



AUTEL ELECTRIC VEHICLE CHARGERS

WE HAVE COMPLETE EV CHARGING SOLUTIONS FOR YOU.



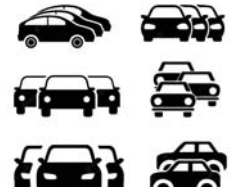
Car Dealerships



Commercial



Government



Car Fleet Owners



Truck Fleet Owners



Car Parks



Supermarket



Schools



Hospital



Places of Worship



Residential

Charge 200 km
range in
20 minutes

1300 756 634

email: solar@crystalsolarenergy.com.au

web: www.crystalsolarenergy.com.au



Your reliable Solutions Partner in Renewable Energy



AUTEL

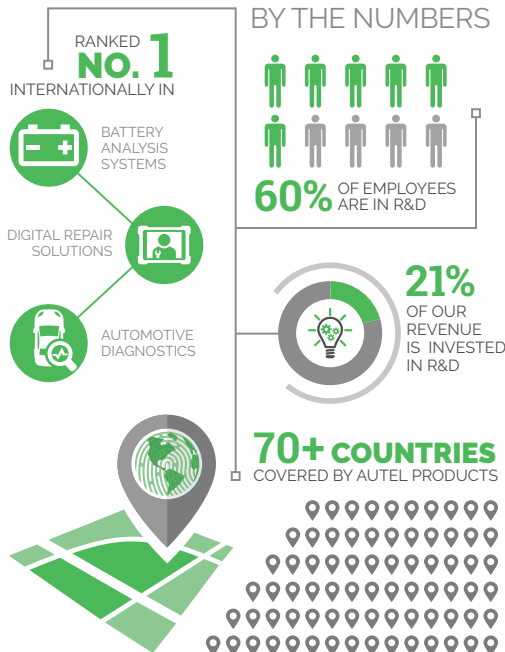
Founded in 2004, Autel develops and sells automotive intelligent diagnostic, inspection and analysis products and solutions. Autel also develops and sells automotive electronic accessories. Our products and solutions cover more than 70 countries and regions, including the United States, Germany, Britain and Australia, etc.

Autel Advantages

From our design process, R&D, production, through to sales and marketing, Autel products provide a total solution of EV Charging innovations, which include a range of AC and DC charging units, smart app software development, with built in battery diagnostics.

With a global presence in the world's technology market, Autel is committed to bringing good value, reliable and smart products to our customers. Our range of EV charging products perfectly fits for all the applications which include residential, workplace, retail, commercial parking, gas stations, highway, fleet, and public CPO.

WHO WE ARE



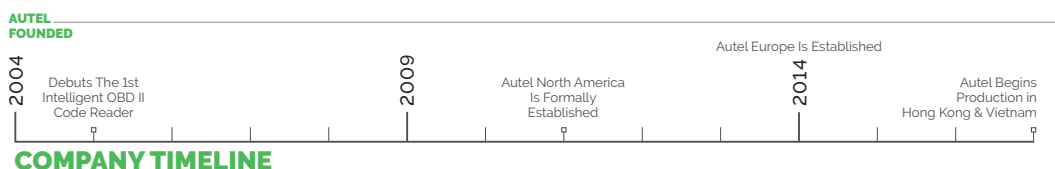
New, smart, efficient energy is a fast-growing social development that has resonated throughout the global community in the past several years. This movement is organically aligned with Autel's product line evolution. We intend to become thought leaders of the industry with innovative platform solutions, while setting the benchmark of excellence for products, service and customer care.

Over the past two decades, Autel (a name born by combining "Automotive" and "Intelligence"), has revolutionized the automotive service and repair business across the globe. We were able to accomplish this feat by acquiring the best and brightest talent to develop intelligent hardware, software, and cloud-based back-end solutions.

We are now set to use the assets we've harnessed to tackle one of the greatest challenges facing our planet today - setting a smarter, greener path for generations to come.

