

biATLAS^{-D}

Programmable DC Regenerative Power Supply
DC Regenerative Electronic Load



business intelligence

Ideal power supply committed to usability

bi business intelligence

'bi' in biATLAS means 'business intelligence'. That is, it includes the meaning of information to help decision-making in business. In addition 'bi' also means 'bi-directional'.

biATLAS

A 'map book' is called as ATLAS. That's originated from the Greek God 'Atlas' drawn on the front page of an early map book and supporting the globe on its shoulder.



Our product 'biATLAS' was born, in addition to as a small and super usable regenerative power supply, with all our heart to strongly support the foundation of various renewable energy appliances such as EVs and Batteries, and to navigate the future of the customer and us as if a map book 'Atlas'.



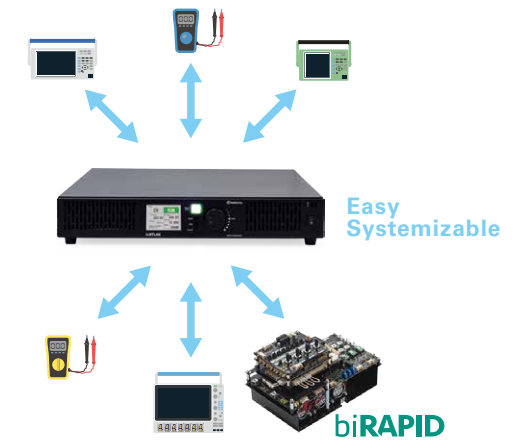
bi technology

Easy-Systemizable power supply

biATLAS-D series has evolved into 'Easy-Systemizable power supply', equipped with the 'bi technology' to realize DX [Digital Transformation] in R&D and manufacturing fields.

The evolution of biATLAS-D into a Easy-Systemizable power supply enables to realize various system integration, such as 'battery simulation system', 'automatic inspection system', 'Load Machine of electric motor' and 'automatic data gathering for development'.

This evolution can improve the work efficiency in development and inspection and reduce cost of the system installation, although custom ordered development was required to configure these systems so far.

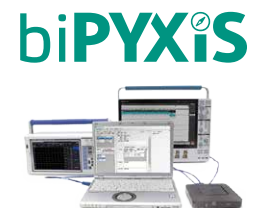


biPYXIS

biPYXIS is the software tool for bi technology application enabling to widely expand the Easy-Systemizable function of biATLAS-D.

✓ Easy automation of time-consuming measurement and control

- Select device and command
- Simple program only to be arranged
- Capable of taking in conditional jump and loop
- Substitute measured data for variable to be used also for conditional branch
- Acquired data automatically stored in unified database



✓ System matching the fields of R&D, inspection, and production can be easily constructed

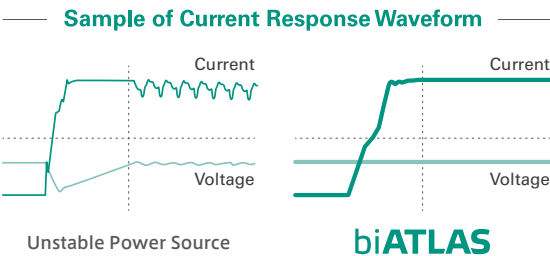
- Easy automation of repetitive measurements on a small-scale inspection line and for R&D
- Capable of the method of use like executing semiautomatically with frequently switching the various types of measurements during product development phase.

biATLAS equipped with biPYXIS can make it easier to configure the system and/or facility including power supplies, since it enables to be connect to external appliances such as measuring instruments.

biATLAS series commitment

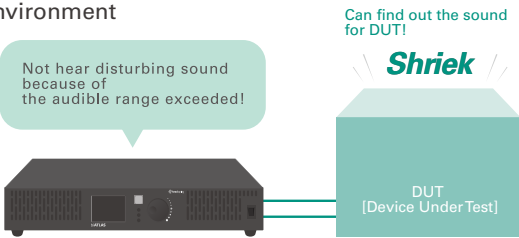
Stable Power Source

- Equipped with **Real-Time Stabilizer** to control stably even for Load.
- Reproducibility of debug is achieved with Stabilized Power Source



