

SIEMENS

Ingenuity for life



SICHARGE CC AC22

Energized design for the future
of eMobility

[siemens.com/sicharge](https://www.siemens.com/sicharge)



At the edge of a new era

Embracing the challenges of today, there is the need to rethink how we experience mobility in the future. Therefore, we commit to our responsibility for future generations.



Innovating the
Future

Charging
Opportunities

eMobility
Ecosphere

Leading
Design

State-of-the-art
Technology

Options &
Technical Data

A future way of living is created by innovation

The beginning of the 21st century marked not only the start of a new millennium, the past 19 years have also fundamentally changed the view of society on the use of natural resources and climate impact.

Key elements to this are not only private cars but also buses and logistic fleets. Fueled by renewable energy, electromobility represents one of the major enablers in reducing CO₂ emissions for a more sustainable way of transporting people and goods.

The future of mobility will be connected, autonomous, electric and shared

On our journey into this future we are taking every challenge step by step jointly.

Large scale renewable energy production, widespread digitalization together with today's incredible speed of global innovation are the drivers for an efficient and effective evolution of mobility.

A new field of opportunities is opening up for established players and innovative start-ups

Today's ecosphere focused on fossil fuels is being replaced by a network of power generation and distribution, maintenance of decentral assets and digital services.

Parties previously not much involved in transportation will seize upcoming business opportunities and completely new players will emerge. This new world will be strongly interconnected and entire solutions have to be evaluated for investment decisions.

At the core – next to the electric vehicle – it all starts with the right charging hardware for the daily life.

A charging hardware which provides you with convenient use, a timeless design and all the connectivity and backend solutions you demand. It gives you the certainty of a sustainable future.

For more information, see: [siemens.com/sicharge](https://www.siemens.com/sicharge)



Charging into the future,
already today



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Universal charging

Providing charging infrastructure will not only attract individuals, it will define the relationship and how strong the tie will be between companies and consumers in future.



Hotel & hospitality

The perfect place to charge an e-car. Staying overnight or just for a meal, in any case, guest expectations are increasing. Providing the opportunity to charge the car improves your clients' experience during their stay.



Retail

A perfect match for your existing offering. Consumer decisions on where to buy, what to buy and how much time is spent will all be influenced by the charging possibilities.



Corporate charging

The perfect time to charge an e-car. Employees spend up to 70% of their daytime at work, visitors spend 20-70%. With the increasing number of electric vehicles, the expectations of responsibility and hospitality of companies are changing.



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Semi-public parking

The perfect opportunity. Until now, drivers just searched for a safe and convenient place for parking their car. Now, charging possibilities become a completely new motivation for visiting a parking space or spending a bit more time.



Events and arenas

The perfect advantage. Cultural and sport events already offer the public transport for an all-electric way to and from the event. With eMobility the individual transport is getting electrified and green as well.



Car retail

The perfect service for customers. Picking up a brand new car or leaving it for inspection and maintenance. As soon as your customer arrives, the expectation goes beyond a clean and fully available car. It should also be charged.



Leading eMobility to long term success

The ramp-up of electric vehicles will significantly impact your business. Balancing all available options will serve your needs.

For more information, see:
siemens.com/sicharge

We do this by leveraging core expertise in the neighboring spheres of energy and building management, providing unique integration and synergy.



Consulting

Numerous technical, legal and commercial boundaries need to be considered when planning a charging infrastructure. Together with our clients, we generate the suitable solutions.



Software Interoperability

While we recommend to combine your SICHARGE hardware with our Siemens Backend solution, we support the open interface to 3rd party backends. By this, SICHARGE integrates easily in environments with own history.



Every time the right hardware

The right choice leads to success. With SICHARGE, you can select from a wide charging portfolio and customized options, always providing you with the right fit.



Managed Services

Our scalable services capable of running entire charging setups let you focus on your core business. This goes far beyond technical service and includes e.g. contract management or billing.



