THE POWER OF REDARC®

Solar Accessory Cables

REDARC Solar®

MODELS:

- SRC0001
- SRC0002
- SRC0003
- SRC0006
- SRC0008
- SRC0009
- SRC0010
- SRC0011
- SRC0012
- SRC0016
- SRC0017
- SRC0018
- SRC0019
- SRPA20-VP
- SRC0001-CK

REDARC Solar Cables are suitable for use with REDARC Solar products, including Solar Panels, Solar Blankets, Solar Regulators and BCDC/BMS Battery Chargers.

The cables feature UV stabilised PVC insulation for outdoor applications, and use genuine Anderson™ to Anderson™ SB™ 50 connectors with silver plated terminals.

WARNINGS & SAFETY INSTRUCTIONS

SAVE THESE INSTRUCTIONS — this manual contains important safety instructions. Do not operate the system unless you have read and understood this manual. REDARC recommends that any Solar product is installed by a suitably qualified person.

Disclaimer: REDARC accepts no liability for any injury, loss or property damage which may occur from the improper or unsafe installation or use of its products.

SAFETY MESSAGE CONVENTIONS

Safety messages in this manual include a signal word to indicate the level of the hazard as follows:

⚠ **WARNING:** Indicates a potentially hazardous situation which could result in death or serious injury to the operator or to bystanders.

⚠ **CAUTION:** Indicates a potentially hazardous situation which may result in moderate or minor injury to the operator or to bystanders.

NOTICE: Indicates a situation that may cause equipment damage.

⚠ WARNING

- **RISK OF EXPLOSIVE GASES:** Working in the vicinity of lead-acid batteries is dangerous. Batteries generate explosive gases during normal operation. For this reason, it is of utmost importance that you follow the instructions when installing and using Solar products.
- **RISK OF EXPLOSIVE GASES:** Batteries should be mounted in a well ventilated area, as far as possible from any ignition sources. NEVER smoke or allow a spark or flame in the vicinity of a battery or engine. This may cause the battery to explode.
- **RISK OF OVERCHARGING:** Check the manufacturer's data for your battery and ensure that the voltage of the profile you select does not exceed the manufacturer's recommended maximum charging voltage. If the maximum voltage for your battery type is too high, please select another charging profile.
- **RISK OF DAMAGE AND INJURY FROM IMPROPERLY SECURED PANELS:** Solar panels mounted to all types of vehicles, including but not limited to, 4x4 Vehicles, RVs, Caravans, are subject to high wind and vibration forces when driving. Solar panels must be securely attached to the vehicle in accordance with all local and national safety standards. In addition, the solar mount manufacturer's instructions must be adhered to or may be required to be exceeded to comply with local and national standards.

UK CA CE

⚠ CAUTION

1. Do NOT use Solar products to charge non– rechargeable batteries. Doing so may result in harm to the user and/or damage to the Solar products.
2. Only use Solar products for charging Lead Acid, Gel,Calcium content, AGM or Lithium Iron Phosphate batteries using a Solar Regulator/Charger suitable for the Battery's chemistry and nominal voltage.
3. Solar products should not be used by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they are supervised or have been instructed on how to use the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the Solar product.
4. Do NOT exceed the current and voltage rating of the cables and connectors. Exceeding the recommended ratings will cause damage to the components.
5. Incorrect connections can subject the Solar products to high voltages or currents that will cause damage. Ensure the recommended connections and sequences are followed.
6. Solar products are not intended to supply power to a low voltage electrical system other than to charge a battery.
7. An unconnected Solar panel exposed to light may generate voltages up to their rated open-circuit voltage on their leads. Completely cover all Solar panels with an opaque material during installation, and when connecting or disconnecting conductors to reduce the chance of an electrical spark.
8. Do not use mirrors or other devices to artificially concentrate sunlight on Solar panels.
9. Solar panels used in series, parallel, or series-parallel shall be positioned to receive identical amounts of light to reduce risk of damage.
10. Partially shaded or partially obscured Solar panels will have reduced output, and can damage the Solar panels.
11. Solar panels will achieve best results when proper battery maintenance is regularly performed. This includes but is not limited to checking water and specific gravity levels of the battery.
12. **Personal Safety Precautions:** To assist with the safe operation and use of the Solar Product:
    a. Wear complete eye protection and clothing protection. Avoid touching eyes while working near a battery.
    b. If battery acid contacts your skin or clothing, remove the affected clothing and wash the affected area of your skin immediately with soap and water. If battery acid enters your eye, immediately flood the eye with running cold water for at least 10 minutes and seek medical assistance immediately.