Noise reduction in audible sound range

- SiC devices utilization minimizes noise in the audible range.
- Enable to concentrate to the change of the sound for DUT [Device under Test] under the development environment



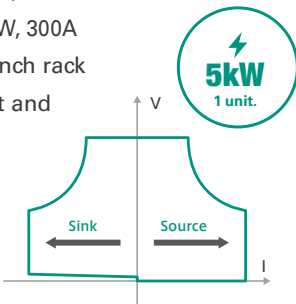
Realized downsizing by SiC utilization

- Utilized next generation power semiconductor SiC realized the down-sizing and weight-saving in the industry-leading level
- Down-sizing enabled to move and to sytem up by less people



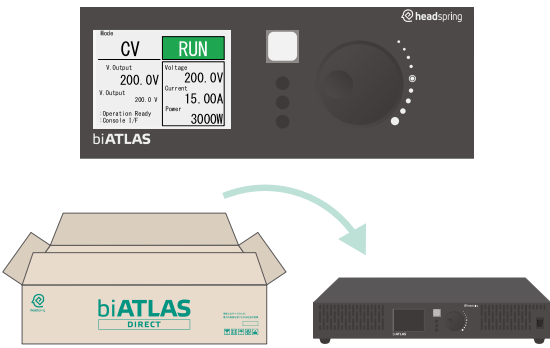
System flexibility by 5kW unit combination

- High configuration flexibility derives from 5kW unit
Upto 100kW by 20 units in series and parallel
eg) D525 in series = 10kW, 1000V
eg) D80 in parallel = 10kW, 300A
- Small size: 1.5U in 19-inch rack
- Light weight: 18kg/unit and more enables to move by 1 person



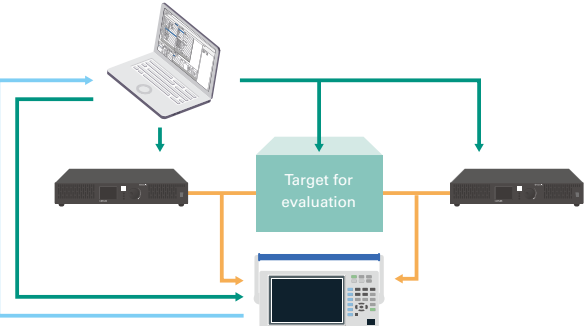
Simple and intuitive operation

- Simple UI and intuitive operation by dialing
- Turnkey solution for power supply



Easy-Systemizable Power Supply

- Although formerly special-ordered development was required to construct these systems, biATLAS enables a system configuration by customizing easily.

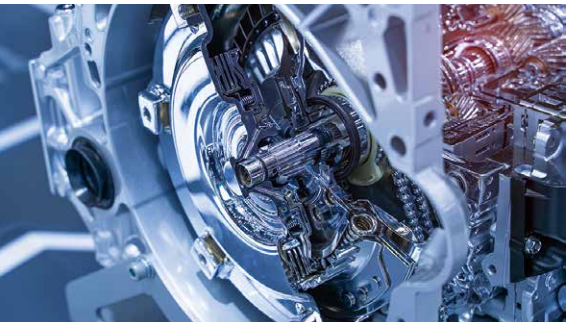


Application of DC regenerative power supply



V2H / Grid Connection P5

Usable as a high-capacity battery that enables free output/input of electricity. Can be used for evaluating an energy management system.



Motor Drive Inverter P6

Can be used for evaluating an inverter for motor drive.



Battery Charge and Discharge P7

Can be used as the charge and discharge system for wide range of batteries applying to EV, PV power system etc.



Hybrid Power Conditioning System P8

Usable for evaluating Hybrid PCS, by the battery simulating function of power supply.



V2V/DCDC Converter P9

Can be used for evaluating the power conversion products from DC to DC.

