

ASSYTECH

 **Valtellina**
Impresa

MADE IN ITALY


ISO
9001:2015



 **MID**
Measuring Instrument Directive
2014/32/UE



Energy storage and charging systems for electric vehicles

ATD02419 Rev. 4_03/26



www.assytech.it

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1 CERTIFICATIONS AND CONTACTS

1.1 Certifications

The equipment is certified according to current regulations according to the use for which it is intended. Below are the symbols used and their references.

COMPANY CERTIFICATIONS



ISO9001 certificate



Compliant with 2014/34/UE ATEX Directive



Compliant with 2014/32/UE MID Directive



Accreditation certificate for type C inspection body according to UNI CEI EN ISO/IEC 17020:2012

PRODUCT CERTIFICATIONS



UE declaration of conformity



ESTI certificate for equipment (intended for the Swiss market)



ATEX certificates



Ministerial certification (Safety standards for working, storage, use or sale and for the transport of liquids of category C Diesel)



MID certificates



Certification for equipment used on motor vehicles

Note: Products in this catalog unless otherwise indicated comply with EU legislation

Certain of the products indicated in the catalog are protected through titles and/or industrial property rights.

Assytech reserves the right to take action, by all means that the law makes available, in order to safeguard its rights in the event that third parties commit serious acts of infringement of the titles and/or rights of privative rights due to Assytech.

1.2 About us

Assytech Srl, founded in 1997, is a dynamic company born from the union of different professionalism and experience in the oil and gas industry.

It has been the main dispenser assembly company for Nuovo Pignone and General Electric for years. Specializing in the design and manufacture of fuel dispensers, power, and refueling management equipment, Assytech is not only a supplier, but a partner in providing flexible services, technology, and products that meet all customer requirements.

Assytech offers technical support throughout the country directly or through authorized installers.



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2 ELECTRIC VEHICLE CHARGING STATIONS

Applications

Public environments such as highway rest stops, gas stations, airports, etc., private environments such as electric vehicle dealerships, electric vehicle fleets, apartment buildings, etc., etc.

2.1 Charger type

● MODE 1

Connection of the vehicle to the AC power supply with domestic connectors up to 16 A, type A differential protection with interrupting device for continuous ground-fault current exceeding 6 mA.



● MODE 2

Connection of vehicle to AC power supply with domestic or industrial connectors up to 32 A, type A differential protection with interrupting device for continuous ground fault current exceeding 6 mA, control device on cable.



● MODE 3

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



● MODE 4

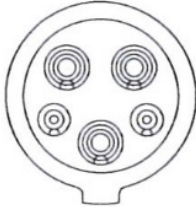
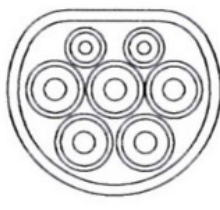
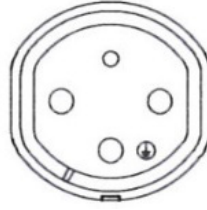
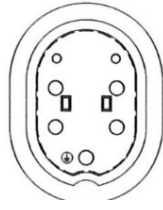
FAST DC Direct Charging

Direct current vehicle connection up to 200A, 400V. Vehicles can be recharged in a few minutes with this system; the charger is external to the vehicle (in the column). There are two standards: CHAdeMO (Japanese) and CCS Combo (European).



2.2 Charger sockets

The reference standards for dedicated mode 3 connectors are IEC 62196-1 and 2 and provide for three types of systems:

TYPE 1	TYPE 2	TYPE 3A for light vehicles	TYPE 3C for all vehicles
Single-phase 2 pilot contacts 32 A 230 V~	Single/three phase 2 pilot contacts 32 A 230/400 VAC	Single-phase 1 pilot contacts 16 A 230 VAC	Single/three phase 2 pilot contacts 32 A 230/400 VAC
			

Connectors for DC charging:

CHAdeMO	CCS COMBO2
The CHAdeMO standard is one of the most widely used direct current (DC) fast charging standards in the World. Used for some years already, it can be found, for example, on Nissan, Mitsubishi, Peugeot, and Citroen vehicles. Vehicles equipped with this standard therefore have two connectors: - CHAdeMO for Fast DC charging. - Connector for AC charging (usually Type 1).	The CCS (Combined Charging System) standard consists of a single charging connector on the electric vehicle, which allows both direct current (DC) fast charging and alternating current (AC) slow charging. In Europe, CCS is made from the Type 2 connector, so the system is named Combo2. This system has now become the European standard for major automakers.
  	  

2.3 Management and monitoring EV charger stations

Assytech Wallboxes or electric columns depending on the models can be connected and operated in different ways as described below:

● **MODE 1 LOCAL**

Wallboxes or columns are connected via LAN to the Data Harvest cloud-based management system. Users can use the equipment without constraints, if activated.

The manager is given login credentials to be able to view the status of the equipment and the consumption of each dispensing, with the possibility of exporting the data in various CSV formats, etc.

● **MODE 2 FIDELITY**

Wallboxes or columns are connected via LAN to the Data Harvest cloud-based management system. Users are given RFID cards to enable disbursements.

The manager is given login credentials to be able to enable the cards, view the status of the equipment, the user and the consumption of each dispensing, with the possibility of exporting the data in various CSV formats, etc.

● **MODE 3 PAYAPP**

The columns are connected via RS485 serial line to the field interface (IDC) or directly in versions with LAN connection to a payment circuit.

The user via APP requests activation of the column and if enabled it is unlocked. When the recharge is completed, the user's account is debited with the amount of energy and service provided. The operator of the payment circuit will retain its commission and credit according to agreement to the operator's account the amount collected.

● **MODE 4 PREPAY**

The dispensers are connected via RS485 serial line to the field interface (IDC) or directly in the versions with connection to the LAN network and managed from the self-service or cash desk present on the service station.

The user via credit card or cash (only at the cash desk) selects the dispenser to which he will have previously connected the charging cable. At the end of charging, the amount of cash (if used) is deducted or the user's account is debited with the amount of energy and service provided. The operator of the payment circuit will retain its commission and credit according to agreement to the operator's account the amount collected.

● **MODE 5 FLEET**

The columns are connected via RS485 serial line to the field interface (IDC) or to the AT07 yard management terminal connected via LAN network to the server with the fleet management SW OTControl 3 installed, which manages the refueling system of the other endothermic vehicles on the plant. The modes of use are those already used on the plant.