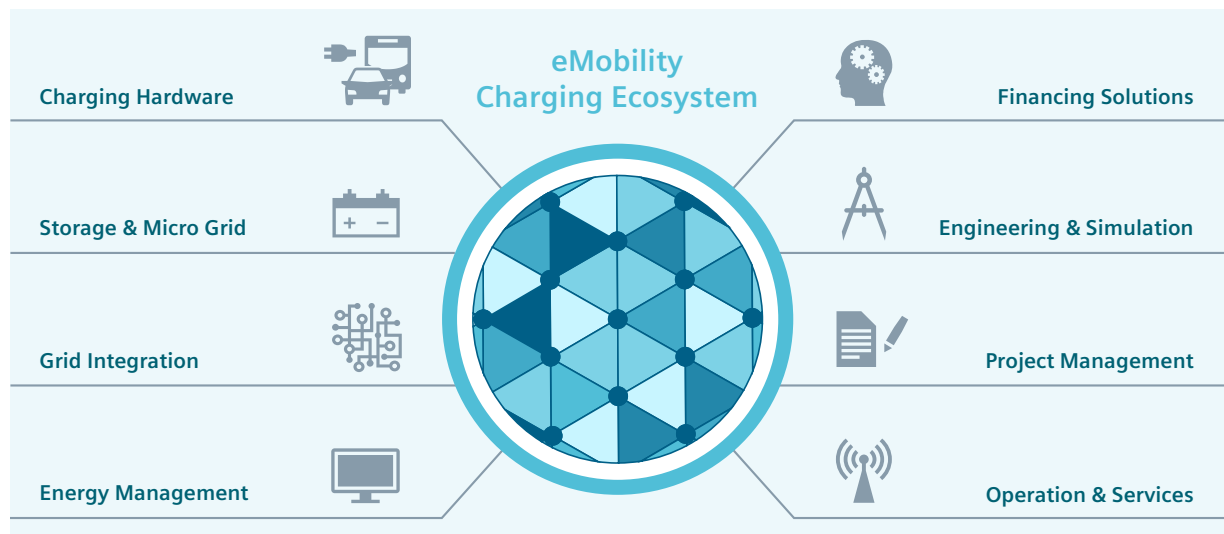
Energy Storage

A well integrated battery system will allow you to decouple your charging loads from grid boundaries. Ensuring reliable charging, management of peak loads or optimized use of renewable energy sources.



Financing

Having your infrastructure in the balance sheet might impact your investment criteria. In combination with financial services, the decision for the right solution gets even easier.



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Elegant design object with an individual look

At first glance, the groundbreaking charging station looks like an architectural highlight – an exclusive, high-quality addition to any surroundings. The color and film coating can be individually customized to meet your needs.



Broad color palette

For your SICHARGE CC AC22 color scheme, you have a choice of numerous colors from the RAL palette and beyond. Once you've chosen a color, the corresponding powder coating is applied in the factory by Siemens. Special colors are also available on request.

3D data

We're happy to supply the 3D data to architects and urban planners. So they can easily verify the positioning of the SICHARGE CC AC22.

Distinctive film coating

You have more options than just color for the film coating. Here, you can let your imagination and creativity run wild. Simply design your SICHARGE CC AC22 charging stations according to your own vision and ideas and turn them into design objects – including brand and individual artwork – that merge perfectly with their particular environment. Like the powder coating, the designer film coating is applied according to your specifications in the factory by Siemens.

Here you'll find a selection of colors from the RAL palette:

[Color selector](#)



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State-of-the-art technology for tomorrow's mobility

The SICHARGE CC AC22 embodies everything that Siemens stands for: decades of experience, solid technological expertise, and passionate ingenuity.

Long-lasting quality

The SICHARGE CC AC22 is a prime example of quality "Made in Germany," starting with the materials used and extending to the high-quality components. The charging stations are 100-percent factory-tested before delivery, including controllers, the device as a whole and, optionally, communication with the backend.

Simple maintenance

Unlike conventional charging stations where damage usually means replacing the entire system, it's easy to replace damaged side and rear parts thanks to the SICHARGE CC AC22's modular housing. One tremendous advantage in terms of maintenance is the front door. Its dimensioning permits easy access to components inside the charging station.