With these resources fully committed to this mission, we will lead the global community in *Powering the Planet*. We are creating a viable and reliable ecosystem of charging solutions that will help promote the integration of electric vehicles in our daily lives, all while managing energy in our homes, businesses and communities.

Autel is building this through the development of smart charging, storage and renewable energy solutions that work in concert to improve our infrastructure, balance power and access micro grids to effectively impact and efficiently deploy energy where we need it, when we need it, and how we need it!



OUR VALUE PROPOSITION



Comprehensive Solution - Makes your operation run efficiently & smoothly, providing you a **Future Proof** electrification strategy.



Multifunctional charging destination of Dealerships. Keeps your EVs charged always ready for the Test Drive. Keep the batteries healthy.



Customer experience at Service - plug in the customers' vehicle as part of customer care routine to create an air of positivity.



Provide a convenient EV charging station in your car park for your staff / customers to charge their EVs while at work or shopping.



Revenue Generation - Autel provides one stop approach solutions for Commercial, Governmental, Fleets, Car Dealerships & Residential charging.



AUTEL brings their 18 years experience in Automotive Diagnostics in every EV Charger. **Low Failure rate (0.09% Global average) so, less down time**



 **CRYSTAL SOLAR ENERGY**
POWER SOLUTIONS provides Supply, Installation & Technical Support including maintenance when required.



COMPATIBLE WITH ALL EVS



AND MANY OTHER BRANDS....



MAXI CHARGER AC WALL MOUNT

DIMENSIONS

WIDTH: 7.36" (187mm)
HEIGHT: 13.23" (336mm)
BODY DEPTH: 3.35" (85mm)
HOLSTER DEPTH: 11.24" (285mm)

ACCESSORIES

FACEPLATES



- ☐ WHITE
- ☐ SILVER
- ☒ DARK GRAY
- ☐ ROSE GOLD*

* For indoor use only

PEDESTAL & MOUNTING BRACKET

RFID CARD



MAXI CHARGER™ ACHOME

LEVEL 2 ELECTRIC VEHICLE CHARGER

The Autel MaxiCHARGER Home makes charging your EV easy. Combining easy installation and an app to control it all from your smartphone, it will integrate perfectly into your home.

FAST HOME AC CHARGING

CHARGE FASTER & MORE EFFICIENTLY

- Up to a maximum of 50A, creating 12kW of power for increased charging speed
- 9X faster than a traditional AC home charger
- Can be adjusted through a hardware switch or the APP

SMART CHARGING

REAL-TIME NOTIFICATION & REPORTING

- Easily view schedules and details
- Charging status sessions

HIGH CONVENIENCE

READY TO GO & EASY TO INSTALL

- Comes standard with hardwired or NEMA 14-50/6-50 plug
- Plug in system can be installed in 8 minutes
- Hardwired version requires a certified electrician

AC HOME IDEAL FOR:



HOME

DIMENSIONS

WIDTH: 7.36" (187mm)
HEIGHT: 13.23" (336mm)
BODY DEPTH: 3.35" (85mm)
HOLSTER DEPTH: 11.24" (285mm)



MAXI CHARGER™ ACCOMMERCIAL

LEVEL 2 ELECTRIC VEHICLE CHARGER

As the demand for EV charging continues to grow, Autel offers a variety of solutions for commercial applications. With Autel commercial charging, you can now appeal to a broader market, provide convenient solutions for EV drivers, and adapt to their needs effortlessly.

FAST COMMERCIAL AC CHARGING

CHARGE FASTER AND MORE EFFICIENTLY

- Up to a maximum of 50A, creating 12kW of power for increased charging speed
- 9X faster than a traditional AC home charger
- Can be adjusted through a hardware switch or the APP

HIGH RELIABILITY AND DURABILITY

BUILT TO LAST

- Evaluated and tested to UL standards
- Tested to IK10 High impact resistance
- NEMA 4 weather protection exterior rated for all-weather use
- Capable of charging at full power between -40°F to 133°F