● **CARGO HANDLING**

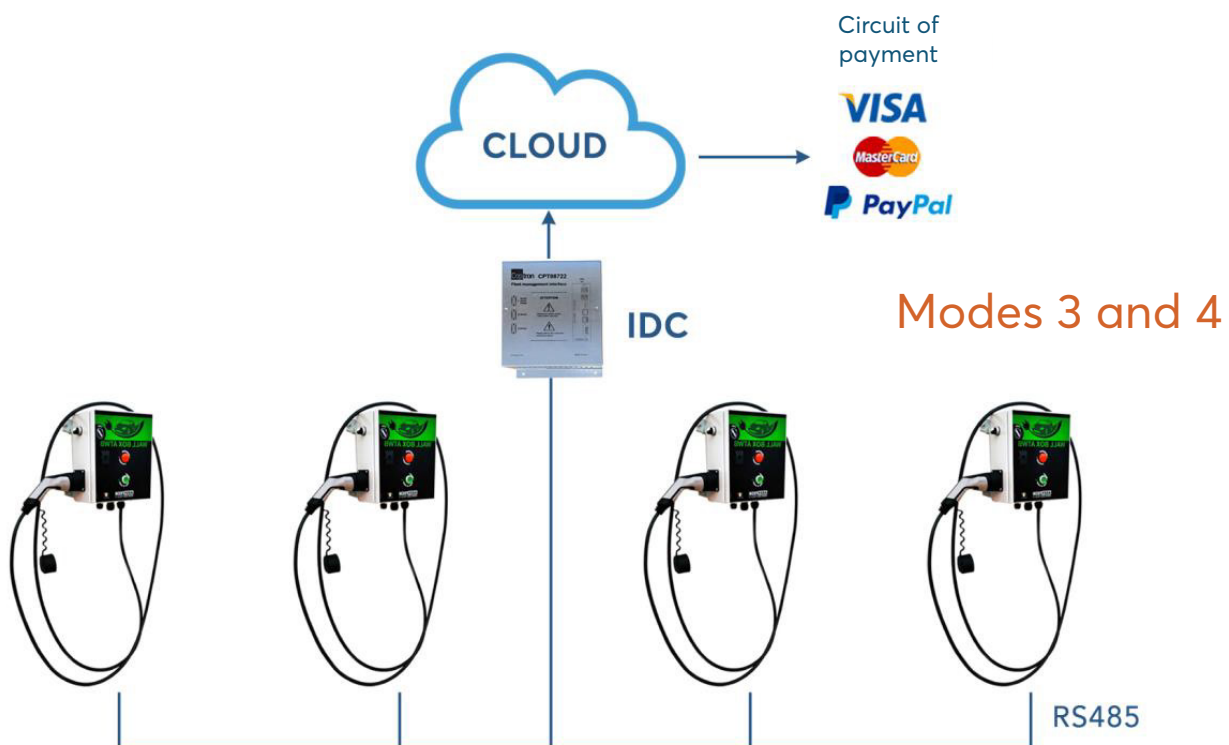
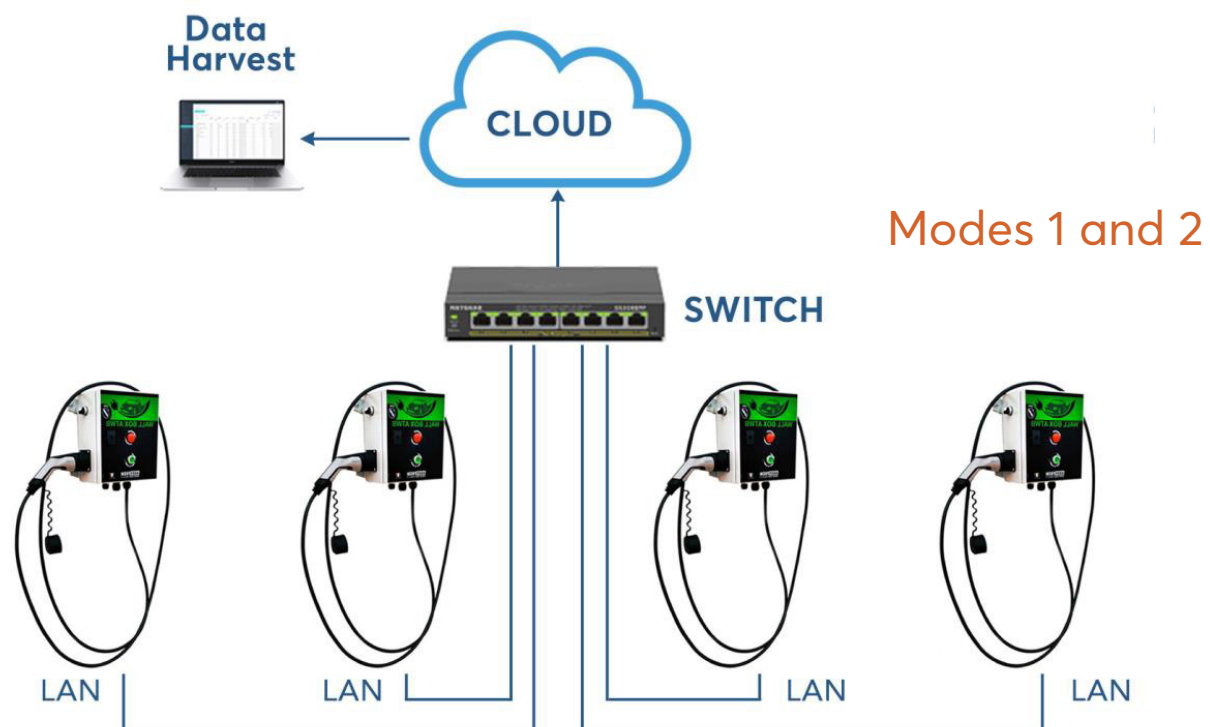
The columns are connected via RS485 serial line to the field interface (IDC), which is usually plugged into a column called the Master, this in addition to managing vehicle charges can limit total consumption to a preset value that can be set.