LEDs indicating status and availability clearly visible from all sides

Multilingual 7" display at an ergonomic height, accessible and easy to read – also in bright sunlight*

RFID card reader for user identification

Intuitive 2-button operation, functionally safe in all weathers

Shatterproof glass front

Large doors for easy access when performing maintenance

Weatherproof, UV-resistant, color-stable, and scratch resistant powder coating

GPRS, UMTS, and LTE connectivity

Illuminated window for easy access to the meter display

Type 2 socket with flap and plug locking, positioned for barrier free accessibility

Double locking: control panel and security key

High degree of protection IP54 against dust and spray water

Easily replaceable aluminum side and back panels

3-bolt locking system protects front against unauthorized opening

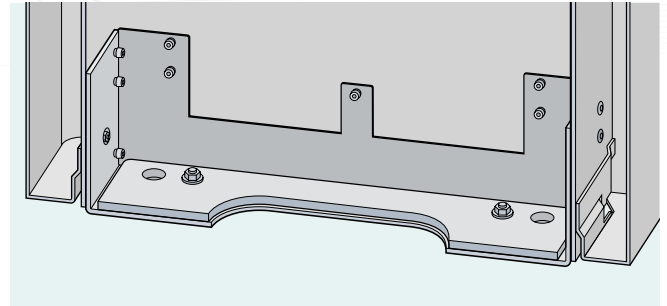
* Individualize the display with your own pictures or videos



Rugged and secure

The SICHARGE CC AC22 withstands unwanted external influences better than conventional charging stations, and not just because of its extremely stable stainless steel and aluminum housing.

Our innovative security concept goes much further. The plug lock protects against unauthorized removal of the cable, and the flap lock prevents unauthorized access to the plug-in contacts. Regular software updates ensure compliance with the highest cybersecurity standards.

