



Energy storage and charging systems for electric vehicle



Brochure _ Code ATD02419 Rev. 7 _ 10/22

Fast charging station

Application: public operations such as highway rest stops, petrol stations, airport, etc., private operations such as EV dealers, EV fleets, etc.

Compatible vehicles: BMW, Volkswagen, GM, Porsche, Audi, Nissan, Mitsubishi, Peugeot, Citroen, Kia, Renault, Daimler, Tesla, Smart, Mercedes



Charger_type

MODE 1

Connection of the vehicle to the power supply network in AC with domestic connectors up to 16 A, type A differential protection with breaking device for DC earth fault current greater than 6 mA.

MODE 2

Connection of the vehicle to the power supply network in AC with domestic or industrial connectors up to 32 A, type A differential protection with breaking device for direct earth fault current greater than 6 mA, control device on the cable.

MODE 3

Connection of the vehicle to the power supply network in AC with dedicated connectors, type A differential protection with interruption device for direct earth fault current greater than 6 mA, control device in the station.

MODE 4

Direct charging in direct current FAST DC Vehicle connection in direct current up to 200A, 400V. With this system it is possible to recharge the vehicles in a few minutes, the charger is external to the vehicle (in the column). There are two standards: **CHAdeMO** (Japanese) and **CCS Combo** (European).







Charging sockets

The reference standards for connectors dedicated to mode 3 are IEC 62196-1 and 2 and include three types of system:

TYPE 1

Single-phase, 2 pilot contacts, 32 A, 230 V ~



TYPE 2 Single/Three-phases, 2 pilot contacts, 32 A 230/400 VAC



TYPE 3A for light vehicles Single-phase, 1 pilot contact, 16 A 230 VAC



TYPE 3C for all vehicles Single/Three-phases, 2 pilot contacts, 32 A 230/400 VAC



Connectors for DC charging:

CHAdeMO

The CHAdeMO standard is the most widely used standard for **fast direct current (DC) charging** in the world.

Used and widespread for some years, it is present for example on **Nissan**, **Mitsubishi**, **Peugeot**, **Citroen** vehicles. Vehicles equipped with this standard therefore have two connectors:

- CHAdeMO for Fast DC charging
- AC charging connector (usually Type 1)



CCS COMBO2

The Combined Charging System (CCS) standard consists of a single charging connector on the electric vehicle, which allows both fast direct current (DC) charging and slow alternating current (AC) charging.

In Europe the CCS is made starting from the Type 2 connector, for which the system is called Combo2. This system is now adopted by some European car manufacturers (e.g. **BMW** and **Volkswagen**).



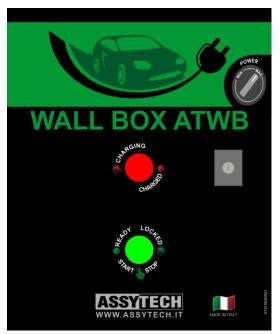
ATWB 7-22 kW AC charge station wall mounting for private use

The professional ATWB series charge station is able to charge the batteries of electric transport vehicles.

The ATWB Wall Box is available with type 2 socket cable or with integrated cable, with or without protections in the single-phase versions, with energy meter (optional) and three-phase.

It has, as standard, a selector to reduce the vehicle charge energy by 50%.

It is ideal for private use: garages, private parking spaces, condominiums, etc. that do not require access control as the use is normally limited to a few people, almost always for the exclusive use of the vehicle owners themselves



Main features

- Charging station for wall installation
- Single-phase or three-phase 230-400 VAC power supply
- Max power 22 kW
- Possibility of automatic load adjustment

Technical characteristics

Model	ATWB 7	ATWB 22						
AC Input								
Input voltage	230/400 VAC							
Nominal current	16 A 32 A							
Nominal power	7,4 kW	22 kW						
Load current control	Through local selecto	r, on / off input or 0 ÷ 10 Volt						
 Consumption stand-by 		25 W						
Measurable load		0,1÷64 A						
Accuracy	Class 0,5	(MID) (optional)						
General specifications								
Output	AC	AC (Mode-3)						
Charging socket	Туре	2 or type 3A						
RFID module	ISO/IEC14443	A/B, Mifare (optional)						
Remote connection	RS485 pi	rotocol MODBUS						
Environment	[Domestic						
Operating temperature	-;	20÷+40°C						
Storage temperature	-7	25÷+50°C						
Operating humidity	≤95% r	non-condensing						
Protection degree		IP44						
	CE, EN 614	39-7, EN 61851-1,						
Certifications	LVD Directive 2014/35/UE,							
	EMC Direc	tive 2014/30/UE						

Accessories

AT07820

2-20 AAC current relay as load limiter



ATWB 30 kW DC charge station wall mounting for private use

The ATWB30 series charge station is able to charge all current and next generation vehicles with the CCS2 standard.