CLOUD BASED SMART CHARGING

HIGH CONVENIENCE

- Connected to Autel Cloud, an easy way to control, monitor and run your business
- In real time dynamically balance energy to reducing electricity costs
- Easy to maintain

AC COMMERCIAL IDEAL FOR:



COMMERCIAL

MAXI CHARGER AC WALL MOUNT

Technical Specifications

Product Information

Charging mode	Type 2
Input/output power rating and current	Single phase up to 7.4kW/32A; Three phase up to 22kW/32A
Input/output voltage	230V±15%, single phase; 400V±15%, three phase; 50Hz (UK: 230V±10%, single phase; 400V±15%, three phase; 50Hz)
Network type	TT, TN
Connector type	IEC 62196 Type 2 or Type 1 plug, 5m IEC 62196 Type 2 Socket or Socket with shutter
Internal RCD	AC 30mA, DC 6mA
Protection	Overcurrent, overvoltage, undervoltage, integrated surge protection, PME (UK)
Card reader (Optional)	ISO 15693, ISO 14443
Power measurement accuracy	+/- 1.0% from 1% to full scale; Build-in MID Certified meter (Only applicable to the products with LCD screen)

General Characteristics

IP and IK rating	IP65 (IP54 for socket version); IK10 (Screen: IK08)
Operating altitude	2000m
Operating temperature range	-40°C~+55°C
Storage temperature range	-40°C~+85°C
Mounting	Wall or floor using a pedestal
Dimensions (H×W×D)	336×187×85mm

User Interface

Status indication	LED/APP/Touch Screen (Optional, 5 inch LCD, 800*480)
User interface	Autel Charge APP; Autel Charge Cloud
Connectivity	Bluetooth, Wi-Fi, Ethernet, 4G (Optional), CAN, RS485 for energy meter connection
Communication protocols	OCPP 1.6J
User authentication	APP, RFID card

Software Update

OTA updates via web portal

Certification and Standards

Safety and compliance	IEC 61851-1, IEC 62311, IEC 62479, IEC 62955, IEC 61439-1/-7
Certification	CE (TUV)
Warranty	36 months, warranty extension possible

* All pictures shown are for illustration purpose only, actual product and specifications may vary due to product enhancement

MAXI CHARGER 47 kW DC FLOOR MOUNT

DC Compact Technical Specifications

MaxiCharger DC Compact

Technical Specifications



DC output connection	Charging mode	Mode 4: CCS2
	Output power	Rated power 40kW (Max. 47kW)
	Output voltage	150~950V
	Max output current	133A
	Number of outputs	2*CCS2, or 1*CCS2+1*CHAdemo, or 1*CCS2
AC input connection	Peak efficiency	≥96%
	Earthing system	3P, N, PE
	Input voltage	3-phase 400V AC ±10%
	Input frequency	50Hz
	Power factor	≥0.99
General characteristics	Harmonic distortion (THDi)	≤5%
	IP and IK rating	IP54; IK10
	Operating altitude	2000m
	Operating temperature range	-30°C~+55°C
	Storage temperature range	-40°C~+70°C
User interface	Mounting	Pedestal or wheels
	Dimensions (H×W×D)	1000×550×265 mm
	Screen type	21.5 inch LCD touch screen (1920*1080)
	Cable length	4m standard; 5m optional
	Status indication	LED/LCD/APP
Software update	User interface	Autel Charge APP; Autel Charge Cloud
	Connectivity	4G, Wi-Fi, Ethernet
	Communication protocols	OCPP 1.6J (Can be upgraded to OCPP 2.0.1 later)
Certification and standards	User authentication	APP, RFID card
	Software update	OTA updates via web portal
	Safety and Compliance	IEC 61851-1; IEC 61851-23; IEC 61851-21-2; ISO 15118
Certification and standards	Certification	CE, EMC Class A
	Warranty	24 months, warranty extension possible

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MaxiCharger DC Wall Mount

Big power and big value in a compact package


Fast and Effective

Built to increase charging efficiency

- Dual-ports provide up to 47kW of power
- Charge 2 vehicles simultaneously
- A 30 min charge equates to 130 km of range