● **DYNAMIC LOAD MANAGEMENT**

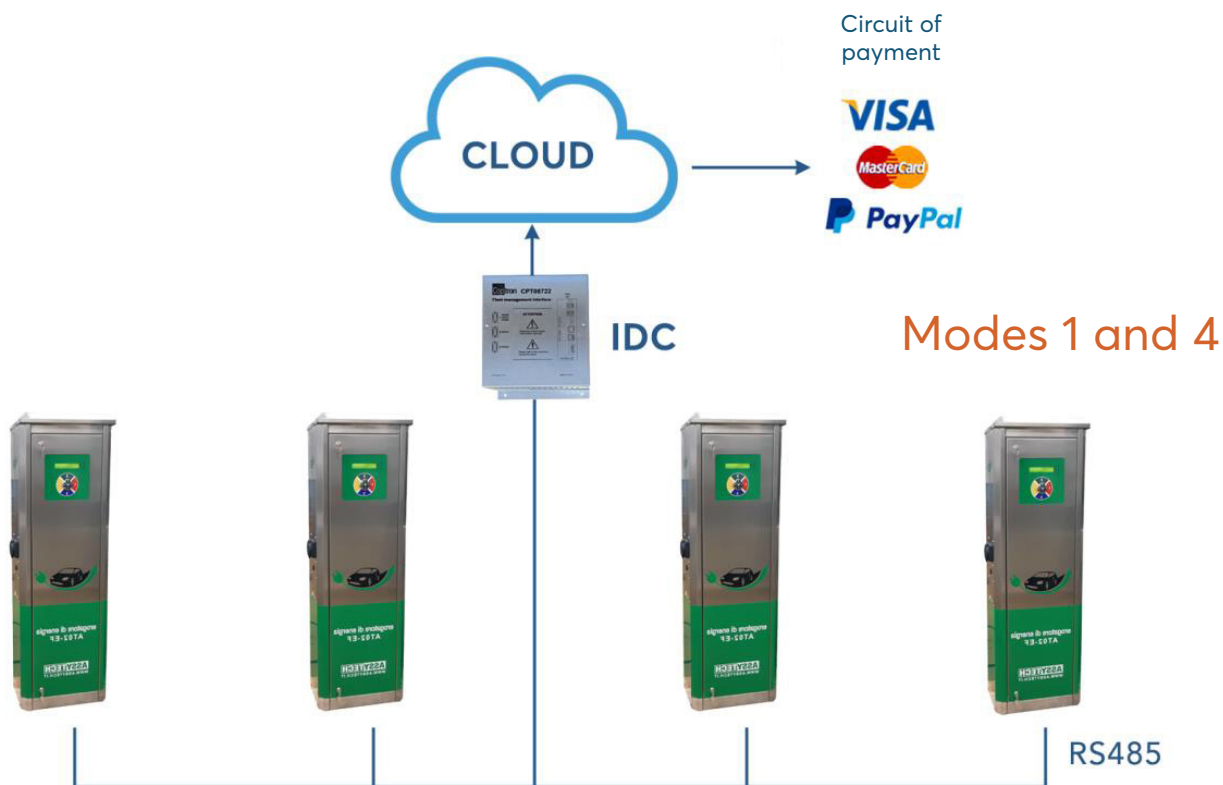
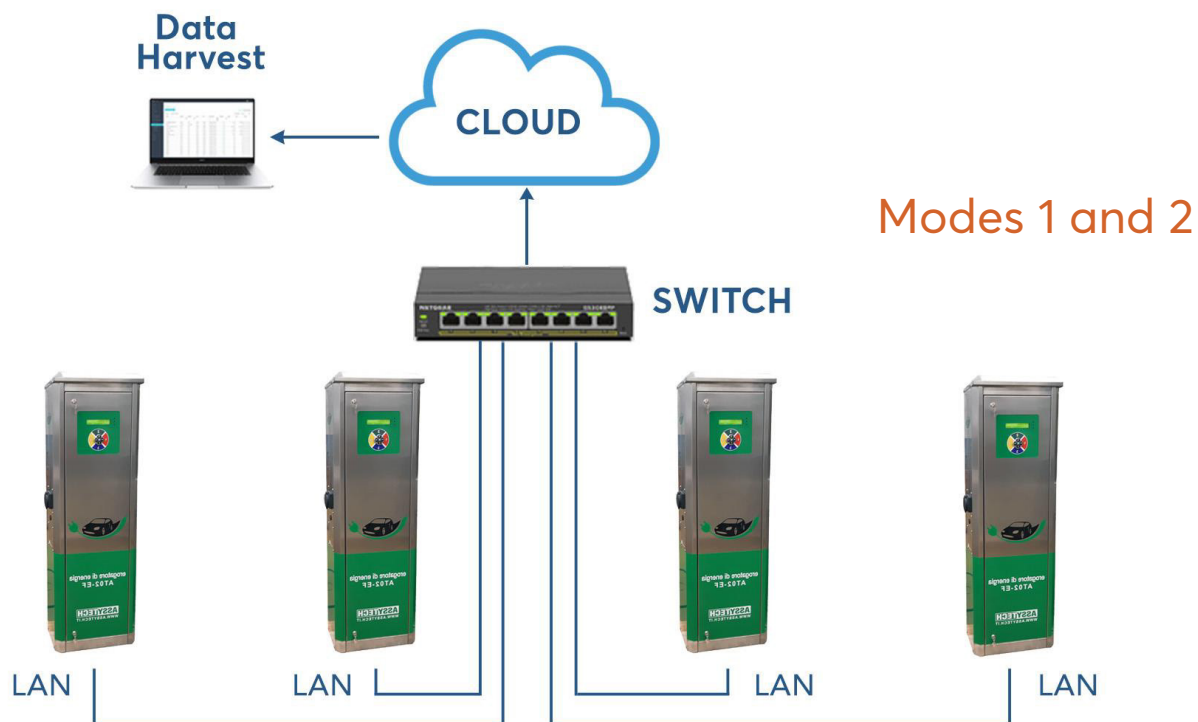
By adding the load management interface (DLM Interface) and current sensors (CT) placed on the main line, it is possible to optimize the consumption of the columns without compromising the functionality of equipment connected to the main supply (offices, workshops, etc.) as a priority. There are various possibilities for operation, the main ones being: only with surplus energy availability to that of the main supply, only with solar energy availability, or electric vehicle charging priority.