The 30 kW Wall Box is a fast DC (direct current) charger with Mode 4 charging type.

It is ideal for the following installations: houses, car parks and businesses.



Main features

- Charging station for wall installation
- Three-phase 400 VAC power supply
- Max power 30 kW
- CCS2 connector type
- OCPP protocol communication
- Small, compact, light
- Immediately ready for use
- Silent
- Power meter (optional)
- RFID reader (optional)

Technical characteristics

Model	ATWB 30
AC Input / Output DC	
Three-phase power	3P + N + PE
 Input voltage 	400 VAC ±20%
Frequency	50 Hz o 60 Hz
Power factor	> 0.99
Efficiency	95%
Output voltage	150-1000 VDC
Nominal current	100 A, 30 kW max
Nominal power	30 kW
General specifications	
Output	DC (Mode-4)
Output connector	CCS2
Display	Color TFT
RFID module	ISO/IEC14443A/B, Mifare (optional)
Remote connection	LAN Standard, 4G/Wifi (optional)
Communication protocol	OCPP 1.6
Environment	Internal / External
Operating temperature	-20÷+40°C
Storage temperature	-40÷+70°C
Operating humidity	≤95%
Altitude	Up to 1000 m
Protection degree	IP54, IK10
Noise	<55 dB
	Over current, under voltage, over voltage,
Protections	residual current, surge protection, short circuit, over
	temperature, ground fault, isolation fault
Certifications	CE, EN 61851, EN 62196, DIN 70121, ISO 15118



ATWB possible configuration

	ATWB													
VERSION	SINGLE	S												
VERSION	DOUBLE	D												2
NOMINAL	230 V		1				ľ							
VOLTAGE	400 V		2											
	7 kW	1	_	1										
MAX	22 kW			2										
POWER	30 kW			3			2							cć.
	44 kW			4									-	
	MODE 1	2	21		1	0	8							
	MODE 2				2		0							
CHARGING	MODE 3		16		3		Q							
TYPE	MODE 1-3			· · · · ·	4		3							
	MODE 4	-			5		2							
	ABSENT		-			0	· c							
	TYPE 1	1				1								
	TYPE 2	1				2	1							
CHARGING	TYPE 3	1				3				1				
SOCKET 1	INDUSTRIAL 1					4								
	INDUSTRIAL 2					5	-							
	INDUSTRIAL 3					6	-							
	CCS2					7								
	ABSENT						0							
	TYPE 1			2			1							v.
	TYPE 2						2							1
CHARGING	TYPE 3						3							
SOCKET 2	INDUSTRIAL 1						4							
	INDUSTRIAL 2						5							
	INDUSTRIAL 3						6							
	YES							S						
RFID READER	NO	1				1		N		1				
OCPP	YES	1				1			S	1				1
CONNECTION	NO								N					
DIFFERENTIAL	YES									S				
PROTECTION	NO		-							N				
	ABSENT					1					N			
	COMPTOMETRIC		-								С			0
VISUALIZATION	VOLUMETRIC										V			
TYPE	ALPHANUMERIC										A			
	TOUCH-SCREEN						2				Т			2
	ABSENT											N		
COUNTER	INDUSTRIAL	1										1		
100 MM	MID											M		
	ABSENT												0	
	SINGLE PHASE TYPE 1	1	1							1			1	
CABLE TYPE	SINGLE PHASE TYPE 2												2	
	THREE PHASE TYPE 2	1											3	
	DC CCS												4	
DIGOLUDGE	YES													S
DISCHARGE	NO	1	1			t	1							N

Standard models in price list in yellow.

AT02-EF 22-44 kW AC fast charger for private use and fleet

The AT02-EF series dispenser is able to charge the batteries of electric transport vehicles.

The dispenser is made with a stainless steel structure and is equipped with 1 or 2 single or three phase Type 2 sockets of 7 or 22kW.