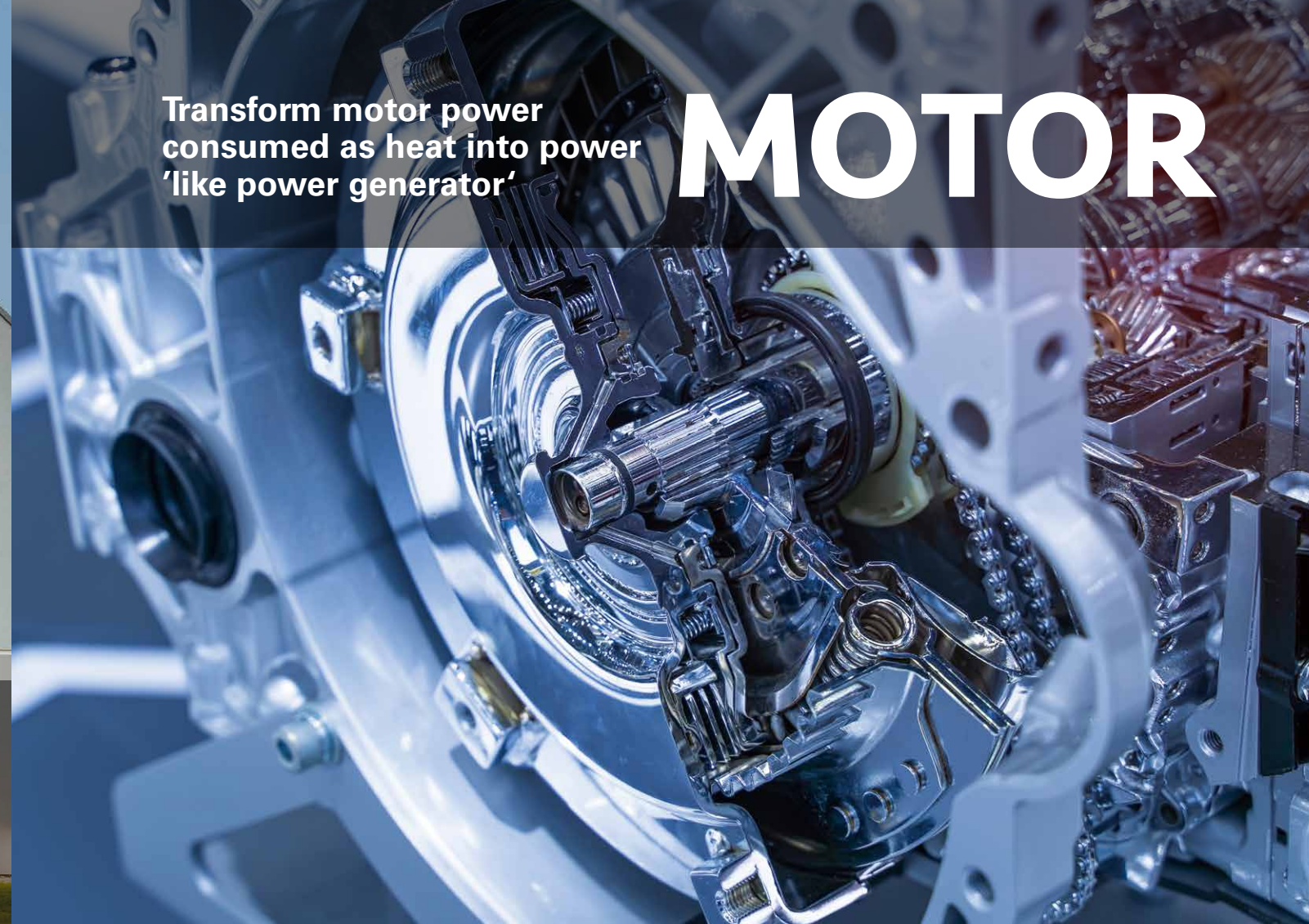


Bidirectional On-Board Charger [OBC] P10

Can be used for evaluating the product having various rated electric power.



