

| 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 mm². 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        |           |             |

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|----|-----|-------|---|--|--|--|
| 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  |  |  |

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|----|-----|-------|---|---|--|--|
| 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   | Fir 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 |     |       |                                       |  |  |  |