It offers the possibility of remote modulation of the charging power based on the energy currently available from the power supply system.

It is designed for connection to automation terminal and refueling authorization.

Main features

- 230/400 VAC charger
- Uses charging mode 3 in accordance with IEC / EN 61851
- Backlit display and vandal-proof keyboard in self-service version
- Local or remote manual activation
- Authorization with OCPP connection available
- Authorization with next charge available



AT02-EF possible configuration

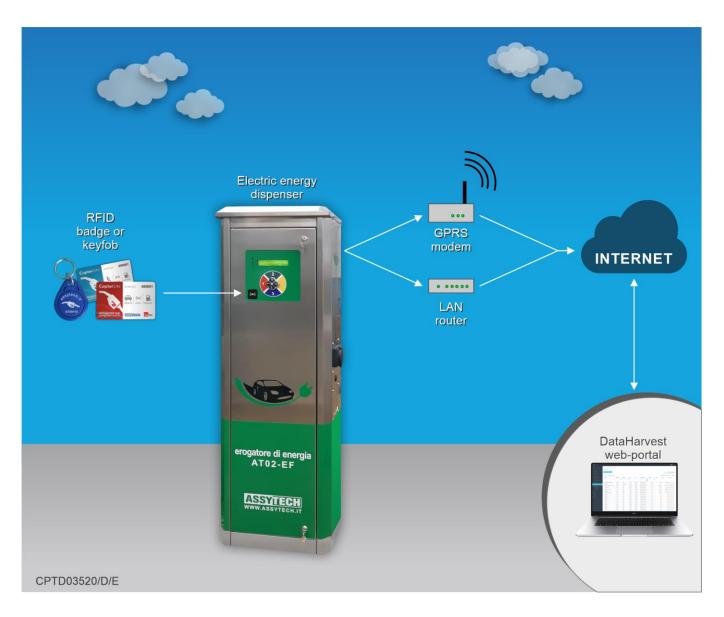
	AT02-EF														<u> </u>
	SINGLE	S													
VERSION	DOUBLE	D			<u> </u>										
	The second second second second second	U	1						<u> </u>	-					22
NOMINAL	230 V		1						<u> </u>						
VOLTAGE	400 V	_	2											-	
MAX	11 kW		-	1					<u> </u>						-
POWER	22 kW			2					<u> </u>			<u> </u>			<u> </u>
	44 kW			3					<u> </u>						
	MODE 1				1										
CHARGING	MODE 2			ļ.,	2										
TYPE	MODE 3				3										
	MODE 1-3				4	-									
	ABSENT					0									
	TYPE 1					1								_	
CHARGING	TYPE 2					2									
SOCKET 1A	TYPE 3					3									
	INDUSTRIAL 1					4	-								
	INDUSTRIAL 2					5									
	INDUSTRIAL 3					6									
	ABSENT						0								
	TYPE 1						1								
CHARGING	TYPE 2						2								
SOCKET 1B	TYPE 3						3								
SUCKET ID	INDUSTRIAL 1						4								
	INDUSTRIAL 2						5								
	INDUSTRIAL 3						6								
	ABSENT							0							
	TYPE 1							1							
	TYPE 2							2							
CHARGING	TYPE 3					-		3			-				
SOCKET 2A	INDUSTRIAL 1							4							
	INDUSTRIAL 2							5							
	INDUSTRIAL 3							6							
	ABSENT								0						
	TYPE 1								1						
	TYPE 2								2						
CHARGING	TYPE 3					-			3						<u> </u>
SOCKET 2B	INDUSTRIAL 1	-							4						
	INDUSTRIAL 2								5						<u> </u>
	INDUSTRIAL 3								6						
	YES	-								S					
RFID READER	NO									N					
OCPP	YES										S				
CONNECTION	NO	-									N			0	
6 mA DC/3 mA AC	YES	-										S			+
DIFFERENTIAL	NO											N			
	ONE SIDE			-									M		
VISUALIZATION	TWO SIDE				-				-				B	-	
	COMPTOMETRIC		-				<u> </u>					-		С	
ТҮРЕ	VOLUMETRIC	2	-			-			-					V	
ITE	ALPHANUMERIC													-	
	INDUSTRIAL			-	-							<u> </u>		A	1
MODALITY										-			-		
	MID														M