Compact Design

Optimized for any location

- Ultra-compact with big DC power in a small package
- DC Wall Mount has low installation costs, meaning a faster ROI due to reduced capital expenditures for the site operator


Smart Advertising and Communication Platform

Improve your ROI

- User-friendly 21.5-inch LCD touch screen
- Powered by smart operating system, Android 10 with enhanced advertising placements
- Communicate, promote or attract customers generating new revenue streams

A Closer Look at the MaxiCharger DC



OCPP1.6/2.0.1



One Stop Cloud Network Management



96% Charging Efficiency



Certified Through a 16-point Inspection Process



ISO 15118 Plug & Charge



Smart Charging



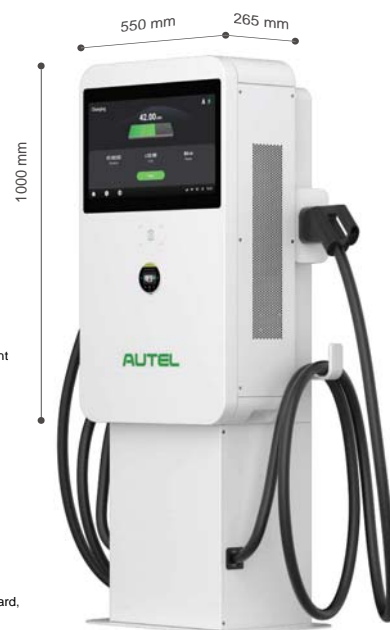
Compatible with CCS1, CCS2, CHAdemo



APP, RFID Card, Credit Card, Mobile Payment



Weather Resistant



MAXI CHARGER 47 kW DC CHARGER

Technical Specifications

DC Output Connection

Charging mode	Mode 4: CCS2
Output power	Max. 47kW
Output voltage	150-950V
Max output current	133A
Number of outputs	2*CCS2, or 1*CCS2+1*CHAdeMO, or 1*CCS2
Peak efficiency	≥96%

AC Input Connection

Earthing system	3P, N, PE
Input voltage	3-phase 400V AC ±10%
Input frequency	50Hz
Power factor	≥0.99
Harmonic distortion (THDi)	≤5%

General Characteristics

IP and IK rating	IP54; IK10
Operating altitude	2000m
Operating temperature range	-30°C~+55°C
Storage temperature range	-40°C~+70°C
Mounting	Wall or floor using a pedestal
Dimensions (HxWxD)	1000x550x265 mm

User interface

Screen type	21.5 inch LCD Touch Screen
Cable length	4m Standard; 5m Optional
Status indication	LED/LCD/APP
User interface	Autel Charge APP; Autel Charge Cloud
Connectivity	4G, Wi-Fi, Ethernet
Communication protocols	OCPP 1.6J (Can be upgraded to OCPP 2.0.1 later)
User authentication	APP, RFID card

Software update

OTA updates via web portal

Certification and standards

Safety and compliance	IEC 61851-1; IEC 61851-23; IEC 61851-21-2; ISO 15118 Plug&Charge
EMC compliance	CE, EMC Class A
Warranty	24 months, warranty extension possible

* All pictures shown are for illustration purpose only, actual product and specifications may vary due to product enhancement

MAXI CHARGER FAST 60-240 kW DC CHARGER

AUTEL[®]

MAXICHARGERTM

DC FAST 60KW-240KW WITH 20KW INCREMENTS

SPECIFICATIONS

High Power meets high operability with the MaxiCharger DC Fast



*600 mm for 60-120kW, 700 mm for 140-240kW



- FLEXIBLE POWER MODULE DESIGN
- MULTIPLE CABLE & CHARGING CONNECTOR OPTIONS
- 27-INCH TOUCHSCREEN DISPLAY
- SMART CLOUD PORTAL WITH REMOTE DIAGNOSTICS
- DYNAMIC LOAD BALANCING
- ISO 15118 PLUG & CHARGE

