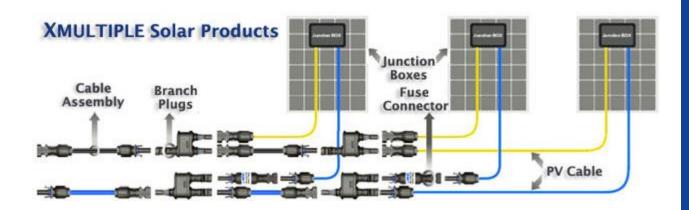
# XMULTIPLE Solar

Solar Connectors, Cables, Branch Plugs Junction Boxes, Inverters & More



## **SOLAR CONNECTION DIAGRAM**

Xnnexa™ Connection diagram for the installation of silicon photovoltaic (PV) systems



Photovoltaics (PV) is a method of generating electrical power by converting solar radiation into direct current electricity. Photovoltaic power generation employs solar panels composed of a number of solar cells containing a photovoltaic material. Due to the growing demand for renewable energy sources, the manufacturing of solar cells and photovoltaic arrays has advanced considerably in recent years. Xmultiple manufactures solar connectors, cables, cable assemblies, branch plugs, couplers, junction boxes, inverters and accessories.



## XMULTIPLE

## PV SOLAR CONNECTORS

The Xnnexa™ Solar Connectors are designed for silicon photovoltaic (PV) systems, We offer an extensive line of Solar connectors for all your needs

#### **FEATURES:**

- Meets all new NEC 2008 requirements
- UL and TUV dual approval
- Meet industry standards
- Quick and easy secure snap-lock mating
- Simple unlocking tool meets NEC requirements
- Long-term UV and Ozone resistance
- Withstands hydrolysis, oil, chemicals, abrasion, corrosion, and extreme temperatures
- Highest current rating in industry
- RoHS compliant
- Complete Cable Assemblies available
- · Low contact resistance means low power loss
- Ready for field assembly
- · No assembly required, no small parts to lose

#### **GENERAL:**

#### MC4 Multi-Contact Connectors

Xmultiple's MC4-2 Kit contains 1 male and 1 female MC4 solar panel connector. This type of connector system is easy to install and uses "snap-in" safety locking tabs to lock two mating connectors, thereby avoiding unintentional disconnection. Also when locked, the mating contacts are sealed against ingress of dust and water. The connectors can be crimped / soldered to wire size AWG #10 or AWG # 12 with an outer insulation diameter of 3 to 6 mm. Two locking tabs are provided on the MC4 Female Connector. When the two connectors are coupled, the locking tabs slide into the locking slots and secure. To uncouple the two connectors, you simply press the ends of the locking tabs which releases the locking mechanism.



XSOL-500



XSOL-501



XSOL-502



XSOL-503



XSOL-504





## PV SOLAR BRANCH PLUG

The Xnnexa™ Branch Plugs and Couplers are designed for silicon photovoltaic (PV) systems, create efficient arrays

#### **FEATURES:**

- Industry standard 4mm pin and sockets
- 1000VDC, 35A rating
- Easy snap lock mating
- UL94-V0 housing material
- Tin-plated copper contacts
- IP67 protection rating

#### **GENERAL:**

The Xmultiple branch plug and receptacle connectors are used in solar arrays to efficiently connect the solar cables from the PV panels. The branch plug connections can be series or parallel.

The Xmultiple solar cable branch plug and socket connector combinations are compatible with all solar system equipment, and they accept the solar connectors and couplers made by all manufactures who are to the industry standard versions such as the MC4 and H4 connectors.

Xmultiple branch connectors come in two versions, Male/Female-Female and Female/Male-Male to insure that you have the right combination for all solar cable and connector installations.









XSOL-203



XSOL-204





## **SOLAR FUSE CONNECTOR & COUPLERS**

The Xnnexa™ Fuse Connectors and Couplers are designed for silicon photovoltaic (PV) systems

#### **FEATURES:**

Insulation material:PPO

Contact material: fuse

Adapting current: 15A

Ambient temperature range: -40~+90° C

Flame class: UL94-V0

· Safety class: II

Low Power Loss

Shell Protection degree: IP65

Test voltage: 6KV(TUV50Hz.

Contact resistance: 0.4mQ

Test voltage: 6000V(TUV50Hz,1min)

#### **GENERAL:**

The Xmultiple fuse connectors and receptacle connectors are used in solar arrays to efficiently connect the solar cables from the PV panels. This fuse connector is designed and fabricated using quality tested raw material.

The Xmultiple MC4 Solar Fuse Connector is in high demand in the industry and is offered at low prices. The Xmultiple fuse connector are compatible with all solar system equipment.