Free 'in and out' of electricity
by bi-directional

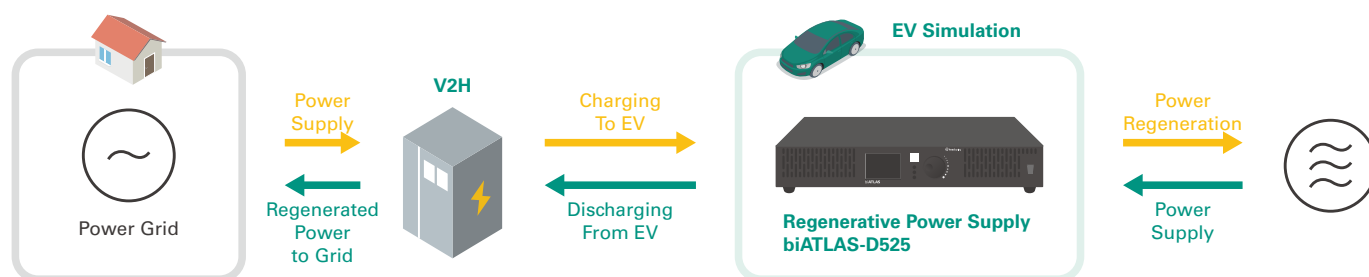


Transform motor power
consumed as heat into power
'like power generator'

MOTOR

V2H / Grid Connection

Usable as a high-capacity battery that enables free output/input of electricity.
Can be used for evaluating an energy management system.



✓ Bidirectionality

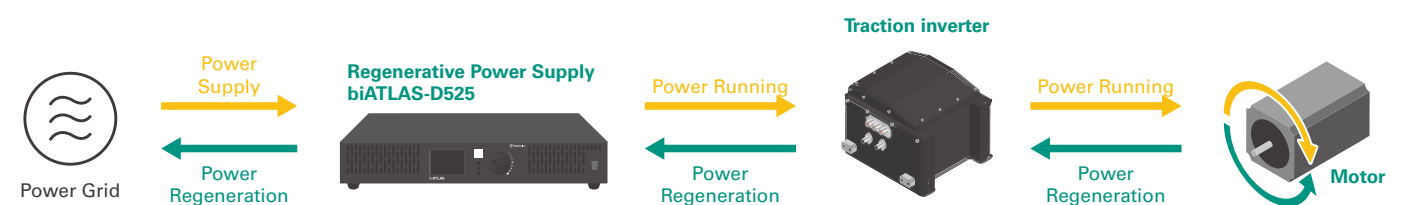
The biATLAS-D series has the function of bidirectional operation.
Bidirectional means AC/DC power transformation bidirectionally from and to power grid.
The bidirectional power supply can simulate a battery including charge and discharge, and realize seamless development, inspections, and evaluations.

Bidirectional enables to simulate a EV battery

V2H evaluation requires two operations; 'charging to an EV battery' and 'supplying power from an EV battery to the home'. The function of a bidirectional power supply to simulate an EV battery enables two types of usages per unit.

Motor Drive Inverter

Can be used for evaluating an inverter for motor drive.