MAXI CHARGER FAST 60-240 kW DC CHARGER

SPECIFICATIONS MAXI CHARGER DC FAST 60KW-240KW WITH 20KW INCREMENTS

PART NUMBERS	DCFC 60KW-120KW	DCFC 140KW-240KW
	60kW: UF060xxxxx; 80kW: UF080xxxxx; 100kW: UF100xxxxx; 120kW: UF120xxxxx	140kW: UF140xxxxx; 160kW: UF160xxxxx; 180kW: UF180xxxxx; 200kW: UF200xxxxx; 220kW: UF220xxxxx; 240kW: UF240xxxxx
	The "xxxxx" portion of the product part number represents the various product configurations.	

ELECTRICAL

CONNECTOR OPTION*	Dual CCS1, or CCS1 + CHAdeMO	Dual CCS1/CCS1 Boost, or CCS1 + CHAdeMO
MAX. INPUT AC CURRENT	60kW: 91A; 80kW: 122A; 100kW: 152A; 120kW: 182A	140kW: 210A; 160kW: 245A; 180kW: 270A; 200kW: 305A; 220kW: 335A; 240kW: 365A
NOMINAL INPUT AC CURRENT	60kW: 83A; 80kW: 110A; 100kW: 138A; 120kW: 165A	140kW: 181A; 160kW: 207A; 180kW: 230A; 200kW: 260A; 220kW: 285A; 240kW: 310A
INPUT VOLTAGE RANGE	480 V AC - 15 % to +10 % @ 60 Hz	
DC OUTPUT VOLTAGE	CCS1: 150 to 950 V DC; CHAdeMO: 150 to 500 V DC	
NETWORK TYPE	TN-S, TN-C, TN-C-S, & TT (External RCD** Required)	
AC INPUT CONNECTION	3P + PE (No Neutral)	
PROTECTION	Over-Current, Over-Voltage, Under-Voltage, Ground-Fault, Over-Temperature, Short-Circuit, Insulation Monitor (IMD), & Surge Protection	
OVERVOLTAGE CATEGORY	AC Side (Input) OVC: III	
POWER FACTOR (> 50 % LOAD)	≥ 0.98	
THDI (> 50 % LOAD)	≤ 5 %	
PEAK EFFICIENCY	≥ 96 %	
STANDBY POWER	80 W	
SHORT CIRCUIT CURRENT RATING	≥ 65 kA	
ENERGY METERING	Class A	

USER INTERFACE & COMMUNICATION

CONNECTIVITY	Internet Access Via 4G / Wi-Fi / Ethernet (RJ 45)
USER AUTHENTICATION	QR Code, RFID, Credit Card (Optional)
ISO 15118 PLUG & CHARGE	Yes
DIN 70121	Yes
INTERFACE	27" LCD High-Contrast Touchscreen (15.6" Optional)
ACCESSIBLE FOR WHEELCHAIR USERS	Yes
COMMUNICATIONS PROTOCOLS	OCPP 1.6 JSON, OCPP 2.0.1 (Can Be Upgraded Later)
RFID READER	ISO 14443 A+B to Part 4 & ISO/IEC 15693, Mifare, NFC, Calypso, Ultralight, PayPass, HID & More
EMERGENCY BUTTON	Yes
SOFTWARE UPDATE	OTA Update Via Web Portal
CONTROL AND CONFIGURATION	Web Portal, On-Board Service Portal

GENERAL CHARACTERISTICS

PROTECTION RATINGS	NEMA 3R Outdoor Use & IK-10
ENCLOSURE TYPE	Stainless Steel 430
OPERATION ALTITUDE	6561 Ft. (6561 to 9843 Ft. with Power Derating)
OPERATING TEMPERATURE	-31 °F to +131 °F (+122 °F to +131 °F with Linear Power Derating)
STORAGE TEMPERATURE	-40 °F to +158 °F
HUMIDITY	< 95 % RH, Non-Condensing
NOISE LEVEL	< 65 dB @1 m/25 °/Full Load/800 VDC
MOUNTING	Free-Standing Cabinet
CABLE LENGTH	15 ft (Optional: 20 or 25 ft)
DIMENSIONS (H X W X D)	76.8 x 32.3 x 23.6 In. (1950 x 820 x 600 mm) 76.8 x 32.3 x 27.6 In. (1950 x 820 x 700 mm)