Technical characteristics

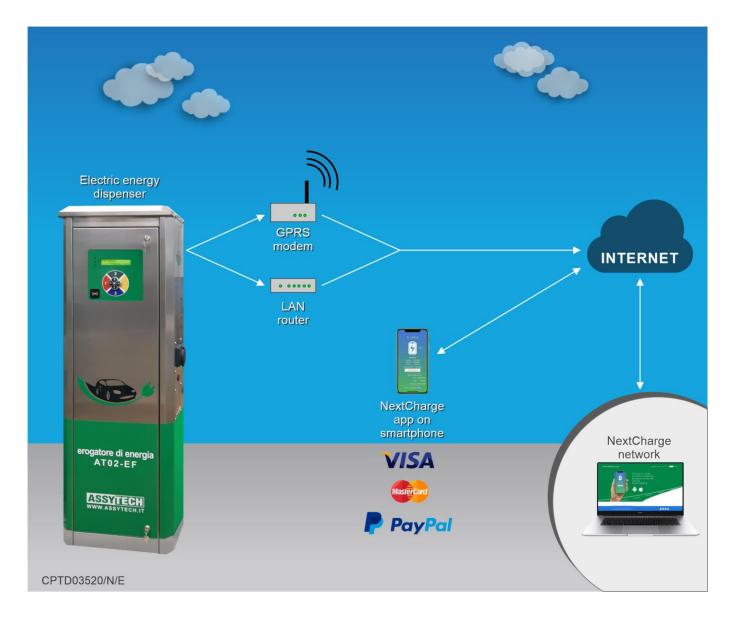
Model	AT02-EF
AC Input	
Input voltage	400 VAC
Nominal power	7 / 14 kW /22 kW / 44 kW (depending on the model)
Nominal current	16 A / 32 A (depending on the model)
Load current control	Programmable 2 ÷ 32 A
Consumption stand-by	25 W
Measurable load	0,1÷64 A
Accuracy	Class 0,5 (MID)
General specifications	
• Display	Alphanumeric 2X20
RFID module	ISO/IEC14443A/B, Mifare (optional)
Remote connection	RS458 protocol MODBUS RTU /OCPP
Environment	Indoor / Outdoor
Operating temperature	-20÷+50°C
Storage temperature	-25÷+60°C
Operating humidity	≤95% non-condensing
Protection degree	IP44
	CE, EN 61439-7, EN 61851-1
Certifications	LVD Directive 2014/35/UE
	EMC Directive 2014/30/UE

Charging management ricarica

Solution via DataHarvest Portal



Solution via NextCharge Circuit

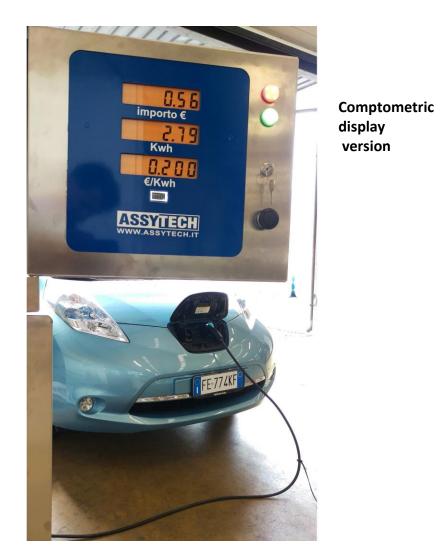


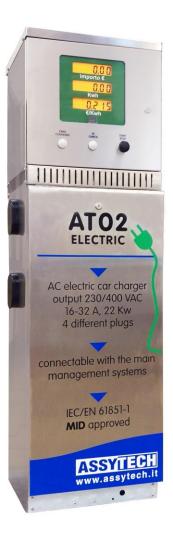
AT02-EA 22-44 kW AC fast charger for service stations

The AT02-EA series dispenser is able to charge the batteries of electric transport vehicles.

This electric charger can be associated with fuel and additive dispensers already used for the refueling of traditional vehicles.

The authorization to charge the vehicle is authorised by via serial connections or with transponder devices in various configurations depending on the customer's needs.