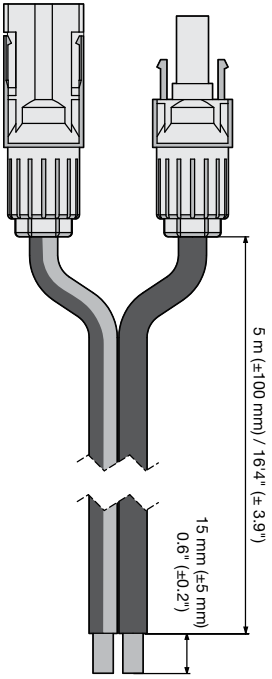
SOLAR CABLE SPECIFICATIONS

5 m (16'4") MC4 to Bare-Wire Connector

SRC0001

Length	5 m (±100 mm) 16'4" (±3.9")
Conductor	Tinned Cooper
Conductor size	AWG 11 (Ø 2.3 mm)
Insulation	UV Stabilised PVC
Connector	MC4 to Bare-Wire
Current Rating*	30 A
Voltage Rating	50 VDC max
Colour Coding	Sheath: Black

*Current rating applies when cable is fully extended. Use of cable in coiled state is not recommended.

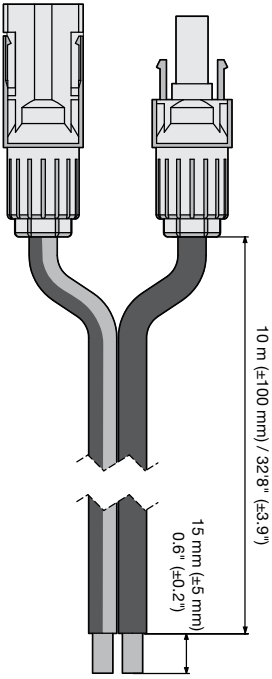


10 m (32'8") MC4 to Bare-Wire Connector

SRC0002

Length	10 m (±100 mm) 32'8" (±3.9")
Conductor	Tinned Cooper
Conductor size	AWG 11 (Ø 2.3 mm)
Insulation	UV Stabilised PVC
Connector	MC4 to Bare-Wire
Current Rating*	30 A
Voltage Rating	50 VDC max
Colour Coding	Sheath: Black

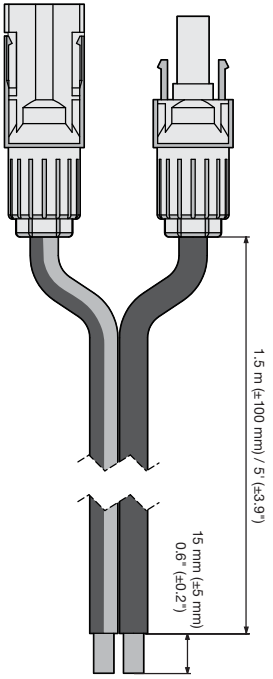
*Current rating applies when cable is fully extended. Use of cable in coiled state is not recommended.



1.5 m (5') MC4 to Bare-Wire Connector
SRC0003

Length	1.5 m (±100 mm) / 5' (±3.9")
Conductor	Tinned Cooper
Conductor size	AWG 11 (Ø 2.3 mm)
Insulation	UV Stabilised PVC
Connector	MC4 to Bare-Wire
Current Rating*	30 A
Voltage Rating	50 VDC max
Colour Coding	Sheath: Black

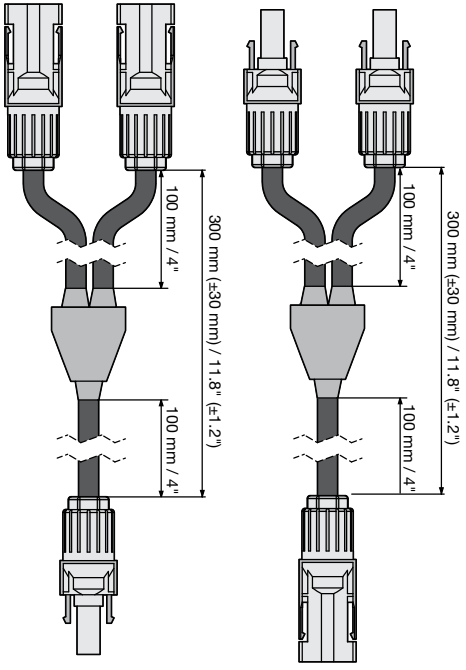
*Current rating applies when cable is fully extended. Use of cable in coiled state is not recommended.