CERTIFICATIONS & STANDARDS

COMPLIANCE & SAFETY	UL 2202, UL 2231-1, UL 2231-2, NEC Article 625, CSA C22.2 No. 107.1-16
EMC COMPLIANCE	FCC Part 15 Class A, Class B (Optional)
WARRANTY	24 Months with Warranty Extensions Available



* CCS1 Max 200A, CCS1 Boost 300A (Max 400A) ** RCD: Residual Current Detector For Ground Fault Protection

DC HIGH POWER TRUCK CHARGING SOLUTIONS 360 kW - 480 kW DC CHARGER



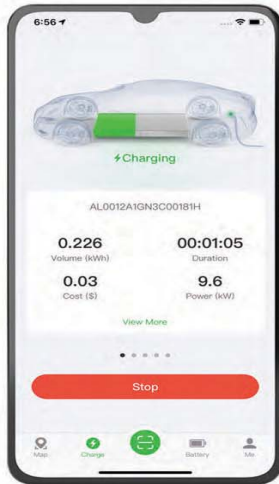
MAXI CHARGE APP



MAXICHARGER™ CHARGEAPP

SMART CHARGING FROM YOUR SMART DEVICE

The Autel Mobile Charge App, makes monitoring your charging process is quicker and more convenient than ever. At the tap of a finger, you can track, manage and optimize your EV charging at any time.



Optimize Your Charging Routine to Complement Your Lifestyle. Start, Stop or Schedule Charging Using Remote Access, Straight from Your Smart Device.

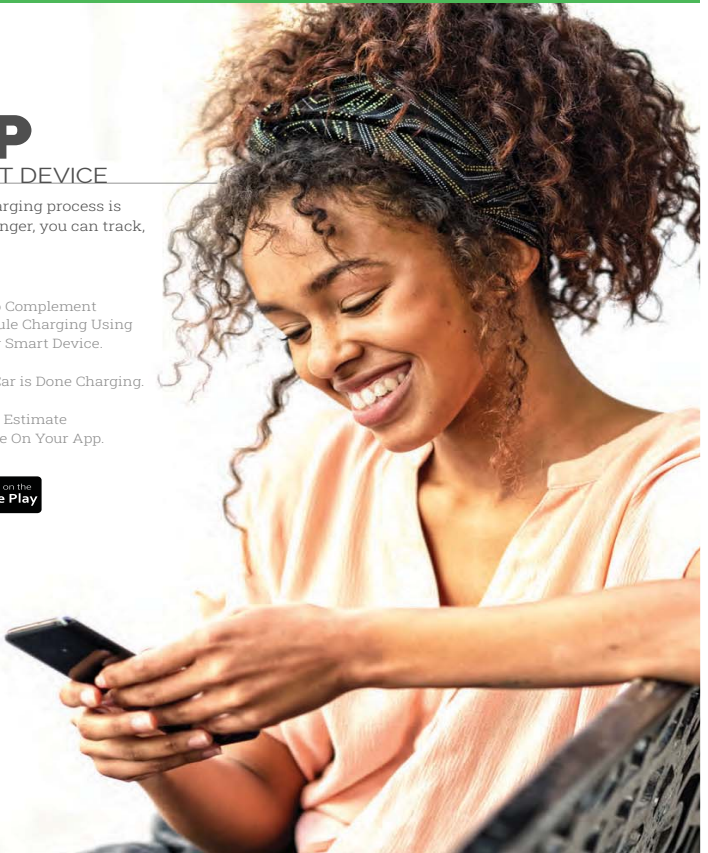


Receive Notifications When Your Car is Done Charging.



Track Your Energy Consumption & Estimate Your Utility Costs, Easily Accessible On Your App.