Main features

- 230/400 VAC charger
- Uses charging mode 3 in accordance with IEC / EN 61851
- Backlit display and vandal-proof keyboard in self version
- Supports IFSF-LON / H2P / PUMALAN /DART protocols communication
- Authorization with next charge connection available

AT02-EA possible configurations

	AT02-EA														
VERGION	SINGLE	S													
VERSION	DOUBLE	D													
NOMINAL	230 V		1												<u> </u>
VOLTAGE	400 V		2												
	11 kW			1											
MAX	22 kW			2											
POWER	44 kW			3											
	MODE 1				1										
CHARGING	MODE 2				2										
TYPE	MODE 3				3										
	MODE 1-3				4										
	ABSENT			-		0									<u> </u>
	TYPE 1					1									
	TYPE 2					2									<u> </u>
CHARGING	TYPE 3					3									<u> </u>
SOCKET 1A	INDUSTRIAL 1					4									<u> </u>
	INDUSTRIAL 2					5									-
	INDUSTRIAL 3					6									<u> </u>
	ABSENT						0								+
	TYPE 1						1								
	TYPE 2						2								
CHARGING	TYPE 3						3								
SOCKET 1B	INDUSTRIAL 1						4	-							
	INDUSTRIAL 2						5								
	INDUSTRIAL 3						6	<u> </u>	<u> </u>			<u> </u>			<u> </u>
	ABSENT	-					0	0							
	TYPE 1							1							
	TYPE 2	-	·	-				2							
CHARGING	TYPE 3							3		-					
SOCKET 2A	INDUSTRIAL 1							4							
	INDUSTRIAL 1							4 5				<u> </u>			<u> </u>
								6							
	INDUSTRIAL 3 ABSENT							0	0			<u> </u>			
									0						<u> </u>
	TYPE 1								1			-			
CHARGING	TYPE 2								2						
SOCKET 2B	TYPE 3								3	÷		<u> </u>			<u> </u>
	INDUSTRIAL 1	-							4						<u> </u>
	INDUSTRIAL 2								5						
	INDUSTRIAL 3							<u> </u>	6	6					<u> </u>
RFID READER	YES		-							S					
0000	NO								<u> </u>	N	6		<u> </u>		<u> </u>
OCPP	YES					-		<u> </u>			S				<u> </u>
CONNECTION	NO										N				
6 mA DC/3 mA	YES											S			<u> </u>
AC	NO											N			
VISUALIZATION	ONE SIDE						-			-			M		
	TWO SIDE												В		
	COMPTOMETRIC							<u> </u>		<u> </u>				С	
TYPE	VOLUMETRIC						-							V	
	ALPHANUMERIC													A	
MODALITY	INDUSTRIAL														1
	MID														M

Standard models in price list in yellow.

Technical characteristics

Model	AT02-EA
AC Input	
 Input voltage 	230÷400 VAC
Nominal current	16 A / 32 A (depending on the model)
Nominal power	22 kW single, 44 kW double
 Consumption stand-by 	25 W
Measurable load	0,1÷64 A
Accuracy	Class 0,5 (MID)
General specifications	
Display	LCD 6-digit height 1" LED backlit
RFID module	ISO/IEC14443A/B, Mifare (optional)
Remote connection	RS458 / C.Loop NP / C.Loop Gilbarco / IFSF-Lon
Environment	Indoor / Outdoor
Operating temperature	-20÷+54°C
Storage temperature	-25÷+50°C
Operating humidity	≤95% non-condensing
Protection degree	IP44
Certifications	IEC / EN 61851-1



Double version

AT15-ER 60-180 kW DC fast charger

The AT15-ER series charger is able to load all current and next generation electric vehicles. Configurable as a single, double (default), or triple socket supporting the changing needs of each customer.



Main features

- 60 ÷ 180 kW DC/AC fast charger, supports multiple socket standards as CCS2, CHAdeMO and AC Type 2
- Multiple output: DC power up to 180 kW, AC up to 22 kW
- Reliable, robust, modular hardware
- Simple, quick and easy installation
- Daylight readable touch screen display
- Supports the communication protocol OCPP 1.6J / Modbus
- RFID authorization
- Authorization with back end system connection available