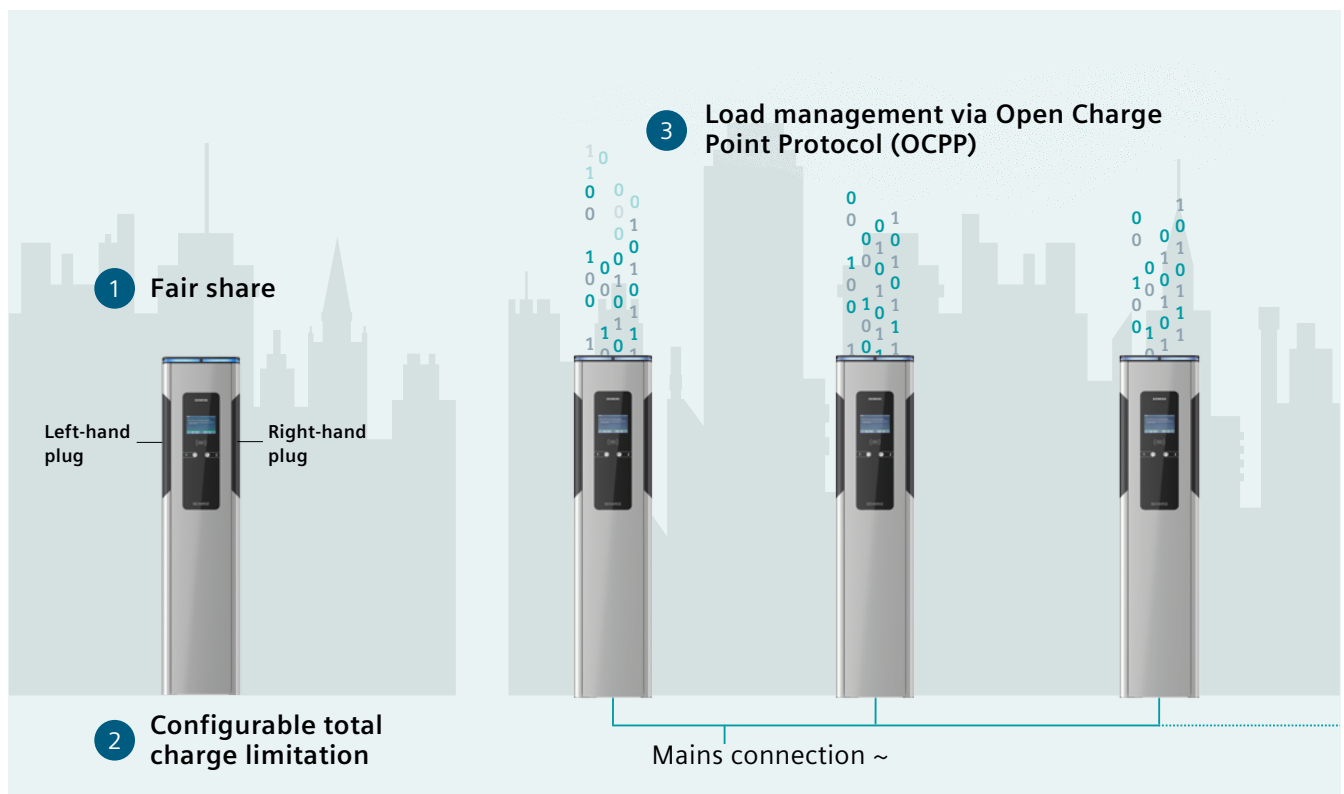


The SICHARGE CC AC22 consists of a stainless-steel inner body and a bolted aluminum outer body

Load management of your choice

The SICHARGE CC AC22 permits the parallel charging of two electric cars. An internal load management system ensures the fair sharing of power between the two vehicles. When two cars are charged simultaneously, the load management system evenly distributes the available connection capacity to the two vehicles.

A comprehensive load management system controlled via OCPP is available for the operation of multiple charging stations.



Flexible selection options

Thanks to the many versions and options, the SICHARGE CC AC22's configuration can be highly customized.



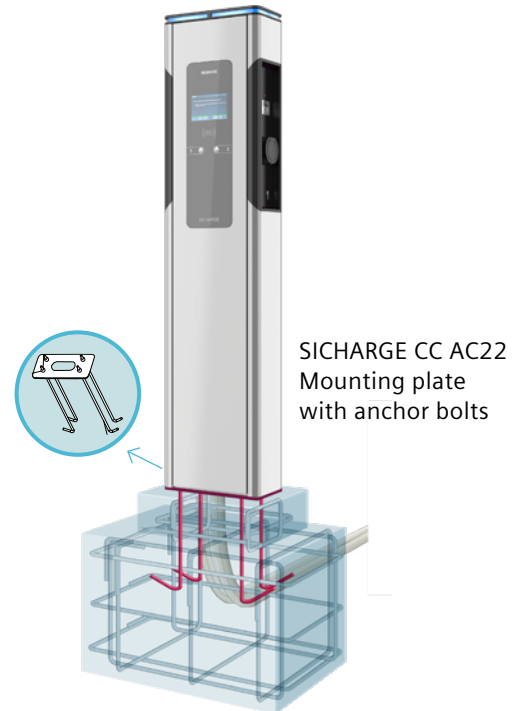
SICHARGE CC AC22
ERK version
MID version



SICHARGE CC AC22
Option with permanently
installed charging cables



SICHARGE CC AC22
Option with grid
connection box



Basic versions	
Basic MID version	Rugged designer charging station with two type 2 charging contacts according to IEC 62199, degree of protection IP 54, backend connection via OCPP 1.6 (2.0 prepared), and MID meter for 50 and 60 Hz
Basic ERK version – complies with weights and measures legislation	Differences from MID: 50 Hz, meter and accounting mechanisms according to German weights and measures legislation
Options and accessories	
Permanently installed type 2 charging cable (2 x)	Instead of two outlets, 5 m spiral, type 2 (approx. + 10 kg) charging cable on both sides and one bracket on each side for storing cable between charging operations
Option with grid connection box for SICHARGE CC AC22	Add-on module for back of SICHARGE CC AC22. Permits direct connection to power company's grid. Contains overload protection, RCCB, and power meter. Can be used for up to two charging stations
Mounting plate with anchor bolts	Stainless-steel plate with foundation bolts, to be integrated into the foundation (not included). Simplifies alignment and installation
Surge protection	Internal add-on module, type 1 + type 2 arresters according to EN 61643-1, spark gap technology with follow current limitation, defect display, trip indication via OCPP, protection level ≤ 1.5 kV. Lightning current impulse (10/350): 50 kA, energetic coordination according to DIN EN 62305-4
Integration test of new backend system	SICHARGE CC AC22 can be flexibly connected to any backend according to OCPP 1.6. On your behalf, we also configure and test connection to a previously unconnected backend
Configuration and communication test	Each SICHARGE CC AC22 is 100% tested in the factory. Optionally, we also perform a customer-specific configuration, including SIM card and communication test to backend
Customer-specific color tone	Standard color is RAL 9006. Numerous other colors are available
Full film coating	Customer-specific film coating on 4 sides of the SICHARGE according to film coating plan with UV-resistant film in 4-color printing, applied directly in the factory
Partial film coating	Same as full film coating except it covers approx. 50% of total surface
Last-gasp function	Internal add-on module. In the event of a power failure, permits charging cable to be unlocked



