





SOLAR EQUIPMENT FOR ACCESS AUTOMATION

Centurion Systems now offers a comprehensive range of solar panels and supporting equipment to help you harness the power of the sun, enjoy a greener lifestyle, reduced electricity bills and complete power failure autonomy. There's no better time to go solar!

CENTURION SOLAR PANELS AND ACCESSORIES

Our range of solar panels are constructed from ultra-efficient polycrystalline and have been designed to provide a reliable and cost-effective alternative energy solution for applications where mains power is either not available, or not desirable. We also supply brackets, regulators, deep-cycle batteries and battery enclosures, meeting your every solar need.



MAIN FEATURES

Mechanical Features

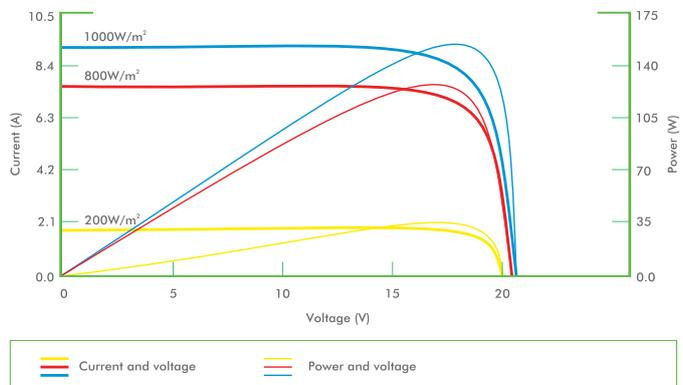
- Minimal voltage drops, even in shade
- Great solar cell conversion efficiency
- White tempered glass, EVA resin, weatherproof film and anodised aluminum frame to provide efficient protection from the most severe environmental conditions
- Perfect for grid applications
- Durable with limited maintenance and repair
- Easy to install and set up with our custom-made mounting bracket, saving you time and money
- Complete power failure autonomy, off-the-grid
- Cost-effective and reliable source of power
- Helps decrease your consumption of electricity from the grid
- Environmentally friendly