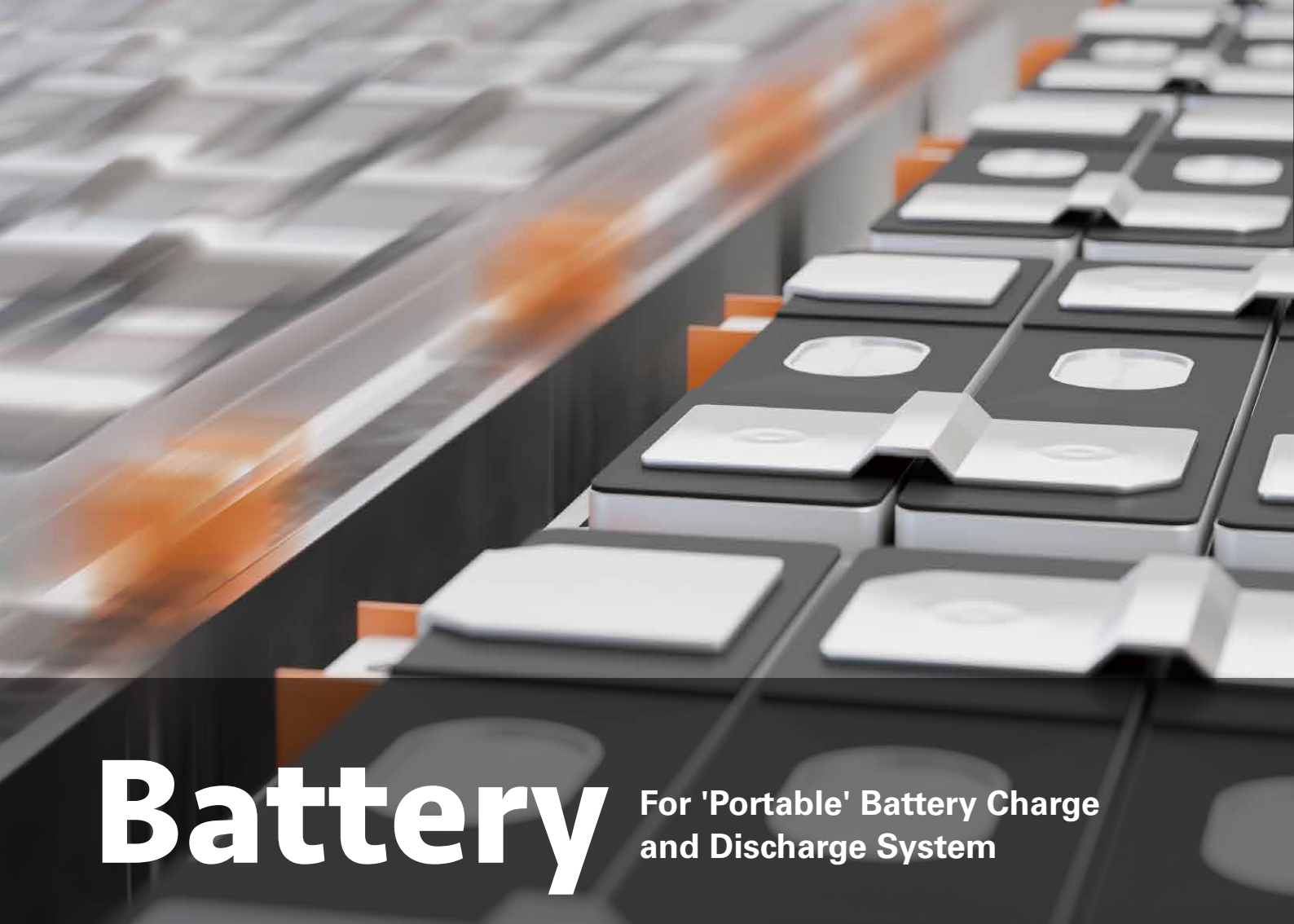


✓ Regenerative Operation

Bidirectional operation includes source and sink function. The source is to supply power like a single function power supply. The sink is to sink power like an electronic load. In addition, regeneration means not consuming power as heat but returning power to the facility side. Therefore can configure a system by saving space.

Can sink the back electromotive force of motor and regenerate power

biATLAS-D series can sink back electromotive force during motor rotating or braking. (bidirectional operation)
Plus, since it can regenerate the power to a distribution board, much smaller space is just required than using an electronic loading device or bipolar power supply.



Battery

For 'Portable' Battery Charge and Discharge System



Even for battery simulation **PCS**

Battery Charge and Discharge

Can be used as the charge and discharge system for wide range of batteries applying to EV, PV power system etc.



Battery Voltage	Application
800V~1000V	EV Truck / EV Sports Car
500V~1000V	EV Bus
400~750V	Energy Storage System
200~400V	Home ESS
200~400V	Passenger EV
48~96V	Forklift / Electric Motorcycle

Small And Lightweight

The biATLAS-D series can be installed even in a small space, by its features of the easily portable size and weight.