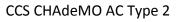
Technical characteristics

Model	AT15- ER/60	AT15- ER/90	AT15- ER/120	AT15- ER/150	AT15- ER/180
AC input / DC output					
Power connection			3P + N + PE		
 Input voltage 			400 VAC ± 20 %)	
Frequency			50 Hz or 60 Hz		
Nominal input current	60 kW	90 kW	120 kW	150 kW	180 kW
& power	87A	130 A	174 A	217 A	260 A
Power factor			> 0.99		
Overall efficiency			95%		
DC output					
Output voltage			150-1000 VDC		
Nominal power	0÷60 kW	0÷90 kW	0÷120 kW	0÷150 kW	0÷180 kW
AC output					
Output voltage			230÷400 VAC		
MAX Output current			32 A		
Nominal power			22 kVA		
General specification					
Output type		DC multi-stan	dard 2 (Mode-4)	, con AC (Mod	e-3)
Output interface		CCS	2, CHAdeMO, A	C type 2	
AC interface		Туре	2 socket 22 kW	(optional)	
• Display			10" TFT color sci	reen	
RFID module		ISC	D/IEC14443A/B,	Mifare	
Network connection		3G (G	SM o CDMA) / L	AN / Wi-Fi	
Communication protoco			OCPP 1.6, DA	RT	
Environment			Indoor / Outdo	oor	
• Operating temperature			-20÷+50°C		
Storage temperature			-40÷+60°C		
Operating humidity		<	95% non-conde	nsing	
Protection degree			IP54, IK10		
Acoustic noise			<55 dB		

• Certifications

CE, EN 61851-1:2011, EN 61851-22:2002, EN 61851-23:2014, EN 61851-24:2014, IEC 61851-21-2:2018, DIN 70121, ISO 15118





CCS CHAdeMO

TECH

Dual CCS

ECH

AT15-EU 180-300 kW DC ultra-fast charger

The AT15-EU series charger is able to load all current and next generation electric vehicle with CCS standard.

It is a fast station to load any vehicle or bus compatible with the CCS2 standard (or GB / T on request).



Features

- 120 ÷ 240 kW DC ultra-fast charger
- Multiple output
- Supports the CCS2 charging outputs simultaneously
- Reliable, robust, modular hardware
- Simple, quick and easy installation
- Daylight readable touch screen display
- Supports the open communication protocol MODBUS/OCPP
- RFID authorization

AT15-EU possible configuration

Model	Туре	
AT15EU	AT15 CCS2 + CCS2	180 kW
AT15EU	AT15 CCS2 + CCS2	240 kW
AT15EU	AT15 CCS2 + CCS2	300 kW

Technical characteristics

Model	AT15-EU/180	AT15-EU/240	AT15-EU/300					
AC input / DC output								
Power connection		3P + N + PE						
Input voltage	400 VAC ± 20 %							
Frequency		50 Hz o 60 Hz						
 Nominal input current & power 	260 A, 180 kW	347 A, 240 kW	435 A, 300 kW					
Power factor		> 0.99						
Overall efficiency		95%						
DC output								
Output voltage		150-1000 VDC						
Nominal power	0÷180 kW	0÷240 kW	0÷300 kW					
General specification								
Output type		CC (Mode-4)						
User interface		CCS2						
• Display		10" TFT color screen						
RFID module	IS	O/IEC14443A/B, Mifa	re					
Network connection	3G (0	GSM o CDMA) / LAN /	Wi-Fi					
Communication protocol		OCPP / Modbus						
Environment		Indoor / Outdoor						
 Operating temperature 		-20÷+50°C						
 Storage temperature 		-40÷+60°C						
Operating humidity		≤95% non-condensing						
Altitude		Up to 1000 m						
Protection degree		IP44, IK10						
Acoustic noise		<55 dB						
Certifications	CE, EN 61852	1, EN 62196, DIN 7012	1, ISO 15118					

AT15-ES Ultra-fast charging station with 120-360 kW satellites

The AT15-ES series station is a new, innovative, solution to the growing demand for high-current fast charging of next-generation electric vehicles.

The AT15-ES system adopts a modular structure and the most advanced ultra-fast charging technology. It consists of a power supply module and two charging columns.



Main features

- Suitable for all current and next generation electric vehicles
- Modular structure, supply battery over 360 kW ~ 500 kW
- Distance between the power supply battery and the charging columns up to 150m
- Wide voltage range: 50-1000 V
- Supports CCS connectors up to 500A with liquid-cooled cables
- Readable touch screen display in daylight
- RFID authorization
- Low operating noise
- Customizable