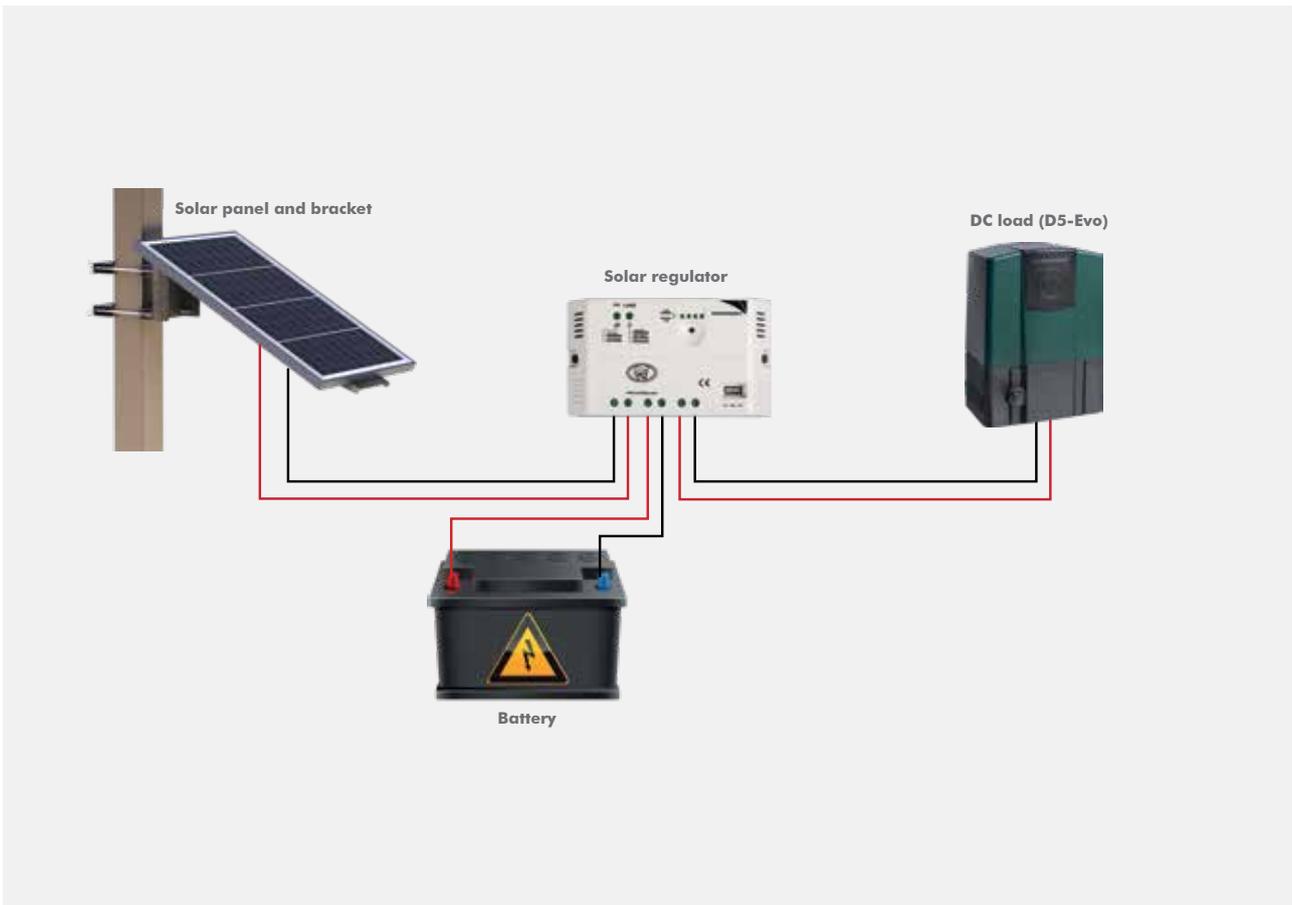
SOLAR PANELS

| Type of module | 40W | 60W | 80W | 100W | 150W |
|------------------------|---|---|---|--|--|
| Maximum power | 40W | 60W | 80W | 100W | 150W |
| Tolerance | ± 3% | ± 3% | ± 3% | ± 3% | ± 3% |
| Open-circuit voltage | 22.2V | 22.2V | 22V | 22V | 22.5V |
| Short-circuit current | 2.37A | 3.56A | 4.85A | 6,06A | 8,56A |
| Maximum power voltage | 18.2V | 18.2V | 18V | 18V | 18.5V |
| Maximum power current | 2.2A | 3.3A | 4.44A | 5.56A | 8.11A |
| Module efficiency | 12.84% | 14.22% | 13.05% | 14.9% | 15.2% |
| Solar cell efficiency | 17.3% | 17.26% | 17.2% | 17.2% | 17.1% |
| Series fuse rating | 15A | 15A | 15A | 15A | 15A |
| Terminal box | IP65 | IP65 | IP65 | IP65 | IP65 |
| Maximum system voltage | 1000V DC | 1000V DC | 1000V DC | 1000V DC | 1000V DC |
| Operating temperature | -40°C to 85°C | -40°C to 85°C | -40°C to 85°C | -40°C to 85°C | -40°C to 85°C |
| Weight | 4kg | 5.1kg | 7.3kg | 8kg | 12kg |
| Packaging dimensions | Length: 465mm x Width: 670mm x Height: 25mm | Length: 630mm x Width: 670mm x Height: 30mm | Length: 915mm x Width: 670mm x Height: 30mm | Length: 1005mm x Width: 670mm x Height: 30mm | Length: 1480mm x Width: 670mm x Height: 35mm |

Current-voltage and power-voltage characteristics - various irradiance levels

| Typical performance characteristics | |
|---|-------|
| Current Temperature Coefficient %/°C | +0.06 |
| Voltage Temperature Coefficient %/°C | -0.34 |
| Power Temperature Coefficient %/°C | -0.47 |
| Performance Warranty: 90%output, 12 year 80%output, 25 years | |