Wide Voltage Range Covered

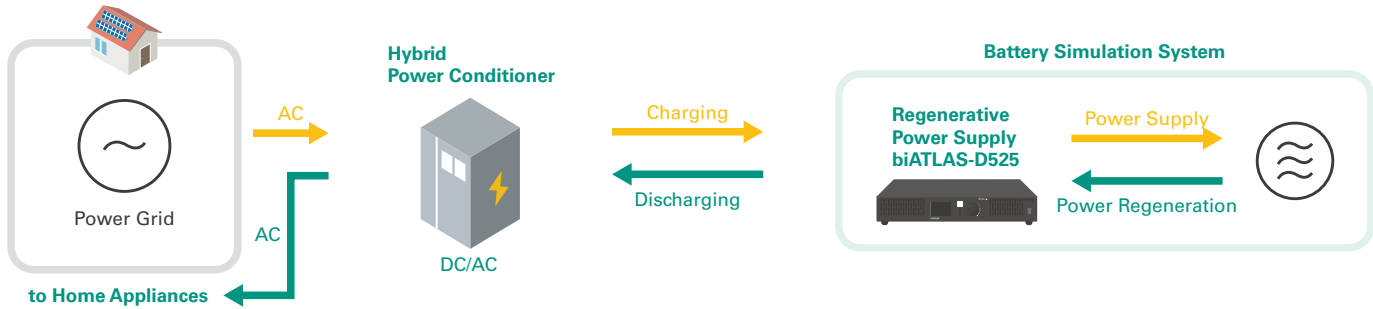
The biATLAS-D series can be used in wide various fields fitting to the application, by its wide voltage range of 0-1000V.

The needs growing unexpectedly for its easily movable size

In terms of battery charge and discharge system, large systems are major with assumption of installation in a manufacturing process. Systems at a movable size are rarely found, but convenient as a ready-to-use system for a laboratory, battery management warehouse and also the demonstration for users.

Hybrid Power Conditioning System

Usable for evaluating Hybrid PCS, by the battery simulating function of power supply.



Battery Simulation System

The biATLAS-D series equips the function for simulating a battery. The battery simulation function of the biATLAS-D enables its operation along the terminal voltage-SOC characteristics and the internal resistance-SOC characteristics. Adjustable parameters are 'Voltage v, Current i, Time t, and Charging status SOC', and the evaluation fitting the characteristics of the battery can be realized.

Power supply with a battery simulation function is useful

PCS evaluation requires a battery or a battery-simulated power supply. In case of a battery, the preliminary charging or the replacement along with battery deterioration is needed. However, the battery-simulated power supply can perform high-efficiency evaluation due to no such work required.



V2V

High efficiency regenerative power supply realizes energy saving and seamless testing

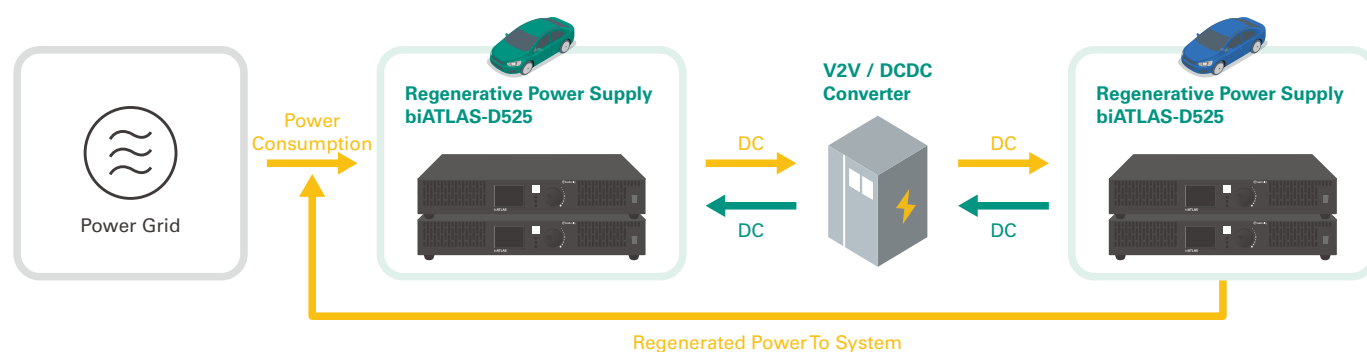


Power supply facility
with wide scalability

OBC

V2V/DCDC Converter

Can be used for evaluating the power conversion products from DC to DC.