SICHARGE CC AC22

Technical data overview

Performance features and functions	
Authentication	Identification via RFID cards (ISO 14443) MIFARE Ultralight or Classic Whitelist function for user management
Screen	TFT – LED 7" color display with pushbutton operation
Charging processes	Charging mode according to IEC 61851 "Mode 3", charging current regulation
Charging connections	2 x IEC 62196 type 2, 22 kW each
Electrical design	
Network connection	Network connection: 3P+N+PE, up to 35 mm ² , rated voltage: 230/400 V AC, rated current: 63 A, rated frequency: 50 Hz, internal back-up fuse: 63 A
Charging point	Charging points: 2 nos. Plug connector: Type 2 – 32 A, with plug and hinged cover interlocking, IEC 62196 Maximum charging current: 32 A per charging point Disconnecting facility, per charging point: 4-pole with function monitoring Optional: 230 V plug type E
Safety	Main switch: Switch-disconnector with fuses 63 A, 3P+N MCB, per charging point: 32 A, 3P+N, characteristic: B with function monitoring RCD, per charging point: Universal current sensitive fault current monitoring IDn 30 mA, with function monitoring
Lightning and surge protection	Optional combination arresters type 1 + type 2 + type 3 (≤ 5 m)
Flexible connected load	Static load management Backend-side load management (OCPP 1.6) Dynamic local load management Interface (e.g. MOD Bus TCP)
Specific functions	i-MiEV detection, mode 3 s detection, contactor blocking check
Weights and measures legislation	The systems are prepared in conformity with the weights and measures legislation; a sample test has been submitted
Power meter	EDM meter with BKE meter accommodation, EDL 40+
Status indication	LED status indication integrated in topper element: free/connected/charging occupied/not charging occupied. Different flashing codes for fault mode indication
Mechanical design	
Dimension	1700 x 390 x 194 mm
Weight	75 kg
Installation type	Standalone installation on concreted foundation provided by the customer
Ambient conditions	Temperature -25 °C to 50 °C, degree of protection IP 54
Connectivity	
Remote maintenance and remote update option	All our charging stations are provided with a comprehensive remote maintenance option, far beyond the OCPP possibilities, as well as with a remote update option for the firmware
Web interface	The most important parameters required for individual operation can be configured through our web interface
External IT systems	Connection via GPRS, UMTS and LTE
Communication protocol	OCPP 1.6 (OCPP 2.0 in preparation)
Accounting and customer management	
Accounting	Accounting possible via backend system
Standards	
Charging processes	IEC 62196-2, VDE-AR-E2623-2, IEC 60309, IEC 61851-1, SEV 1011
Safety	IP 54 acc. to IEC 60529, protection class 1 acc. to DIN EN 61140, CE "Class A" acc. to EU Directive 2004/108/EC, DIN EN 55022, DIN EN 61439-1
Protection	High protection against vandalism (impact resistance acc. to IK10)
Released backends	
eCar OC, HTB – Has To Be, ENIO, Driivz, Smartlab, Virta, Swarco ARGOS, NTT Data	

Version 1.1



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Smart Infrastructure
Distribution Systems

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Subject to changes and errors. The information given in this document only contains general descriptions and/or performance features which may not always specifically reflect those described, or which may undergo modification in the course of further development of the products. The requested performance features are binding only when they are expressly agreed upon in the concluded contract.



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Color selector

Here you'll find a small selection from our RAL color palette. Naturally, additional tones and special colors are available for your customized design on request.