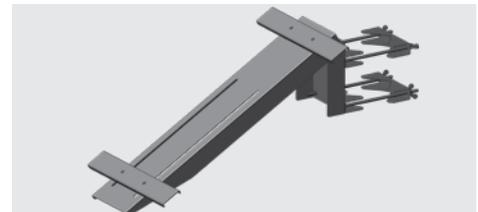


SOLAR EQUIPMENT FOR ACCESS AUTOMATION GUIDE



SOLAR REGULATOR 20A CHR9 L/SHED PWM USB

For monitoring the condition of your battery according to the power generated by your solar panels.



UNIVERSAL SOLAR PANEL BRACKET ASSEMBLY

Robust and versatile galvanised mild steel bracket suitable for mounting a variety of solar panels between 20W and 150W in size.



BATTERY BOX

Durable and secure for the safety and protection of your battery. 2 x CP5C2 batteries fits into the secure box. Comes with a theft-resistant cage.



BATTERY BOX

Durable and secure for the safety and protection of your battery. Suitable for a single CP5C2 battery.



DEEP-CYCLE BATTERY



CABLE SOLAR 4mm AND 6mm

Black and red with insulation and jacket materials. Extremely resistant to weathering, UV-radiation, abrasion, water and acids.



MALE SERIES MC4 CONNECTOR – POSITIVE

An easy-to-install connector system used to connect CENTURION solar panels. Consists of male and female connecting to the branch connectors.



FEMALE SERIES MC4 CONNECTOR – NEGATIVE

An easy-to-install connector system used to connect CENTURION solar panels. Consists of male and female connecting to the branch connectors.



MALE PARALLEL BRANCH CONNECTOR – POSITIVE

Branch Connectors are used to connect two MC4 Connectors in parallel.



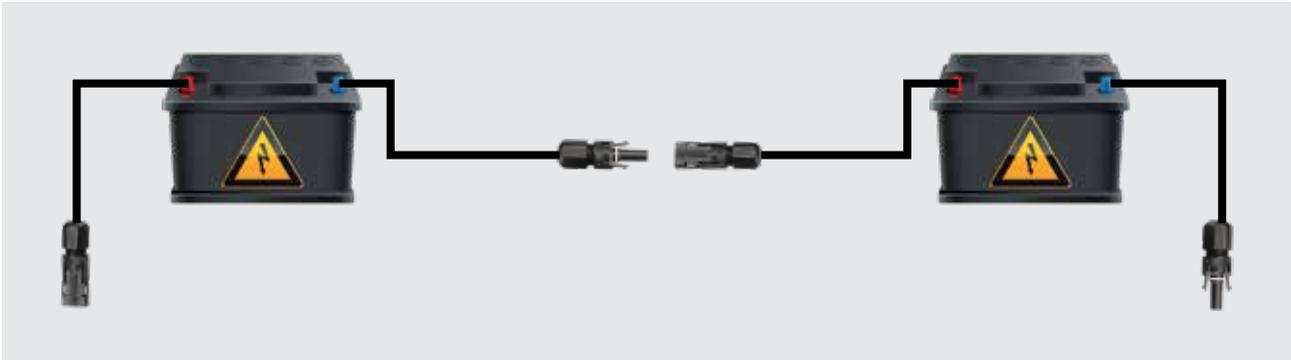
FEMALE PARALLEL BRANCH CONNECTOR – NEGATIVE

Branch Connectors are used to connect two MC4 Connectors in parallel.