Model	AT15-ES/120	AT15-ES/180	AT15-ES/360
AC input / DC output			
Power connection		3P + N + PE	
 Input voltage 		400 VAC ± 20 %	
Frequency		50 Hz o 60 Hz	
Power factor		> 0.99	
Overall efficiency		95%	
DC output			
Output voltage		50-1000 VDC	
Current	174 A	260 A	360 A
Nominal power	120 kW	180 kW	360 kW
General specification			
Output interface		CCS2	
Display		12.1" TFT color screen	
RFID module		SO/IEC14443A/B, Mifare	
Network connection	3G	(GSM o CDMA) / LAN / W	i-Fi
 Communication protocol 		OCPP / Modbus	
Environment		Indoor / Outdoor	
Operating temperature		-20÷+40°C	
Storage temperature		-40÷+70°C	
Operating humidity		≤95% non-condensing	
Altitude		Up to 1000 m	
Protection degree		IP44, IK10	
Acoustic noise		pply module: 1300x750x1 ge column: 320x280x1740	
Network connection		<55 dB	
Certifications	EN 61851	, EN 62196, DIN 70121, IS	0 15118

AT15-EF Ultra-fast charging station with satellites for fleets

The AT15-EF series charging station is a split-type charging system meeting multiple standards CCS2, CHAdeMO, GB/T. Adopting modular design concept and forefront power electronic technology, consists of power stack, control units and charge posts. Both indoor and outdoor types available.

Dedicated to parking or fleet charging.



Features

- Flexible, supports multiple socket standards as CCS2, CHAdeMO, GB/T
- Flexible power distribution function, dynamically adjust output power according to the demand of electric vehicles.
- Multi outlets to charge multiple vehicles simultaneously, the output and power as follows:
 240 kW indoor/outdoor type satellite: 2 ÷ 8 outputs, each output 0~60 kW o 0~120 kW
 360 kW indoor type satellite: 2~12 outputs, 30~180 kW flexible output
- 12,1" LCD / LED screen to display information in real time, easy operation and humanized user interface
- Supports various online payment methods
- Insulation monitoring function, automatically turn off output to ensure safe charging
- High adaptability of temperature range, isolated heat dissipation air ducts, power heat dispassion is separated from control circuit to ensure dust-free of control unit
- High efficiency, high reliability, ultra-low radiation, fast maintenance, flexible capacity expansion, energy efficiency and environmental protection



AT15-EF with 8 satellites

Model		AT15-EF	/240	AT15-EF/360				
AC input / DC ou	tput							
• System capa	city	240 k	W	360 kW				
• Max outputs		8		12				
Output capae route	city of each	15÷60 kW o	0÷120 kW	30÷180 kW				
Input voltage	è		400 VA0	C ±20%				
Input voltage	e range	260÷530 V	(260÷304 VCA; o	utput power derating 50%)				
Current share	e precision		3%	6				
 Power factor 	•		> 0.	99				
 Working free 	luency		50/60) Hz				
 Output volta 	ge		150-100	0 VDC				
Current regu	lation		<19	%				
accuracy								
 Voltage regu 	lation		<0,5%					
accuracy								
Current share	e precision		<39	%				
 Overall effici 	ency		959	%				
 BMS auxiliary 	y power		12 V /	10 A				
supply								
General specifica	ation							
 Communicat interface 	ion		Ethernet, CAN/	RS485, 3G/4G				
 Communicat protocol 	ion		OCPP / N	Nodbus				
 Environment 	al	Outdoor	Indoor	Indoor				
Acoustic nois	se		≤60	dB				
Degree	PCS	IP55 (outdoor)		IP30 (indoor)				
protection	Column	· · ·	IP55 (ou	tdoor)				
	PCS	1300x750x1950		900x1000x2000				
• Dimensions	Control unit	-		600x1000x2000				
	Column		320x280)x1740				

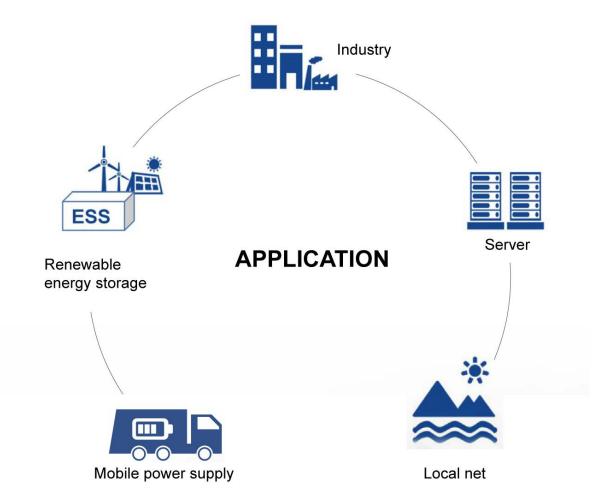
ATBAT Renewable energy charging station

The storage station allows energy to be stored to make it available when a high capacity of instantaneous power is needed for fast recharging of the batteries of motor vehicles.