Available At



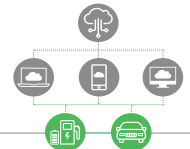
AUTEL CHARGE CLOUD



AUTEL® CHARGE CLOUD

VISUALIZE, MONETIZE & OPTIMIZE YOUR CHARGING NETWORK

Get complete control and visibility on your network with the Autel Charge Cloud. The only all-in-one charging cloud on the market, giving you control of operations, maintenance and advertising management, reducing your O&M costs as well as increases revenue through innovative advertising.



INTELLIGENT OPERATION EFFORTLESSLY MANAGE & OPTIMIZE CHARGING OPERATIONS

- Set prices designated by driver type, session length, energy cost and time of use
- Big data and AI-driven algorithms enable smart pricing and marketing strategy
- Real-time tracking of all charger activity by user, location, and timeframe

CLOUD BASED SMART CHARGING ADVANCED CHARGING MANAGEMENT

- In real time dynamically balance energy to reduce electricity costs
- Set and automatically adjust charging current by pre-setting energy demand requirements and price thresholds
- Smart charging prioritization according to vehicle State of Charge and scheduling

REMOTE MAINTENANCE MONITORING ROBUST & RELIABLE MAINTENANCE SYSTEM

- Remote diagnosis and troubleshooting
- Reduce repair time and minimize operational costs

SMART ADVERTISING & COMMUNICATION PORTAL IMPROVE YOUR ROI & BOTTOM-LINE

- Easily access to global media assets and resources
- Conveniently localize community advertisement, promotion and communication
- Use advertising to diversify revenue





THE LOGO

Symbolises our Sun and the abundant energy it provides for us to harness.

The Company

Founded by engineers with a cumulative experience of over seventy-two years; Crystal Solar Energy's philosophy is to provide the very best in Energy Savings, Energy Efficiency and Sustainability. We adopt and deploy new technologies and processes to bring value to our customers.

Our experience

Our extensive industry experience, and strong engineering background has seen Crystal Solar Energy at the forefront of the ever-changing process of achieving Energy Efficiency and savings. Our team of professionals strive to always bring the emerging technologies to you.

Product Knowledge

Our core philosophy is to offer you the best and reliable products available in renewable energy and sustainability, such as solar panels, inverters, battery storage, EV charging, wind power. Our engineers and technologists understand the finer details of these products and offer you the best suited to your needs; this makes different from our peers. You can be confident that you receive the best products, that perform well with long warranty.

New Technologies

Renewable energy sector is developing at a rapid pace. New developments take place in products such as solar panels, inverters, battery storage, micro inverters, means there are many technologies available to choose from.

Our experienced engineers and technologists keep up to date on product developments through training and seminars and expos. Thus, you are offered the best technology suited with nominal investment for years of performance. Minimise your investment and maximise your savings is our goal.

Advice & Support

Our advice is simple, honest and pertinent. You can be rest assured that you are receiving the best for you for now and a long term. All our advice is based on the knowledge we harness from the manufacturers, industry peak bodies and world's best testing labs. More importantly, our advice is complimentary and reliable. Our after sales support is one of the best in the industry.

The Natural Choice

Crystal Solar Energy works with various industry sectors. We have delivered cost savings in their energy consumption. We work with our customers closely, identifying areas that can bring in energy savings. We listen to you, understand your needs, process, conduct site study on how to improvements can be achieved, and offer solutions, implementing them with great outcome.

We have demonstrated our ability to identify and provide practical solutions to our customers. We value our clients' need to achieve cost savings in their energy consumption. Offer solutions to achieve energy efficiency. We are proud to be a bespoke service provider in this area and our commitment to excellence combined with our expertise, product selection, implementation with long warranties and ongoing follow up service sets Crystal Solar Energy apart from our peers.







200km range in 20 minutes



1300 756 634

email: solar@crystalsolarenergy.com.au
web: www.crystalsolarenergy.com.au



Your reliable Solutions Partner in Renewable Energy