SERIES AND PARALLEL CONNECTIONS

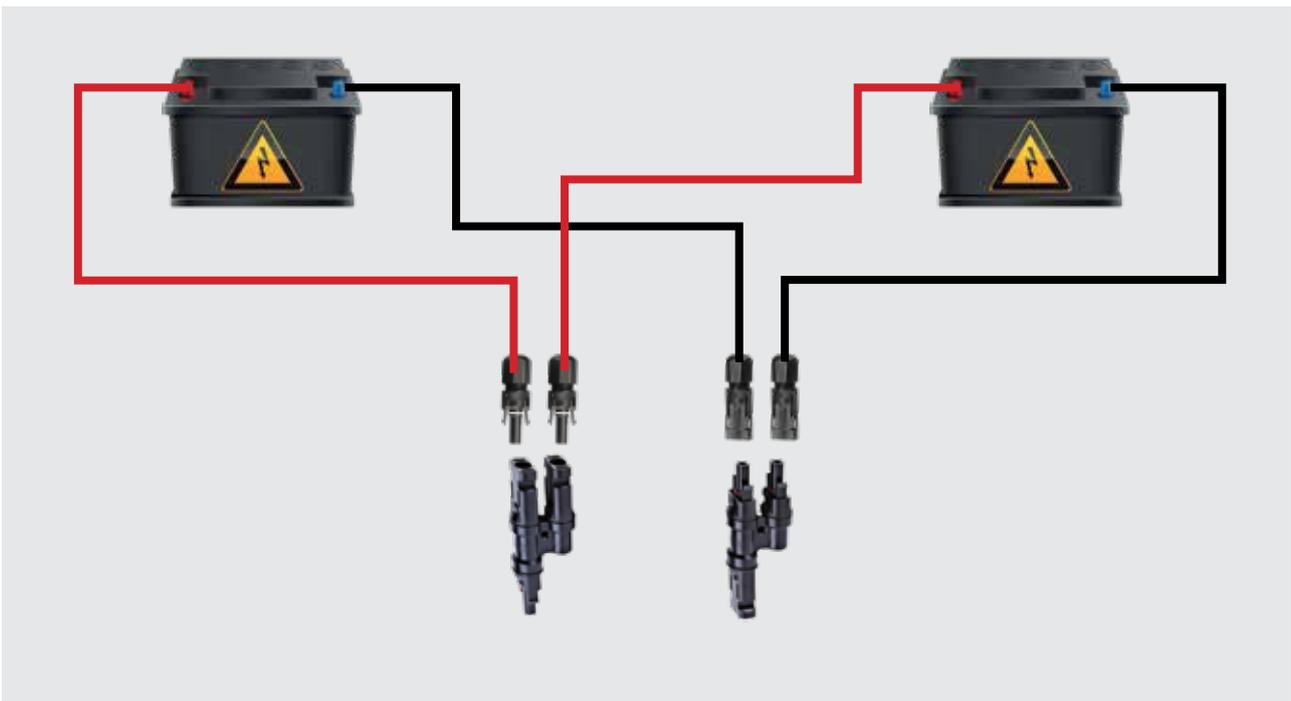
SERIES CONNECTION

The **Series Connection** is commonly used to increase the voltage range. If you require a 24V setup you would connect two 12V batteries together by connecting the positive and negative terminals of each battery together.



PARALLEL CONNECTION

The **Parallel Connection** is commonly used to increase the system capacity (watts) while still only supplying 12V. This is achieved by joining the positive and negative connections together as one.





GOOD MORNING SUNSHINE

Is there anything more spectacular than an African sunrise? That gorgeous blood-red sphere sits atop its throne of clouds, playfully throwing its amber rays and painting the landscape like an artist would a blank canvas. The very horizon seems ablaze as the grass of countless fields, the concrete spines of many skyscrapers, again feel the warm caress of another beautiful morning.

Of course, the sun is good for more than Instagram fodder or the backgrounds to motivational Facebook postcards, and in recent years has become an important source of renewable energy. Amid worries about the effects of global warming – which is caused by trapped greenhouse gasses, the result of excessive carbon emissions – and concerns regarding the country's unstable power supply, people are turning their attention skyward, towards the world's oldest power cell. The rising popularity of solar has also meant that the prices of equipment and installations have come down significantly since it first came onto the scene, while lower energy bills make up yet another reason to stick it to the energy companies and go off-grid.