	RAL 1000 HR		RAL 3005 HR		RAL 5019 HR		RAL 7002 HR
	RAL 1001 HR		RAL 3007 HR		RAL 5020 HR		RAL 7003 HR
	RAL 1002 HR		RAL 3009 HR		RAL 5021 HR		RAL 7004 HR
	RAL 1003 HR		RAL 3011 HR		RAL 5022 HR		RAL 7005 HR
	RAL 1004 HR		RAL 3012 HR		RAL 5023 HR		RAL 7006 HR
	RAL 1005 HR		RAL 3013 HR		RAL 5024 HR		RAL 7008 HR
	RAL 1006 HR		RAL 3014 HR				RAL 7009 HR
	RAL 1011 HR		RAL 3015 HR		RAL 6000 HR		RAL 7010 HR
	RAL 1012 HR		RAL 3016 HR		RAL 6001 HR		RAL 7011 HR
	RAL 1013 HR		RAL 3017 HR		RAL 6002 HR		RAL 7012 HR
	RAL 1014 HR		RAL 3018 HR		RAL 6003 HR		RAL 7013 HR
	RAL 1015 HR		RAL 3020 HR		RAL 6004 HR		RAL 7015 HR
	RAL 1016 HR		RAL 3022 HR		RAL 6005 HR		RAL 7016 HR
	RAL 1017 HR		RAL 3031 HR		RAL 6006 HR		RAL 7016 HR
	RAL 1018 HR				RAL 6007 HR		RAL 7021 HR
	RAL 1019 HR		RAL 4001 HR		RAL 6008 HR		RAL 7022 HR
	RAL 1020 HR		RAL 4002 HR		RAL 6009 HR		RAL 7023 HR
	IGP 10213 R		RAL 4003 HR		RAL 6010 HR		RAL 7024 HR
	RAL 1023 HR		RAL 4004 HR		RAL 6011 HR		RAL 7026 HR
	RAL 1024 HR		RAL 4005 HR		RAL 6012 HR		RAL 7030 HR
	RAL 1027 HR		RAL 4006 HR		RAL 6013 HR		RAL 7031 HR
	IGP 10285 R		RAL 4007 HR		RAL 6014 HR		RAL 7032 HR
	RAL 1032 HR		RAL 4008 HR		RAL 6015 HR		RAL 7033 HR
	RAL 1033 HR		RAL 4009 HR		RAL 6016 HR		RAL 7034 HR
	RAL 1034 HR				RAL 6017 HR		RAL 7035 HR
			RAL 5000 HR		RAL 6018 HR		RAL 7036 HR
	RAL 2000 HR		RAL 5001 HR		RAL 6019 HR		RAL 7037 HR
	RAL 2001 HR		RAL 5002 HR		RAL 6020 HR		RAL 7038 HR
	RAL 2002 HR		RAL 5003 HR		RAL 6021 HR		RAL 7039 HR
	RAL 2003 HR		RAL 5004 HR		RAL 6022 HR		RAL 7040 HR
	RAL 2004 HR		RAL 5005 HR		RAL 6024 HR		RAL 7042 HR
	RAL 2008 HR		RAL 5007 HR		RAL 6025 HR		RAL 7043 HR
	RAL 2009 HR		RAL 5008 HR		RAL 6026 HR		RAL 7044 HR
	RAL 2010 HR		RAL 5009 HR		RAL 6027 HR		
	RAL 2011 HR		RAL 5010 HR		RAL 6028 HR		RAL 80 00
	RAL 2012 HR		RAL 5011 HR		RAL 6029 HR		RAL 70 00
			RAL 5012 HR		RAL 6032 HR		RAL 50 00
	RAL 3000 HR		RAL 5013 HR		RAL 6033 HR		RAL 20 00
	RAL 3001 HR		RAL 5014 HR		RAL 6034 HR		
	RAL 3002 HR		RAL 5015 HR				RAL 8000 HR
	RAL 3003 HR		RAL 5017 HR		RAL 7000 HR		RAL 8001 HR
	RAL 3004 HR		RAL 5018 HR		RAL 7001 HR		RAL 8002 HR



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