2.3.1 AC CHARGER STATIONS

ATWB 7 - 22 kW WALLBOX

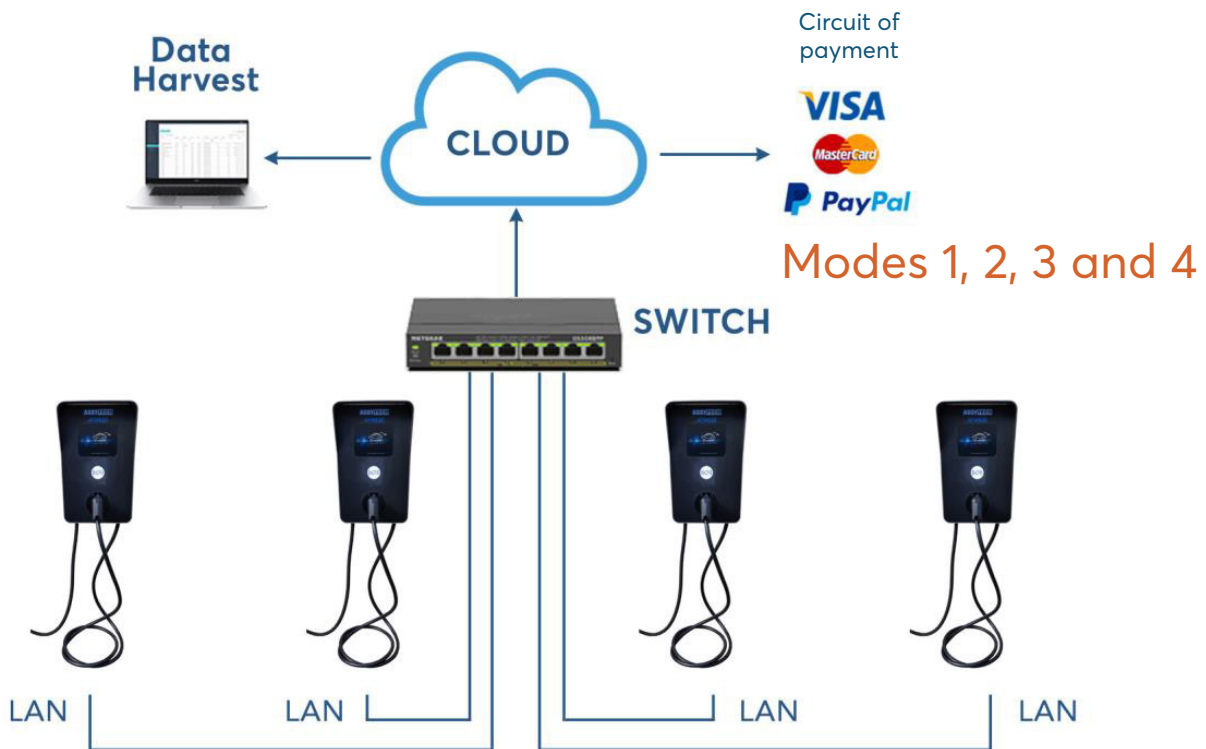


AT02-EF 22 + 22 kW DC CHARGER

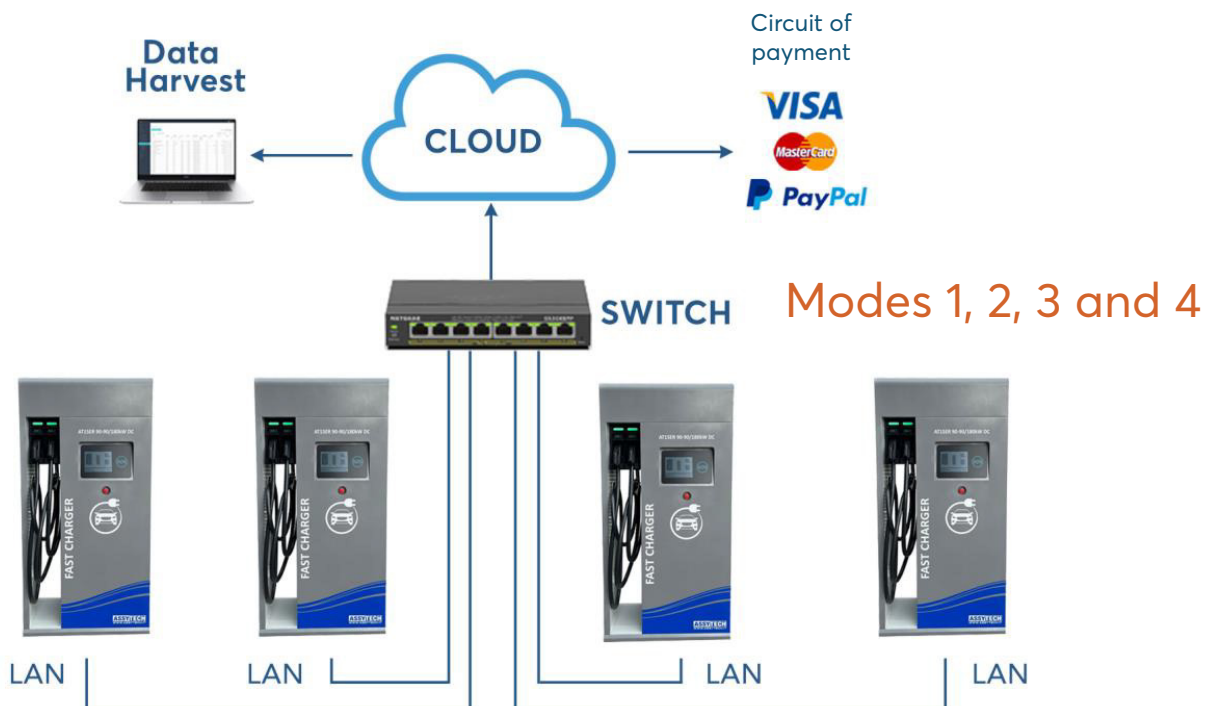


2.3.2 DC WALLBOX CHARGER

WALLBOX ATWB 30 kW CC



AT15-ER 30 + 30 kW ÷ 90 + 90 kW DC CHARGER



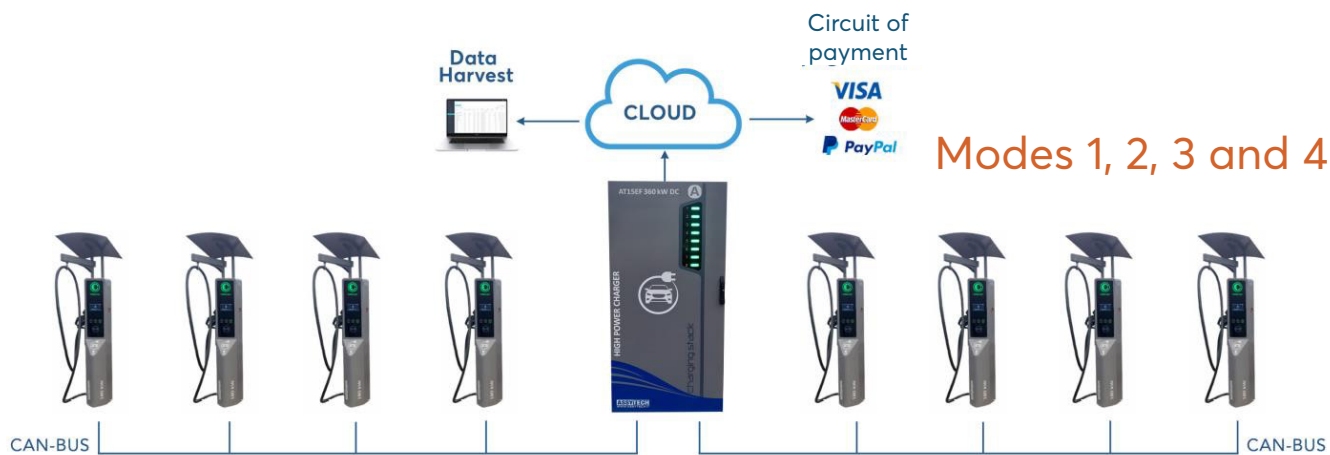
ATWB 7 - 22 kW AC WALLBOX AND AT07 OUTDOOR MANAGEMENT



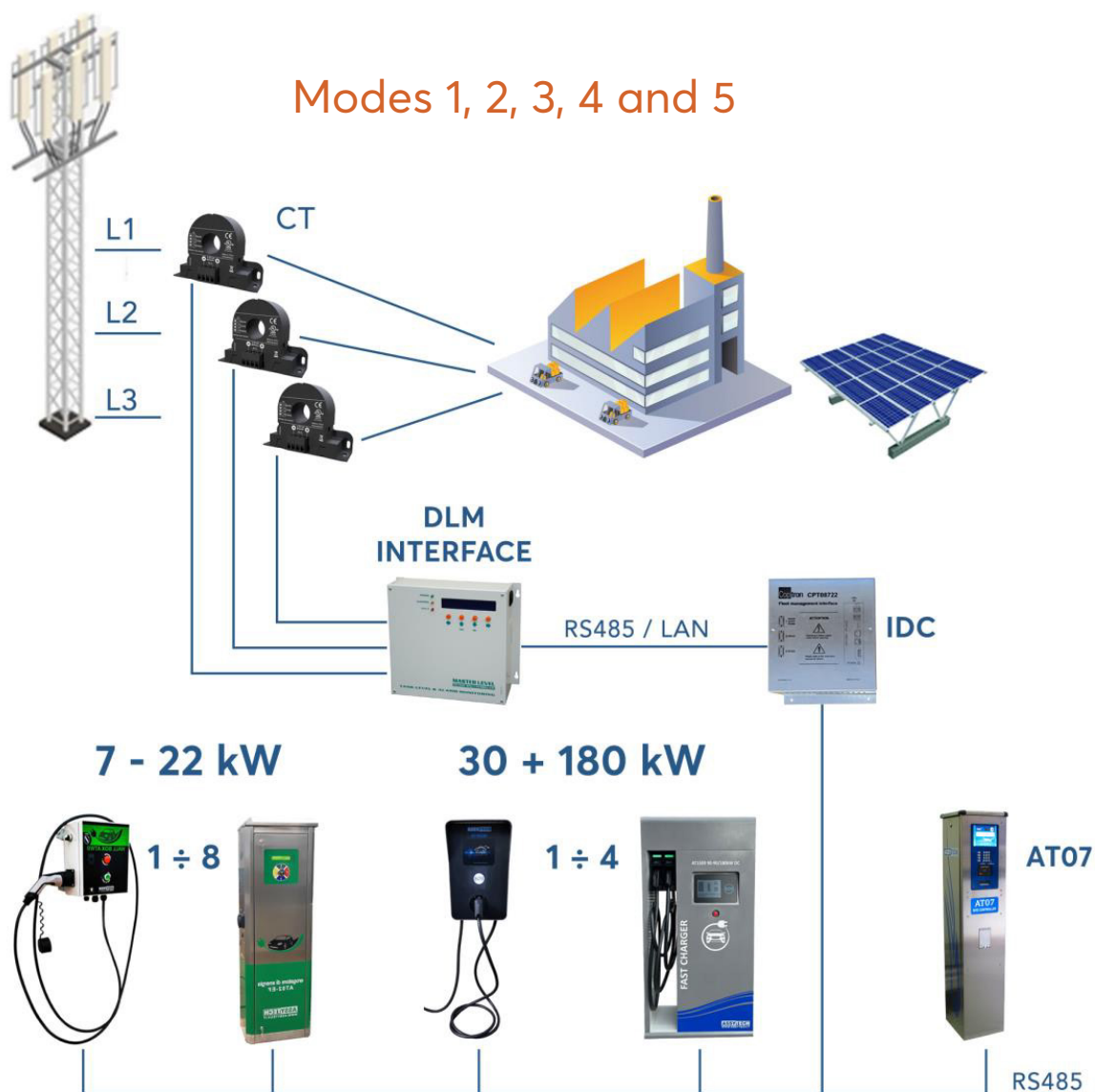
AT02 EF 22 + 22 kW DC CHARGER, AT02, AT15 FUEL DISPENSER AND AT07 OUTDOOR MANAGEMENT



AT15-EF 360 kW DC FAST CHARGER, SATELLITE AT15-EFS 30 ÷ 180 kW



2.3.3 LOAD MANAGEMENT



2.4 ATWB 7-22 kW AC charge station

For AC electric vehicle charging for private environments

DESCRIPTION

The ATWB Wall Box is a charging station that can be fixed on a wall. It is suitable for charging batteries of AC electric transportation vehicles.