You'll be pleased to know that everything you need for a complete solar installation can be found at your nearest CENTURION branch, including:

Solar Panels

Solar panels are photovoltaic systems, which basically means that they convert light into electricity. We commonly refer to devices that convert one type of energy into another as "transducers", if you want to get all science-y about it. Simply put, the panels absorb the light from the sun and pump out electricity at the other end, which is a pretty sweet deal, if you ask us.

Centurion Systems stocks high-quality, robust and efficient solar panels in the following sizes: 40W, 60W, 80W, 100W, 150W,

Regulators

Imagine the line at your local licensing office without marshals to control the flow of people into and out of the building: total chaos, right? That's a bit what the electricity is like when it first comes out of the solar panel. Without anything to regulate it, the voltage can be too high, too low, or simply too erratic to be of

any real use. Luckily, you can get some reliable (and great-looking) solar regulators from CENTURION!

Brackets

Mount your panels in style with our versatile galvanised mild steel solar mounting brackets. They're easy to install and adjust, and they look good, too!

Batteries

Naturally, the whole *raison d'être* of solar systems is to power or charge something that would otherwise require mains power. Solar configurations are typically connected to batteries or some other power store, which are charged via the regulated voltage output. Solar power takes the place of mains voltage, replenishing the energy expended by the battery. The bigger the battery, the longer it will take to empty its "energy reservoir", and the more efficient the system will be. Why not let CENTURION take care of your power store requirements? Get your 65Ah, 100Ah or 200Ah battery directly from us!



OUR DIGITAL AND ONLINE BRAND PRESENCE AND SUPPORT

WEBSITE

- Landing pages in French, Spanish, Portuguese and Thai
- Access to product documentation, comparison charts and diagnostic guides
- Device software
- G-WEB PLUS interface for administering CENTURION GSM devices
- Massive library of useful articles
- <http://www.centsys.com>

SUPPORT

- Dedicated technicians, unrivalled backup support and friendly and efficient sales personnel
- Technical support in all official languages, as well as French, Spanish and Portuguese
- Call centre operates 7am to 6pm (GMT +2), Monday to Friday and 8am to 4:30pm (GMT +2) on Saturdays

SOCIAL MEDIA

- “Like” our Facebook page (www.facebook.com/centurionsystems) and follow us on Twitter (@askCenturion) for all the exciting company news, launches, roadshows, competitions as well as technical and sales support
- Subscribe to our YouTube channel for access to an extensive library of how-to videos and tutorials
- Interesting and innovative installations from around the world, including unusual uses of CENTURION products
- Are you on our YouTube channel? Showcase your installations!

NEWSLETTER

- Fantastic way of staying abreast of company news, developments, events and functions, new products and enhancements to existing range



INDUSTRY-LEADING PRODUCT TECHNOLOGIES

TECHNOLOGY

CENTURION products feature a host of industry-leading technologies, all conducive to greater security, greater convenience and superior functionality. Just some of the advanced technologies found in our products are:

- **ChronoGuard** – a world-first timer technology that allows the user to set a myriad Auto-activation and Time-barring functions using the onboard Real Time Clock and Calendar, which tracks the date up to the year 2099
- **Intruder-detection Alarms** – The novel feature-set – consisting of the Beam Alarm and Ambush Alarm - ups the security ante even further by providing an audible output when the infrared gate safety beams are obstructed, or remain interrupted for a pre-defined period of time
- **Code-hopping technology** – CENTURION remote controls are equipped with code-hopping encoders which process the outgoing transmission through a sophisticated encryption engine, making copying and cloning virtually impossible. No two transmitted codes will ever be alike

- **Onboard diagnostics** – Our D-Series range provides both audible and visual feedback of the gate status at any given time. In addition, a designated diagnostic screen makes fault-finding a breeze
- **High-volume capability** – CENTURION operators are designed to work hard, and work hard they do – with some operators such as the SECTOR II traffic barrier being capable of performing in excess of 3000 operations every single day



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**Sharecall numbers applicable when dialled
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