to join wires in electrical circuits.		
23	25	pair	Insulated Gloves	Type of protective gloves designed to protect the hands from electrical shocks when working with electrical devices		
24	30	Meter	Thermal Insulation (Shrink Sleeve) with Heater for Fixing	each color 10 meter		
25	10	pcs	Bottles Crimper for Solar Energy Applications	Specialized tool used to seal or secure bottles, containers, or enclosures used in solar energy systems, such as batteries or other electronic components		
26	50	pcs	Bottles Fixing Cage (Various Sizes)	a device or tool used to secure or fasten bottles or containers tightly. stainless steel or durable plastic		
27	2	pcs	Fixing Gun Nailer/Stapler (Nail) with Washers and Iron Clips (19mm)	used in various industrial applications such as installing barriers, and solar energy systems.		
28	1	pcs	Iron Casting Mold (30x30) for Structural Fixation solar installation	Essential tool used in structural fixation processes, in solar energy system installations.		
29	50	pcs	Anchor Bolt with J-Hook shape for Structural Fixation	used in solar energy system installations to stabilize and secure the frames and supporting structures for solar panels.		
30	25	Meter	Cable Tray (Wire Channels) 25x25 mm	structural system used to support, organize, and protect electrical wires and cables. It is commonly utilized in various installations, including solar energy systems		

31	5	pcs	Multi-Purpose Electrical Extension Cable	(25 Meters)		
32	120	pcs	safety vest	Blue Color - Protective clothing worn to ensure high visibility and enhance safety, particularly in environments with potential hazards, such as construction sites,		
33	120	pcs	Safety Helmet - Yellow color	personal protective equipment (PPE) used to protect the head from potential injuries in work environments where falling objects or impacts are a risk.		
34	80	pair	Safety gloves	any brands		
35	80	pcs	Safety glasses	any brands		
36	5	set	drill bit screwdriver	any brands		
37	15	pcs	Hydraulic Pipe Expanding Tool	a specialized device used to expand the diameter of metal or plastic pipes, often in plumbing, HVAC, or automotive applications.		
38	60	meter	Copper Pipe size 1/4	used for residential plumbing, HVAC systems, and water supply lines		
39	60	meter	Copper Pipe size 1/2	used for residential plumbing, HVAC systems, and water supply lines		
40	60	meter	Copper Pipe size 3/4	used for residential plumbing, HVAC systems, and water supply lines		
41	60	meter	Copper Pipe size 3/8	used for residential plumbing, HVAC systems, and water supply lines		
42	60	meter	Copper Pipe size 5/8	used for residential plumbing, HVAC systems, and water supply lines		
43	60	meter	Copper Pipe size 5/16	used for residential plumbing, HVAC systems, and water supply lines		
44	20	pcs	Copper Threaded Pipe size 1/2	copper pipe with threads on its ends, designed for screw-type connections. typically used in plumbing systems for secure, leak-resistant joints.		
45	20	pcs	Copper Threaded Pipe size 3/4	copper pipe with threads on its ends, designed for screw-type connections. typically used in plumbing systems for secure, leak-resistant joints.		
46	20	pcs	Copper Threaded Pipe size 3/8	copper pipe with threads on its ends, designed for screw-type connections. typically used in plumbing systems for secure, leak-resistant joints.		
47	20	pcs	Copper Threaded Pipe size 5/8	copper pipe with threads on its ends, designed for screw-type connections. typically used in plumbing systems for secure, leak-resistant joints.		
48	25	pcs	Copper Union Connector size 1/4	a fitting used to join two copper pipes, It's commonly used in HVAC and plumbing systems.		
49	25	pcs	Copper Union Connector size 1/2	a fitting used to join two copper pipes, It's commonly used in HVAC and plumbing systems.		
50	25	pcs	Copper Union Connector size 3/4	a fitting used to join two copper pipes, It's commonly used in HVAC and plumbing systems.		
51	25	pcs	Copper Union Connector size 3/8	a fitting used to join two copper pipes, It's commonly used in HVAC and plumbing systems.		