300 mm (11.8") MC4 'Y' Connectors SRC0006

Length	300 mm (±30 mm) 11.8" (±1.2")
Conductor	Tinned Cooper
Conductor size	AWG 11 (Ø 2.3 mm)
Insulation	UV Stabilised PVC
Connector	MC4 'Y'
Current Rating*	30 A
Voltage Rating	50 VDC max
Colour Coding	Sheath: Black

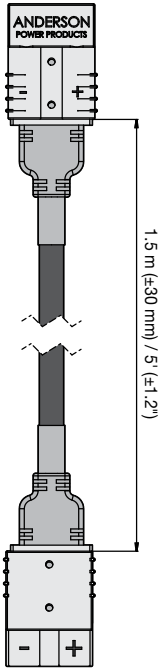
*Current rating applies when cable is fully extended.
Use of cable in coiled state is not recommended.



1.5 m (5') Anderson™ to Anderson™ Cable SRC0008

Length	1.5 m (± 30 mm) / 5' (± 1.2")
Conductor	Bare Cooper
Conductor size	AWG 11 (Ø 2.3 mm)
Sheath	UV Stabilised PVC
Connector	Anderson™ SB™ 50
Current Rating*	50 A
Voltage Rating	50 VDC max
Colour Coding	Positive Lead: Red Negative Lead: Black Sheath: Black

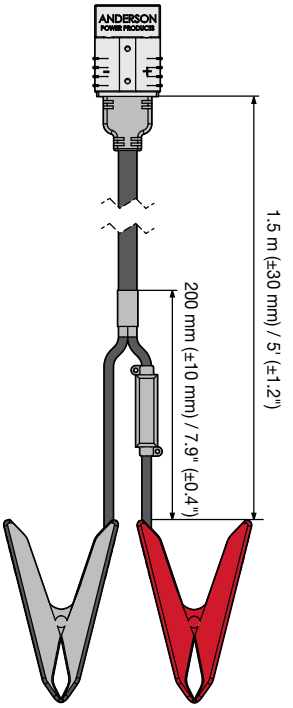
*Current rating applies when cable is fully extended. Use of cable in coiled state is not recommended.



1.5 m (5') Anderson™ to Battery Clip Cable SRC0009

Length	1.5 m (± 30 mm) / 5' (± 1.2")
Conductor	Bare Cooper
Conductor size	AWG 11 (Ø 2.3 mm)
Sheath	UV Stabilised PVC
Connector	Anderson™ SB™ 50 to Battery Clip
Current Rating*	30 A
Voltage Rating	50 VDC max
Colour Coding	Positive Lead: Red Negative Lead: Black Sheath: Black
Fuse Rating	40 A
Fuse Type	MIDI

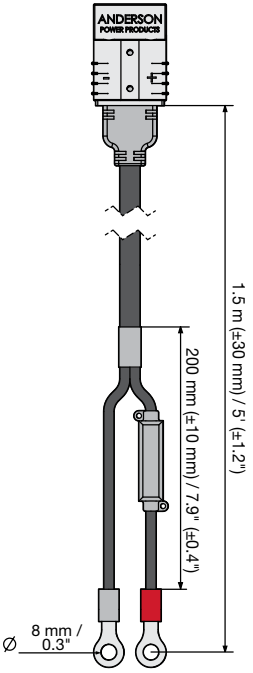
*Current rating applies when cable is fully extended. Use of cable in coiled state is not recommended.



1.5 m (5') Anderson™ to Battery Terminal Cable SRC0010

Length	1.5 m (± 30 mm) / 5' (± 1.2")
Conductor	Bare Cooper
Conductor size	AWG 6 (Ø 4.1 mm)
Sheath	UV Stabilised PVC
Connector	Anderson™ SB™ 50 to Battery Terminal
Current Rating*	30 A
Voltage Rating	50 VDC max
Colour Coding	Positive Lead: Red Negative Lead: Black Sheath: Black
Fuse Rating	40 A
Fuse Type	MIDI

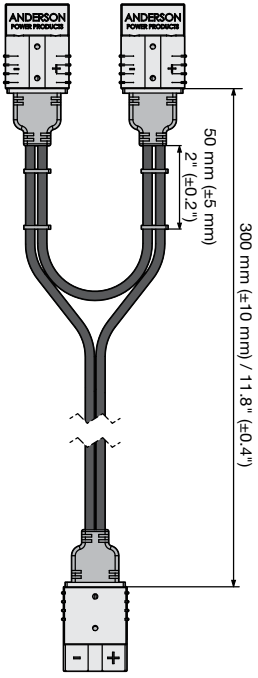
*Current rating applies when cable is fully extended. Use of cable in coiled state is not recommended.