MAIN FEATURES

- ATWB charging stations use charging mode 3 in accordance with IEC/EN 61851-1. Charging mode 3 consists of connecting the vehicle to the AC power grid using specific connectors and having a pilot control circuit inside the dispenser to verify the continuity of the protective conductor between the vehicle and the grid during charging. This control is necessary to ensure the proper functioning of the protections against indirect contacts by preventing any hazardous voltage from being discharged through accidental contact with unaware persons.
- The Wall Box is available with type 2 socket or with integrated cable, with or without protections in single-phase, three-phase and with energy meter (optional) versions.
- It has a selector switch as standard to reduce vehicle charging current by 50%.

MAIN USE

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

ENVIRONMENT

Inside

ACTIVATION AND PAYMENT SYSTEM

- Local manual activation by password
- Activation via automation terminal AT04/07
- Activation by RFID TAG



TECHNICAL FEATURES

Power supply	230 VAC / 400 VAC
Power output	7 kW /22 kW (depending on the model)
Protections	Surge Arresters Differential protection DC $\geq$ 6mA AC/DC=30mA (RMS) (optional)
Energy meter	0,1 ÷ 32 A (MID) (optional)
Charging current control	Via local switch, on/off input or 0÷10 V, MODBUS
Charging points	Type 2 (other types on request)
Remote connection	RS485 protocol MODBUS / OCPP (optional)
Display	2X20 backlit + 4-key keyboard (optional)
RFID reader	13,56 MHz / MIFARE
Operating temperature	-10 ÷ +40°C
Degree of protection	IP54, IK10
Installation	Wall-mounted
Construction norms	EN 61439-7; EN 61851-1; Low Voltage Directive 2014/35/UE; EMC Directive 2014/30/UE

ACCESSORIES

AT07820	2-20 AAC current relay as load limiter
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Installation example

POSSIBLE CONFIGURATIONS

CODE	TYPE	COUNTER AND DISPLAY	ARRESTER	PROTECTION DIFF.	CABLE WITH PLUG
ATWBS11320NNNNI0N	Single, single-phase, 7 kW	NO	NO	NO	NO
ATWBS11320NNNNIOS	Single, single-phase, 7 kW	NO	YES	NO	NO
ATWBS22320NNNNI0N	Single, three-phase, 22 kW	NO	NO	NO	NO
ATWBS22300NNNNI3N	Single, three-phase, 22 kW	NO	NO	NO	Type 2
ATWBS22320NNNNIOS	Single, single-phase, 22 kW	NO	YES	NO	NO
ATWBS22300NNNNI3S	Single, three-phase, 22 kW	NO	YES	NO	Type 2

2.5 ATWB 30 kW DC charge station

For DC electric vehicle charging for private environments

DESCRIPTION

The ATWB30 Wall Box is a wall-mounted charging station. It is suitable for charging batteries of DC electric transportation vehicles with the CCS standard.

MAIN FEATURES

- The Wall Box with power up to 30 kW is a DC (direct current) rapid charger with charging type Mode 4. Charging mode 4 consists of connecting the vehicle in direct current from 150 to 1000 VDC. With this system, vehicles can be recharged in a few minutes; the charger is external to the vehicle (in the wall box).
- Small, compact, lightweight, quiet

MAIN USE

Housing, parking lots, businesses, and hotels.

ENVIRONMENT

Inside / Outside

ACTIVATION AND PAYMENT SYSTEM

- Local manual activation by password
- Activation via RFID TAG
- Activation via APP

GESTIONE FLOTTE

- Automatic vehicle identification when connected.



TECHNICAL FEATURES

Power supply	400 VAC $\pm$ 20%
Power output	30 kW
Power factor	> 0.99
Protections	Over current, low voltage, over voltage, residual current, arresters, short circuit, over temperature, ground fault, insulation loss
Efficiency	95%
Connector	CCS2
Output voltage	150 ÷ 1000 VCC
Remote connection	LAN Standard, 4G/Wifi (optional)
Display	10" TFT color screen
RFID reader	ISO/IEC14443A/B, Mifare
Data Protocol	MODBUS / OCPP
Operating temperature	-20 ÷ +50°C
Degree of protection	IP54, IK10
Mounting	Wall-mounted
Construction norms	CE, EN 61851, EN 62196, DIN 70121, ISO 15118



Installation example

POSSIBLE CONFIGURATIONS

CODE	TYPE	COUNTER AND DISPLAY	ARRESTER	DIFF. PROTECTION	CABLE WITH PLUG
ATWB30S23570SSNTM4S	Single, CC, 30 kW	YES	YES	NO	YES

2.6 AT02-EF 22 - 44 kW AC fast charger

for AC electric vehicle charging for private and fleet use

DESCRIPTION

The AT02-EF is an electric power dispenser for charging electric vehicles with alternating current.

The dispenser is made of a stainless steel structure and is equipped with 1 or 2 Type 2 single-phase or 3-phase 7 or 22kW sockets.

It offers the possibility of remote modulation of charging power according to the energy available at the time from the 'power system.

It is prepared for connection to automation terminal and supply authorization.

MAIN FEATURES

- The AT02-EF dispenser uses charge mode 3 in accordance with IEC/EN 61851-1. Charge mode 3 consists of connecting the vehicle to the AC power supply using specific connectors and having a pilot control circuit inside the dispenser to verify the continuity of the protective conductor between the vehicle and the grid during charging. This control is necessary to ensure the proper functioning of the protections against indirect contacts by preventing any hazardous voltage from being discharged through accidental contact with unaware persons.
- Available with type 2 socket or with integrated cable, with or without protections in single-phase, three-phase and with energy meter (optional) versions.

MAIN USE

Housing, parking lots, businesses, and hotels.

ENVIRONMENT

Inside / Outside

ACTIVATION AND PAYMENT SYSTEM

- Local manual activation by password
- Activation by automation terminal AT04/07
- Activation by RFID TAG
- Activation via APP



TECHNICAL FEATURES

Power supply	230 VAC / 400 VAC
Power output	22 + 22 kW (depending on the model)
Protections	Surge Arresters Differential protection DC $\geq$ 6mA AC/DC=30mA (RMS) (optional)
Energy meter	0,1 ÷ 32 A (MID) (optional)
Charging current control	Programmable 6 ÷ 32 A
Charging points	Type 2 three-phase (other types on request)
Remote connection	RS485 protocol MODBUS RTU / OCPP
Display	2X20 backlit + keyboard 4 keys
RFID reader	13,56 MHz / MIFARE
Operating temperature	-10 ÷ +40°C
Degree of protection	IP44, IK10
Construction norms	EN 61439-7 ; EN 61851-1 ; Direttiva LVD 2014/35/UE ; Direttiva EMC 2014/30/UE



Installation example

POSSIBLE CONFIGURATIONS

CODE	TYPE	DOWNLOADER	DIFF PROTECTION	CONN. OCPP
AT02EFS2232000NNSMAM	Single, 22 kW	YES	YES	NO
AT02EFS2232000NSSMAM	Single, 22 kW	YES	YES	YES
AT02EFD2332020NNSMAM	Double, 44 kW	YES	YES	NO
AT02EFD2332020NSSMAM	Double, 44 kW	YES	YES	YES
AT02EFS2332000NSSMAM	Single, 44 kW	YES	YES	YES

2.7 AT02-EA AC/DC EV charger

dedicated to service stations and connectable to POS systems

DESCRIPTION

The AT02-EA is a battery charging station for electric transportation vehicles.