52	25	pcs	Copper Union Connector size 5/8	a fitting used to join two copper pipes, It's commonly used in HVAC and plumbing systems.		
53	30	pcs	Brass - Aluminum Adapter	fitting used to connect brass and aluminum components, ensuring a secure and durable transition between the two materials, often in plumbing, HVAC,		
54	20	pack	Welding Silver Wire	filler material containing silver, used in brazing or welding to join metals		
55	20	pack	Welding Brass Wire	filler material made of brass, used in welding or brazing to join brass or other metals,		
56	15	can	Welding Brass Assistant	tools or accessories that help with the welding process of brass, such as clamps, rods, flux, or heat sources,		
57	20	pack	Welding Aluminum Wire Blue	filler wire specifically designed for aluminum welding.		
58	15	pcs	charging valve	valve used to add refrigerant or other fluids to a system, such as HVAC or refrigeration units,		
59	15	pcs	charging valve R410	valve specifically designed for use with the R410A refrigerant, found in air conditioning and heat pump systems.		
60	15	pcs	Expansion Valve With Needle	valve used in refrigeration and HVAC systems. It regulates the flow of refrigerant into the evaporator by controlling pressure,		
61	15	pcs	eversal valve	valve used in heat pump systems to reverse the flow of refrigerant, allowing the system to switch between heating and cooling modes.		
62	5	pcs	Portable Gas Cylinder for Refrigeration and AC Workshop	A small gas cylinder used for assembling refrigeration and air conditioning systems		

63	10	pcs	Capacitor UF60 for Refrigeration and AC	A capacitor with a 60-microfarad rating, used to start or run motors in air conditioning and refrigeration systems		
64	10	pcs	Capacitor UF30 for Refrigeration and AC	A capacitor with a 60-microfarad rating, used to start or run motors in air conditioning and refrigeration systems		
65	5	pcs	5 Ton Split Unit Universal Control Board (Joker Card)	control board designed for 5-ton split air conditioning units, used to regulate and manage the system's operations		
66	5	pcs	Spli Joker Card 2 Ton	control board tailored for 2-ton air conditioning units, used to manage essential functions like temperature regulation, compressor operation		
67	5	pcs	Three-Phase Contactor	An electrical switch used in three-phase AC systems - any brand any type		
68	2	pcs	R-410A Gas (11 kg)	modern air conditioning and refrigeration system gas		
69	5	pcs	Flir Device tools	A specialized heat tool used for tasks such as cutting or sealing materials, and ironing certain components		
70	1	pcs	Inverter Split	1 ton, any brand any type in the market		
71	10	pcs	Bandage Split AC Tape	Any brand and type		
72	20	pcs	Insulation Tube 3/8 tape	A thermal insulation material used to cover pipes in refrigeration and air conditioning systems		
73	20	meter	Pipe Insulation 5/8 Tube tape	A thermal insulation material used to cover pipes in refrigeration and air conditioning systems		
74	20	pcs	Electrical Tape	10 black and 10 white colors		
75	2	pcs	Electronic Scale for Gas Charging	to measure the weight of refrigerant gas when charging air conditioning and refrigeration systems.		
76	10	pcs	Compressor Wire (Braided Wire)	flexible, braided wire used for electrical connections in compressors of air conditioning and refrigeration systems		
77	10	pcs	Radiator Cleaning Spray	designed to remove dirt, debris, and buildup from the radiator fins and coils in air conditioning and refrigeration systems		
78	2	pcs	Charging Cage device	used during refrigerant charging in air conditioning or refrigeration systems.		
79	2	pcs	Vacuum Pump AC	used to remove air and moisture from the refrigeration or air conditioning system before charging it with refrigerant.		
80	2	pcs	R-22 Gas A.C	10 Kg, gaz bottle used in older air conditioning and refrigeration systems		
81	1	pcs	Normal 2 ton Split	Any brand or type in the market		
82	30	pcs	Lamp LED 40w	efficient light bulb that uses 40 watts of electrical power		
83	30	pcs	Lamp LED 50w	efficient light bulb that uses 50 watts of electrical power		
84	150	meter	PVC Pipe (25) mm	polyvinyl chloride (PVC) pipe with a diameter of 25 millimeters.		