300 mm (11.8") Series Anderson™ to Anderson™ Connector SRC0011

Length	300 mm (±10 mm) / 11.8" (±0.4")
Conductor	Bare Cooper
Conductor size	AWG 11 (Ø 2.3 mm)
Sheath	UV Stabilised PVC
Connector	Anderson™ SB™ 50
Current Rating*	40 A
Voltage Rating	50 VDC max
Colour Coding	Positive Lead: Red Negative Lead: Black Sheath: Black

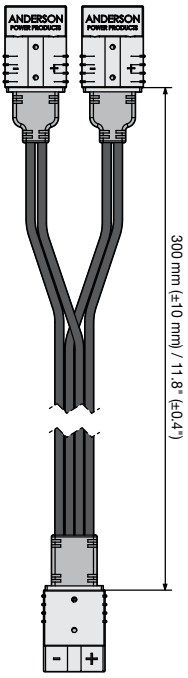
*Current rating applies when cable is fully extended. Use of cable in coiled state is not recommended.



300 mm (11.8") Parallel Anderson™ to Anderson™ Connector SRC0012

Length	300 mm (± 10 mm) / 11.8" (± 0.4")
Conductor	Bare Cooper
Conductor size	AWG 11 (Ø 2.3 mm)
Sheath	UV Stabilised PVC
Connector	Anderson™ SB™ 50
Current Rating*	40 A
Voltage Rating	50 VDC max
Colour Coding	Positive Lead: Red Negative Lead: Black Sheath: Black

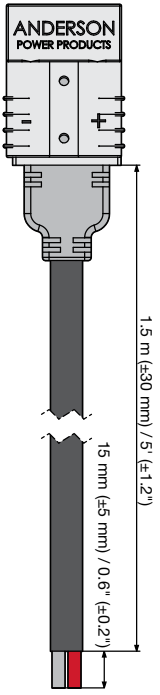
*Current rating applies when cable is fully extended. Use of cable in coiled state is not recommended.



1.5 m (5') Series Anderson™ to Bare-Wire Connector SRC0016

Length	1.5 m (±30 mm) / 5' (±1.2")
Conductor	Bare Cooper
Conductor size	AWG 10 (Ø 2.6 mm)
Sheath	UV Stabilised PVC
Connector	Anderson™ SB™ 50 to Bare-Wire
Current Rating*	40 A
Voltage Rating	50 VDC max
Colour Coding	Positive Lead: Red Negative Lead: Black Sheath: Black

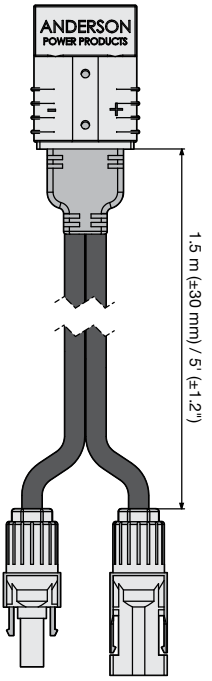
*Current rating applies when cable is fully extended. Use of cable in coiled state is not recommended.



1.5 m (5') Parallel Anderson™ to MC4 Connector SRC0017

Length	1.5 m (± 30 mm) / 5' (± 1.2")
Conductor	Bare Cooper
Conductor size	AWG 10 (Ø 2.6 mm)
Sheath	UV Stabilised PVC
Connector	Anderson™ SB™ 50 to MC4
Current Rating*	30 A
Voltage Rating	50 VDC max
Colour Coding	Sheath: Black

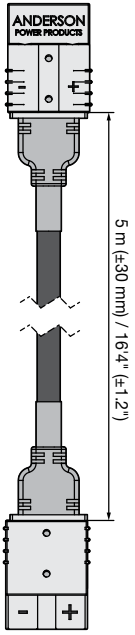
*Current rating applies when cable is fully extended. Use of cable in coiled state is not recommended.