This charging station can be integrated with the fuel and additive dispensers already present on service stations for refueling conventional vehicles and can be connected to POS systems for payment.

MAIN FEATURES

- AT02-EA charging stations use charging mode 3 in accordance with IEC/EN 61851-1 in AC version and charging mode 4 with CCS2 standard in DC version.

MAIN USE

Fuel service stations

ENVIRONMENT

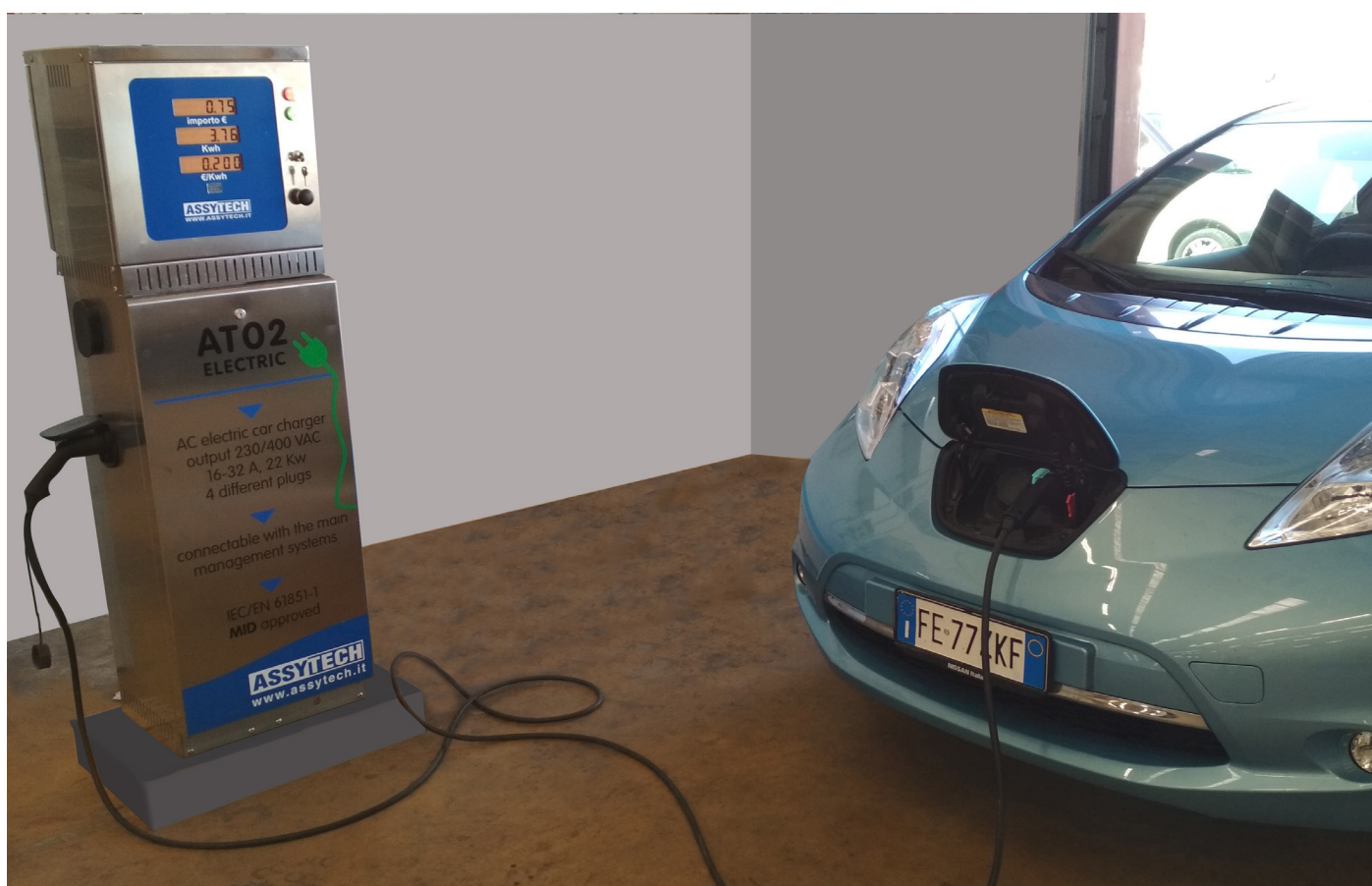
Outside

ACTIVATION AND PAYMENT SYSTEM

- Activation via POS gas station payment terminal.



TECHNICAL FEATURES	AC version	CC version
Power supply	230 VAC / 400 VAC 2/3 P + N + PE	400 VAC $\pm 20\%$
Power output	22 kW / 44 kW	30 kW
Protections	Surge Arresters Differential protection type B (Conforms to variant 6 64-8)	Over current, low voltage, over voltage, residual current, arresters, short circuit, over temperature, ground fault, insulation loss
Rated input current	32 A	-
Energy meter	AC 0,1 ÷ 32 A	CC
Charging points	Type 2	CCS2
Remote connection	RS485 / C. Loop Nuovo Pignone / C. Loop Gilbarco / IFSF Lon	
Display	Contometric 6+6+6 digits 1"	
Protocol	Nuovo Pignone / PumaLan / Wayne / IFSF Lon / MODBUS	
Degree of protection	IP44, IK10	
Construction norms	CE, EN 61851, EN 62196, DIN 70121, ISO 15118	



Installation example

2.8 AT15-ER DC/AC EV charger

for fast charging of electric vehicles in direct/alternating current

DESCRIPTION

The AT15-ER is a charging station for current and next-generation electric vehicles that supports the CCS2, Chademo, and AC Type 2 standards. The station is a configurable fast-charging unit available in single, dual, or triple-port configurations to accommodate the charging needs of each vehicle.

MAIN FEATURES

- 60-180 kW DC/AC fast charger supporting CCS2, ChAdemo and AC TYPE 2 standards.
- Multiple outputs: power up to 90 kW
- Reliable, robust and modular hardware
- Simple, quick and easy installation
- High-brightness touch screen display
- RFID authorization
- Low operating noise
- Customizable

MAIN USA

Highway stops, gas stations, electric vehicle dealers, bus fleets, urban areas, etc.

ENVIRONMENT

Inside / Outside

ACTIVATION AND PAYMENT SYSTEM

- Local manual activation by password
- Activation via RFID TAG
- Activation via APP

FLEET MANAGEMENT

- Automatic vehicle identification when connected.



TECHNICAL FEATURES

Power supply	400 VAC $\pm 20\%$ 3P + N + PE
Power output	60-180 kW
Protections	Surge arresters
Productivity	95%
Connectors	Connectors CCS2, ChAdemo e CA TIPO 2
Output voltage	150 ÷ 1000 VCC
Max output current	200 A (150 kW) – 250 A (180 kW)
Display	10" TFT color screen
RFID reader	ISO/IEC14443A/B, Mifare
Network connection	LAN / 4G / WiFi (color screen)
Protocol	OCPP /MODBUS
Operating temperature	-20 ÷ +50°C
Noise	< 55 dB
Degree of protection	IP54, IK10
Construction norms	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



Installation example

POSSIBLE CONFIGURATIONS

AT15-ER	/TYPE	/VCC	/DISPLAY
	/1: CCS2 /2: CHADEMO /3: CCS2 + CHADEMO /4: CCS2 + CHADEMO + AC TIPO 2 /5: CCS2 + CCS2 /6: CCS2 + CCS2 + AC TIPO 2 /7: CCS2 + AC TIPO 2	5: 500 VCC 60 kW 7: 750 VCC 60 kW 8: 150-1000 VCC 60 kW 1: 150-1000 VCC 90 kW 2: 150-1000 VCC 120 Kw 3: 150-1000 VCC 150 Kw 4: 150-1000 VCC 180 kW	1: standard

2.9 AT15-EU DC fast EV charger

for fast charging of DC electric vehicles

DESCRIPTION

The AT15-EU is a charging station for current and next-generation electric vehicles with CCS2 standards. The station is dual connector fast charging.