XSOL-312





## **SOLAR CABLE ASSEMBLIES**

The Xnnexa™ Cable Assemblies are designed for silicon photovoltaic (PV) systems, In-Line fused or independent fuse

#### **FEATURES:**

- **IP67** Performance
- Sunlight-resistance jacketing
- Over-molded for weatherproofing
- **ROHS Compliant**
- Sealed against dust and water
- Gold -Plated contacts
- Universal IEC connector
- Temperature Rating: -40°C to 90°C
- Conductor AWG: 18 to 8 AWG
- **High Durability**
- Insulation Material: XLPE
- Jacket Material: PVC
- Corrosion protection
- Flame Resistance: VW-1

#### **GENERAL:**

Xmultiple manufacturers solar cable assemblies for customers around the world. Solar power systems require a variety of solar power cables and connectivity solutions between panels, inverters and control systems. We offer cost effective and reliable cable assembly solutions including custom design and prototyping to satisfy your specific requirements. We have built PV wire assemblies for projects as big as 20 Mega Watts. Custom solar cable assemblies manufactured by Xmultiple Cable can include:

- Array Circuit Assemblies
- Panel Harnesses
- •In-Line Fused or Independent Fuse
- Interconnection System





### **SOLAR CABLE**

The innovative Xnnexa™ Cables are designed for silicon photovoltaic (PV) systems, Xnnexa Cables are UL Type

#### **FEATURES:**

- UL Type PV (overall) UL 4703
- USE-2 Rated (14 AWG & Larger 600V)
- UL Type RHW-2 (90°C wet)
- ROHS Compliant
- CE
- Flame Resistance: VW-1
- Maximum Operating Voltage: 600 VRMS -UL PV
- Temperature Rating: -40°C to 90°C
- Conductor AWG: 18 to 8 AWG
- Conductor Material: Soft Annealed tinned
- Insulation Material: XLPE
- Jacket Material: Sunlight-Resistant PVC
- · Min. Bend Radius: 8x Diameter
- Flame Resistance: VW-1

#### **GENERAL:**

Single conductor, insulated and non-integrally jacketed, sunlight resistant, photovoltaic wire rated for 90°C wet or dry, 600V for interconnection wiring of grounded and ungrounded photovoltaic power systems.



XSOL-100



**XSOL-101** 



XSOL-102



XSOL-103



XSOL-104





## **SOLAR JUNCTION BOXES**

The innovative Xnnexa™ Junction Boxes are designed for silicon photovoltaic (PV) systems, Xnnexa junction boxes reduce installation time

#### **FEATURES:**

#### For All Solar Panels including Single Diode, Double **Ribbon Photovoltaic Panels**

- Highest performance rated axial diode on the market for a single diode box application.
- Insertion force connection of PV ribbons for quick and easy assembly with no soldering.
- Low profile single panel design to accommodate a two ribbon panel.
- Cable strain relief incorporated in box.
- Practical internal volume and venting for good thermal dissipation and low interior temperatures.
- IP65 rated.
- RoHS and REACH compliant eco-friendly solderless internal connections.
- Sizeable opening for conductor ribbons.
- Ambient temperature range of -40°F (-40°C) to 221°F (105°C) (UL).
- UL recognized under file E325860.
- TUV certification pending.

#### **GENERAL:**

The Xmultiple Smart Junction Boxes allow for wireless communication with a central unit that can track the panels on their individual performance and allows the panels or its substrings to be quickly switched off in the case of failure, fire, tornado, or other calamity. The Smart Junction Box allows monitoring of voltage, current and temperature parameters such that Solar system owners or service providers can automatically track the performance of the panels and determine if service or maintenance is required.



XSOL-802/



**XSOL-803/** 



XSOL-804/



**XSOL-805A** 



XSOL-806A



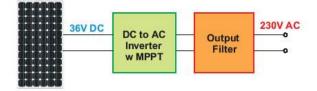


## **SOLAR INVERTERS**

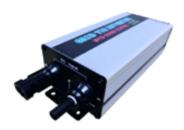
The innovative Xnnexa™ Inverters are designed for silicon photovoltaic (PV) systems - Xnnexa Inverters reduce installation time

#### **FEATURES:**

- Meets all new NEC 2008 requirements
- **UL** approval
- Meet industry standards
- The maximum output power up to 400 VA.
- The output voltage is 230 V / 50 Hz + 10 %.
- Output voltage with a maximum of 3% distortion.
- Over-current protections implemented
- Hardware for the isolated communication line
- Efficiency better than 80 %.
- MPPT implemented, and the P&O method used.







#### **GENERAL:**

The overall structure of this inverter can be split into two sections, the primary low voltage input side and the isolated secondary high voltage output side. The main control unit-digital signal controller (DSC) is placed on the primary side to start to run when the solar panel starts to source minimum output power. The power conversion from the DC low voltage to the high voltage DC bus is maintained by the standard push-pull type converter and isolation power transformer. The conversion from the high voltage DC bus to the standard AC power line voltage is maintained by the inverter in the full-bridge configuration.





## **SOLAR TOOLS & ACCESSORIES**

The innovative Xnnexa™ Tools for the installation of silicon photovoltaic (PV) systems

#### **FEATURES:**

- · Meets all new NEC 2008 requirements
- UL and TUV dual approval
- Meet industry standards
- Quick and easy to use tools
- Meets NEC requirements
- Long-term UV and Ozone resistance
- · Tools withstand extreme temperatures
- Highest current rating in industry
- · RoHS compliant
- Made specifically for Solar Cable Assemblies
- · Ready for field assembly

#### **GENERAL:**

Xmultiple solar tools and accessories make solar panel installation easy. Solar panel prices have been reduced more than 80 percent in the last few years,. Now solar companies are turning their attention to reducing the cost of installing solar systems. New designs in mounting solar panels to roofs is also reducing cost. Good solar tools also help greatly reducing labor costs. Xmultiple has all the tools and hardware you need to make your installation. Please call us today and we will help you with tools for your requirements.



XSOL-903A



**XSOL-904A** 



XSOL-905A



XSOL-906A



XSOL-907A