The station is powered by electricity, photovoltaic panels, wind generators or other renewable sources. It can be configured with various powers both in input (battery charge rectifiers) and storage capacity of stationary batteries.



Storage system



Features

- High quality LFP betteries for mobile use
- Battery module is used to wiring electrode, wich is of high strength and low impedance
- Damping pad design for battery installation to improve the impact resistance of the system
- IP54, safe and reliable operation in outdoor environment
- Serially designed PCS and battery pack eliminates circulating current and improve system reliability
- Integrated BMS, DC, AC multi-layer protection, maximum safety performance design
- Integrated system, standard modular power module and battery module, easy for installation, maintenance and capacity expansion
- Easy access to PV and diesel generation, intelligent multi-energy management
- Fixed on the ground or mounted on vehicle, can be loaded and unloaded by forklift and hoisted by lifting ring
- Multi system could be connected in parallel



Model	ATBAT75-50	ATBAT150-100	ATBAT225-150	ATBAT300-200
Battery capacity	76.6 kWh	150 kWh	225 kWh	300 kWh
Pcs CAPACITY	50 kW	100 kW	150 kW	200 kW
Dimension (WxDxH) mm	1300x1500x1700	1300x2270x1700	1300x3050x1700	1300x3830x1700
• Peso (kg)	1400	2500	3550	4600

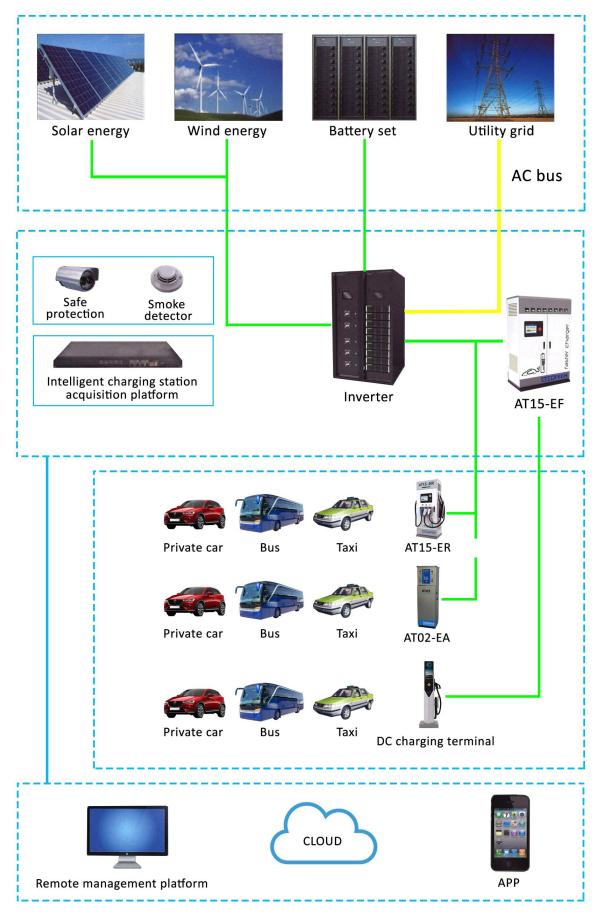
ATBAT possible configuration

ATBAT75-50	Storage system 76.6 kWh
ATBAT150-100	Storage system 150 kWh
ATBAT225-150	Storage system 225 kWh
ATBAT300-200	Storage system 300 kWh

Accessories

MPTT 50 kW MPTT solar panel connection module	

Station layout



Container

Container solution provides an integrated product of PCS, storage battery, switch gear, charging satellite (optional), etc., support grid tired or off-grid operation and renewable energy sources connection.

Battery storage container: 500 kW/1 MWh Charging satellite: 32 units of 0÷120 kW



Examples of application



AT15-ER 60 kW with double charge connection



AT15-ER 60 kW with double charge connection



AT15-EV for fleet charging with double charge connection



AT15-EV 120 kW fast charge, one charge connection



AT15-EV with two charge connection



AT15-EV bus charger with double charge connection