MAIN FEATURES

- 180-360kW DC fast charger supporting CCS2 or GB/T standards.
- Reliable, robust and modular hardware
- Compact size
- Simple, easy and fast installation
- High-brightness touch screen display
- RFID authorization
- Low operating noise
- Customizable

MAIN USE

Electric vehicle dealers, bus fleets, industrial environments.

ENVIRONMENT

Indoor / Outdoor

ACTIVATION AND PAYMENT SYSTEM

- Local manual activation by password
- Activation via RFID TAG
- Activation via APP

FLEET MANAGEMENT

- Automatic vehicle identification when connected.



TECHNICAL FEATURES					
Power supply	400 VAC ±20% 3P + N + PE				
Power output	180-360 kW				
Protections	Surge arresters				
Productivity	95%				
Connector	CCS2 / GB/T 200 A - 250 A - 300 A				
Output voltage	150 ÷ 1000 VCC				
Max output current	300 A				
Display	10" TFT color screen				
RFID module	ISO/IEC14443A/B, Mifare				
Network connection	LAN / 4G / WiFi (opzionale)				
Data protocol	OCPP /MODBUS				
Operating temperature	-20 ÷ +50°C				
Noise	< 55 dB				
Degree of protection	IP54, IK10				
Dimensions (LXPXH)	60 kW	120 kW	180 kW	240 kW	360 kW
	730X650X1500		760X650X1700		800X851X1900
Construction norms	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				



Installation example

POSSIBLE CONFIGURATIONS		
AT15-EU	/CONNECTORS	/POWER
	/1: 1 connector /2: 2 connectors	60 ÷ 360 kW (30 kW increments)

2.10 AT40-ER CC EV charger

for fast charging of DC electric vehicles

DESCRIPTION

The AT15-EU is a charging station for current and next-generation electric vehicles with CCS2 standards. The station is dual connector fast charging.

MAIN FEATURES

- 180-360kW DC fast charger supporting CCS2 or GB/T standards.
- Reliable, robust and modular hardware
- Compact size
- Simple, easy and fast installation
- High-brightness touch screen display
- RFID authorization
- Low operating noise
- Customizable

MAIN USE

Electric vehicle dealers, bus fleets, industrial environments.

ENVIRONMENT

Indoor / Outdoor

ACTIVATION AND PAYMENT SYSTEM

- Local manual activation by password
- Activation via RFID TAG
- Activation via APP

FLEET MANAGEMENT

- Automatic vehicle identification when connected.



TECHNICAL FEATURES

Power supply	400 VAC $\pm 20\%$ 3P + N + PE				
Power output	80/120/160/240/360 kW				
Protections	Residual current circuit breaker / surge arresters				
Efficiency	$\geq 97\%$				
Power factor	$\geq 0.99\%$				
Connector	200A/250A/300A/380A - cable length= 5000mm				
Output voltage	150 $\div$ 1000 VCC				
Display	Touchscreen 15/21/43"				
RFID module	ISO/IEC14443A/B, Mifare				
Network connection	WiFi / 4G LTE / Ethernet				
Data protocol	OCPP1.6-2.0.1 /MODBUS				
Operating temperature	$-20 \div +75^{\circ}\text{C}$				
Noise	< 60 dB				
Degree of protection	IP55, IK10				
Dimensions (LXPXH)	80 kW	120 kW	160 kW	180 kW	360 kW
	850X800X2280				850X1150X2280
Construction norms	CE; EN 61851-1:2011; EN 61851-23:2014 ; EN 61851-24:2014; DIN 70121; ISO 15118				



POSSIBLE CONFIGURATIONS

AT40-ER	/TYPE	/POWER	/DISPLAY
	/1: CSS2+CSS2 200 A	/1: 80 kW	/1: 15"
	/2: CSS2+CSS2 250 A	/2: 120 kW	/2: 21"
	/3: CSS2+CSS2 300 A	/3: 160 kW	/3: 43"
	/4: CSS2+CSS2 380 A	/4: 240 kW	
		/5: 360 kW	

3 DC FAST CHARGING STATIONS WITH SATELLITES FOR FLEETS

The AT15-EF series station is a satellite charging system that meets CCS2, CHAdeMO, GB/T standards. Adopting a modular design and state-of-the-art power electronics technology, it consists of power units, control units and charging columns. Both indoor and outdoor versions are available.

Dedicated for parking lots or fleet refueling.



3.1 AT15-EF DC power module for charging station with satellites

For fast charging of DC electric vehicles

DESCRIPTION

The AT15-EF is the power module for rapid charging of current and next-generation electric vehicles for use with CCS2-standard satellites.

MAIN FEATURES

- 240 to 360 kW rapid charger
- Multiple outputs: power up to 360 kW
- Reliable, robust and modular hardware
- Simple, quick and easy installation
- Bright status indicators
- Low operating noise
- Customizable

MAIN USES

Parking lots, refueling private fleets.

ENVIRONMENT

Outside



TECHNICAL FEATURES

Power supply	400 VAC $\pm 10\%$ L1-L2-L3-N-PE
Power output	240 - 360 kW
Protections	Surge arresters
Productivity	95%
Number of charging stations	2 ÷ 8
Output voltage	150 ÷ 1000 VCC
Max output current	250 A
Display	10" TFT color screen
Network connection	LAN / 4G / WiFi (optional)
Data protocol	OCPP /MODBUS
Operating temperature	-20 ÷ +50°C
Noise	< 55 dB
Degree of protection	IP54, IK10
Construction norms	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

POSSIBLE CONFIGURATIONS

AT15-EF	/TYPE
	/240 kW
	/360 kW

3.2 AT15-EFS Satellite

for rapid charging of DC electric vehicles

DESCRIPTION

The AT15-EFS satellite is a module for rapid charging of current and next-generation electric vehicles for use with CCS2 standards. It must be used with the AT15-EF charging station.

MAIN FEATURES

- Rapid charger from 120 to 180 kW
- Reliable, robust and modular hardware
- Simple, easy and fast installation
- High-brightness touch screen display
- RFID authorization
- Customizable

MAIN USES

Parking lots, refueling private fleets.

ENVIRONMENT

Outside

ACTIVATION AND PAYMENT SYSTEM

- Local manual activation by password
- Activation via RFID TAG
- Activation via APP

FLEET MANAGEMENT

- Automatic vehicle identification when connected.



TECHNICAL FEATURES

Power supply	230 VAC $\pm 10\%$ L1-N-PE
Power output	120 - 180 kW
Safety device	Stop button
Input frequency	50 Hz
Connector	CCS2
Output voltage	150 ÷ 1000 VCC
Max output current	250 A
Display	7" TFT colour screen
RFID module	ISO/IEC14443A/B, Mifare
Connection to power module	N. 2 CANBUS serial lines
Operating temperature	-20 ÷ +50°C
Degree of protection	IP54, IK10
Construction norms	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

POSSIBLE CONFIGURATIONS

AT15-EFS	Street version
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3.3 AT15-EFF Satellite

for rapid charging of DC electric vehicles

DESCRIPTION

The AT15-EFS satellite is a module for rapid charging of current and next-generation electric vehicles for use with CCS2 standards.