5 m (16'4") Anderson™ to Anderson™ Cable SRC0018

Length	5 m (±30 mm) / 16'4" (±1.2")
Conductor	Bare Cooper
Conductor size	AWG 10 (Ø 2.6 mm)
Sheath	UV Stabilised PVC
Connector	Anderson™ SB™ 50
Current Rating*	40 A
Voltage Rating	50 VDC max
Colour Coding	Positive Lead: Red Negative Lead: Black Sheath: Black

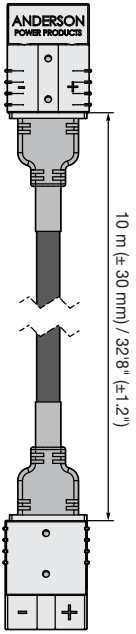
*Current rating applies when cable is fully extended. Use of cable in coiled state is not recommended.



10 m (32'8") Anderson™ to Anderson™ Cable
SRC0019

Length	10 m (± 30 mm) / 32'8" (± 1.2")
Conductor	Bare Cooper
Conductor size	AWG 10 (Ø 2.6 mm)
Sheath	UV Stabilised PVC
Connector	Anderson™ SB™ 50
Current Rating*	30 A
Voltage Rating	50 VDC max
Colour Coding	Positive Lead: Red Negative Lead: Black Sheath: Black

*Current rating applies when cable is fully extended. Use of cable in coiled state is not recommended.

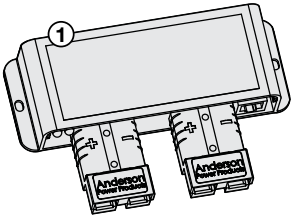


Value Pack SRPA20-VP

The Value Pack offers a complete regulator and cable kit for a portable setup. The Anderson™ SB™ 50 connectors allow for a simple plug and play setup of the system. The included cables allow the panels to be positioned up to 5 m from the regulator.

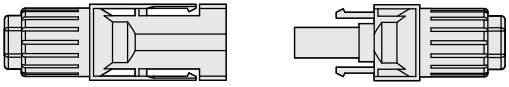
Value Pack Contents:

1. 20 A Solar Regulator — SRPA0240
2. 1.5 m (5') Anderson™ to Battery Clip Cable — SRC0009
3. 5 m (16'4") Anderson™ to Anderson™ Cable — SRC0018



MC4 Connector Kit SRC0001-CK

The MC4 Connector Kit included a male and female MC4 Connector.



SYSTEM WIRING

Wiring Precautions

- Ensure that all connections are made using REDARC recommended connectors and cables or other suitably rated connectors and cables.
- Ensure that the maximum system current does not exceed the current rating of the cables.
- Ensure that the grounding and fusing is adequate and sound for the system.
- Ensure that all additional and/or non-REDARC Anderson™ plug terminals are soldered correctly or crimped with the correct Anderson™ crimping tool.
- All cable entries into the vehicle or trailer must be suitably sealed.
- If the regulator has a dedicated Solar input ground (negative) terminal, ensure that the negative ground from the solar panels is connected directly to the regulator. Refer to the manufacturer's instructions.
- The SRC0009 Battery Clip cable is intended for a portable short term connection, and is not to be left connected permanently.

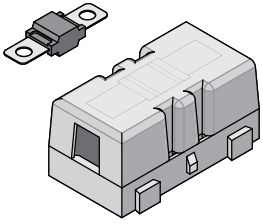
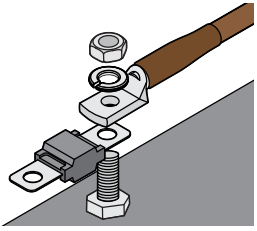
Fuse Protection

Fuse protection is required for wire and component protection in case of short circuit. Fuses must be fitted as close as possible to the battery positive terminal.

REDARC recommend using a MIDI style bolt down fuses as they ensure a low resistance connection. The REDARC FK40 and FK60 Fuse Kits are recommended.

Blade type fuses are not recommended as they can result in high resistance connection which causes excess heat and may damage the fuse holder and/or the wiring.

Self-resetting circuit breakers are not recommended as they may trip prematurely due to the heat generated by the current flowing through the wires.

MIDI Fuse (with holder)	Fuse Assembly
	

WARRANTY

LIMITED WARRANTY

For full warranty terms and conditions, visit the Warranty page of the REDARC website:
www.redarcelectronics.com/warranty

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