85	300	meter	Wires single 1,5 mm2 red	a single-core electrical wire with a cross-sectional area of 1.5 square millimeters and a red insulation color.		
86	300	meter	Wires single 1,5 mm2 yellow	a single-core electrical wire with a 1.5 square millimeter cross-sectional area and yellow insulation.		
87	300	meter	Wires single 1,5 mm2 blue	a single-core electrical wire with a 1.5 square millimeter cross-sectional area and blue insulation		
88	300	meter	Wires single 1,5 mm2 Black	a single-core electrical wire with a 1.5 square millimeter cross-sectional area and black insulation		
89	300	meter	Wires single 1,5 mm2 Yellow-Green (Earth)	a single-core electrical wire with a 1.5 square millimeter cross-sectional area and yellow-green striped insulation.		
90	300	meter	Wires single 2,5 mm2 Red	a single-core electrical wire with a 2.5 square millimeter cross-sectional area and red insulation.		
91	300	meter	Wires single 2,5 mm2 Black	a single-core electrical wire with a 2.5 square millimeter cross-sectional area and black insulation		
92	300	meter	Wires single 2.5 mm2 Yellow-Green (Earth)	a single-core electrical wire with a 2.5 square millimeter cross-sectional area and yellow-green striped insulation		
93	300	meter	Wires single 4 mm2 red	single-core electrical wire with a 4 square millimeter cross-sectional area and red insulation.		
94	300	meter	Wires single 4 mm2 Black	a single-core electrical wire with a 4 square millimeter cross-sectional area and black insulation		
95	150	meter	Wires single 6 mm2 red	a single-core electrical wire with a 6 square millimeter cross-sectional area and red insulation		

96	150	meter	Wires single 6 mm2 yellow	a single-core electrical wire with a 6 square millimeter cross-sectional area and yellow insulation.		
97	150	meter	Wires single 6 mm2 blue	a single-core electrical wire with a 6 square millimeter cross-sectional area and blue insulation.		
98	150	meter	Wires single 6 mm2 black	a single-core electrical wire with a 6 square millimeter cross-sectional area and black insulation.		
99	150	meter	Wires flex 2 * 1.5 mm2	a flexible electrical cable consisting of two conductors, each with a 1.5 square millimeter cross-sectional area.		
100	50	pcs	Electric Socket 13A + Socket	a 13-ampere electrical socket, commonly used for standard power outlets		
101	50	pcs	Circuit Breaker 1 pole / 63 A	a single-pole circuit breaker rated for 63 amperes		
102	150	pcs	Electric Tape	insulating material used to cover and protect electrical wires and connections.		
103	10	pack	Wire Terminal size 6 mm	a terminal connector designed to fit wires with a 6 millimeter diameter or cross-sectional area.		
104	10	pack	Wire Terminal size(6,4) mm	a terminal connector designed to fit wires with a 6 millimeter diameter or cross-sectional area.		
105	30	pcs	Lamp LED size 6 inch with 32 W	LED light fixture with a diameter of 6 inches and a power consumption of 32 watts.		
106	5	pcs	Electrical extension 20 Meter	extension cord that is 20 meters long, designed to extend the reach of electrical power from a wall outlet to electrical devices or equipment.		
107	10	pcs	Cable Crimping Tool	uses a squeezing or crimping mechanism to press the connector onto the wire		
108	10	pcs	Spring Bender for 25 mm Plastic Pipes	The tool consists of a metal or plastic spring that fits over the pipe		
109	10	pcs	Automatic Selector Switch	electrical switch that allows for the automatic selection between multiple circuits, modes, or functions within a system		
110	10	pcs	Bending Spring Cable Puller 5 meter	tool used to pull cables through conduits or pipes, especially in tight or curved spaces, while preventing damage to the cables		
Total						