It must be used with the AT15-EF charging station.

MAIN FEATURES

- Rapid charger from 120 to 180 kW
- Reliable, robust and modular hardware
- Simple, easy and fast installation
- High-brightness touch screen display
- RFID authorization
- Customizable

MAIN USES

Parking lots, refueling private fleets.

ENVIRONMENT

Outside

ACTIVATION AND PAYMENT SYSTEM

- Local manual activation by password
- Activation via RFID TAG
- Activation via APP

FLEETS MANAGEMENT

- Automatic vehicle identification when connected.



TECHNICAL FEATURES

Power supply	230 VAC $\pm 10\%$ L1-N-PE
Power output	120 - 180 kW
Safety device	Stop button
Input frequency	50 Hz
Connector	CCS2
Output voltage	150 $\div$ 1000 VCC
Max output current	250 A
Display	10" TFT colour screen
RFID module	ISO/IEC14443A/B, Mifare
Connection to power module	N. 2 CANBUS serial lines
Operating temperature	-20 $\div$ +50°C
Degree of protection	IP44, IK10
Construction norms	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

POSSIBLE CONFIGURATIONS

AT15-EFF	Fleet version
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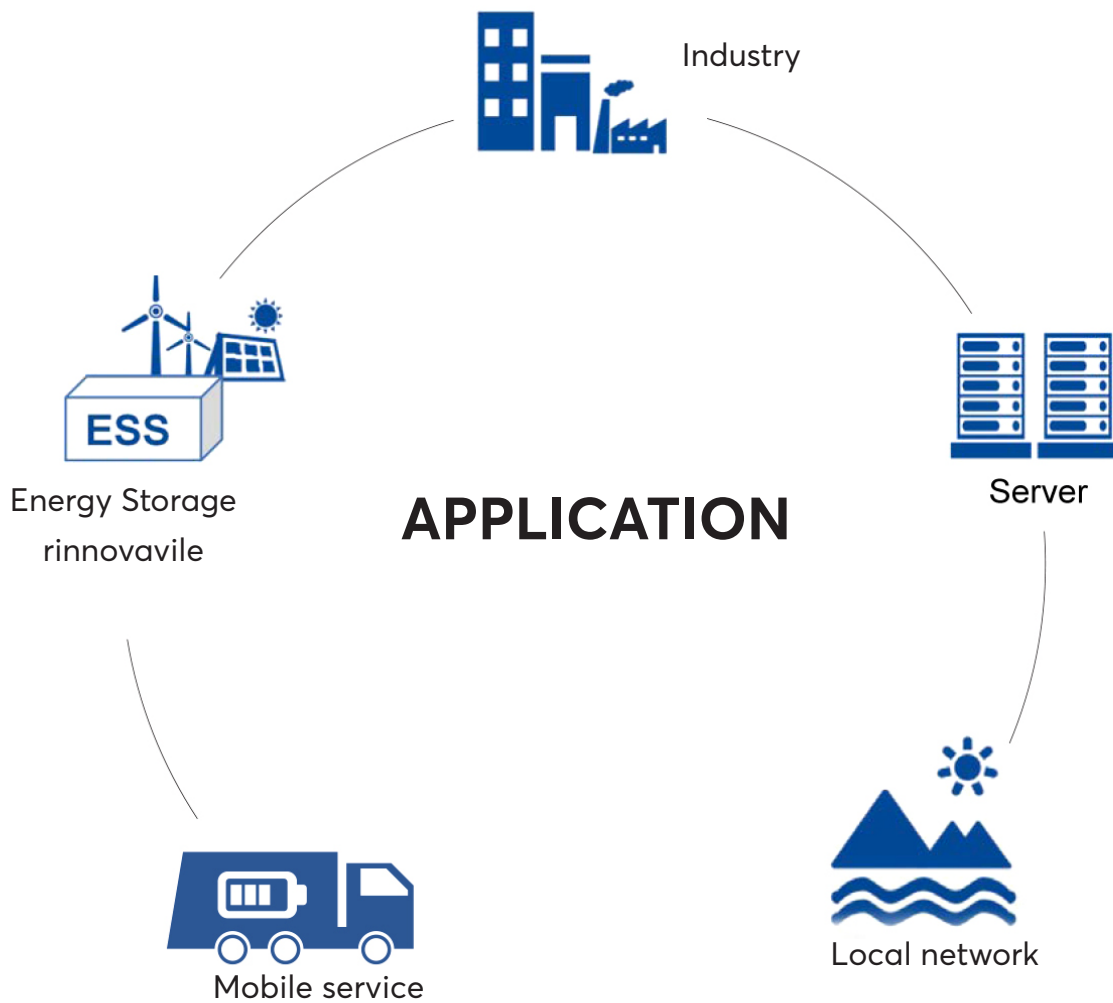
4 ATBAT - Renewable energy storage station

The storage station allows energy to be stored to make it available when high instantaneous power capacity is needed for fast charging of vehicle batteries.

The station is powered through the power grid, photovoltaic panels, wind generators or other renewable sources. It can be configured with various powers both input (battery charger rectifiers) and stationary battery storage capacity.



4.1 Storage system



FEATURES

- High quality LFP (lithium, iron, phosphate) batteries for mobile use.
- Battery module is designed with steel brackets and structure to ensure maximum system safety during transport, installation, and operation
- Design designed to improve the shock resistance of the system
- IP54 protection, safe and reliable operation in outdoor environment
- Power converter and battery pack designed to eliminate leakage currents and improve system reliability
- Integrated BMS, multi-layer protection DC, AC, maximum safety performance design.
- Integrated system, standard modular power module and battery module, easy installation, maintenance and expansion capability
- Easy connection to photovoltaic systems and diesel generators, intelligent multi energy management
- Ground-fixed or vehicle-mounted, can be loaded and unloaded by forklift and lifted by lifting rings
- Multiple systems can be connected in parallel

4.2 ATBAT series energy storage systems

SAFE AND RELIABLE

- High-quality LFP (lithium, iron, phosphate) batteries for mobile use
- Battery module is designed with steel brackets and structure to ensure maximum system safety during transportation, installation, and operation
- Design designed to improve the shock resistance of the system
- IP54 protection, safe and reliable operation in outdoor environment
- Power converter and battery pack designed to eliminate leakage currents and improve system reliability
- Integrated BMS, multi-layer protection DC, AC, maximum safety performance design.

EFFICIENT AND CONVENIENT

- Integrated system, standard modular power module and battery module, easy installation, maintenance and expansion capability
- Easy connection to photovoltaic systems and diesel generators, intelligent multi energy management
- Ground-fixed or vehicle-mounted, can be loaded and unloaded by forklift and lifted by lifting rings
- Multiple systems can be connected in parallel.

COST OPTIMIZATION

- One investment, multiple benefits: peak energy elimination, backup power supply, local grid construction, power quality improvement and energy storage, etc.
- Small size, light weight, less space and installation costs.



ATBAT75-50



ATBAT150-100



ATBAT225-150



ATBAT300-200

MAIN TECHNICAL FEATURES

	ATBAT75-50	ATBAT150-100	ATBAT225-150	ATBAT300-200
Battery capacity	76.6 kWh	150 kWh	225 kWh	300 kWh
Max power output	50 kW	100 kW	150 kW	200 kW
Dimensions (WxDxH) mm	1300x1500x1700	1300x2270x1700	1300x3050x1700	1300x3830x1700
Weight (kg)	1400	2500	3550	4600



POSSIBLE CONFIGURATIONS

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
MPTT	Solar panel connection module 50 kW MPTT

5 EXAMPLES OF APPLICATION





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**HEAVY-DUTY FUEL
STATION EQUIPMENT**

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