✓ High Efficiency

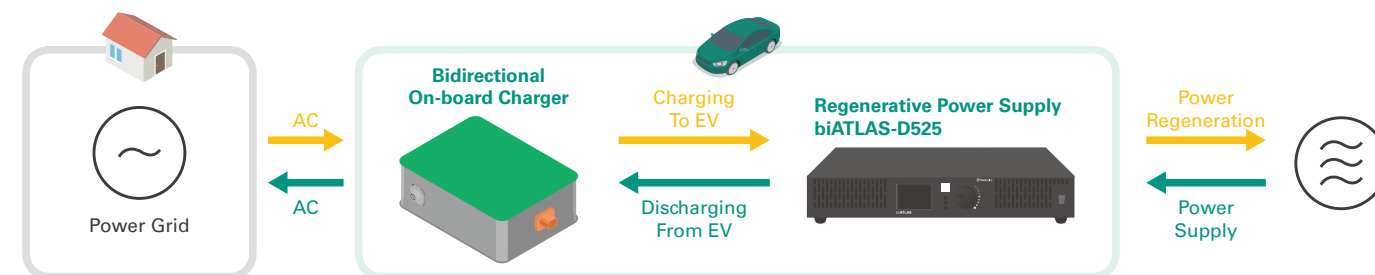
The biATLAS-D series has very high efficiency by utilizing the next generation power semiconductor (SiC). Since this high efficiency enables the power consumption reduction, and the power can be also regenerated on site, energy saving is realized. Especially, in case of long hours testing etc, the electricity rate can be reduced to achieve even an economic effect.

Regenerative high efficiency power supply realizes saving energy and space

Regenerative DC power supply is most suitable for the product of bidirectional power conversion from DC to DC, such as V2V. Bidirectional tests can be conducted seamlessly for high work efficiency without rearranging the facility. In addition, 'the high efficiency + regenerative function' enables to construct the facility with saving energy and space.

Bidirectional On-board Charger [OBC]

Can be used for evaluating the product having various rated electric power.



✓ Power Scalability

The biATLAS-D series can expand the voltage range in serial and the current range in parallel connection. Since 20 units can be connected at maximum in series-parallel, DC regenerative power supply up to 100 kW can be constructed flexibly. The preparation of multiple units of the biATLAS-D enables the construction of a power supply fitting the application on demand, and a common facility can be used in various applications.

A scalable power supply suitable for an OBC to keep enlarging its capacity

The bidirectional on-board battery charger loaded on an EV increases its capacity year by year. For products which market drastically change, a scalable facility is easy-to-use and very useful. Since the biATLAS-D offers excellent power scalability and can simulate a battery, it can be utilized most suitably as the testing facility for the bidirectional on-board battery charger.

biATLAS Series Product Lineup

DC Regenerative Power Supply For High Voltage System

P13-14

biATLAS-D525

- ▶ biATLAS-D525 BASIC HBPS-A2D525-502N
- ▶ biATLAS-D525 Booster HBPS-A2D525-502B
- ▶ biATLAS-D525 DOUBLE HBPS-A2D525-103NP
- ▶ biATLAS-D525 DOUBLE-S HBPS-A2D1000-103NP
- ▶ biATLAS-D525 TALL HBPS-A2D525-203NP
- ▶ biATLAS-D525 TALL-S HBPS-A2D1000-203NP
- ▶ biATLAS-D525 TOWER HBPS-A2D525-403NP
- ▶ biATLAS-D525 TOWER-S HBPS-A2D1000-403NP

biATLAS-D525



DC Regenerative Power Supply For Large Current System

P15-16

biATLAS-D80

- ▶ biATLAS-D80 HBPS-A2D080-502N
- ▶ biATLAS-D80 Booster HBPS-A2D080-502B

biATLAS-D80



DC Regenerative Electronic Load For High Voltage System

P17-18

biATLAS-D525 Load

- ▶ biATLAS-D525 Load HBPS-A2D525-502LN
- ▶ biATLAS-D525 Load Booster HBPS-A2D525-502LB

biATLAS-D525 Load



Rules of Model Name

HBPS - A2 D525 - 103 NP

AC Voltage: 200 V / DC Voltage: 0-525 V
Output Capacity: 10 kW / Function: Regenerative Power Supply / Package Equipped with bi-Technology

- 1 Series name
- 2 AC voltage
- 3 DC voltage
- 4 Output capacity
- 5 Function [Blank: Regenerative Power Supply / L: Electronic load]
- 6 Package [Blank: Normal / N: Equipped with bi-Technology / NP: Package Equipped with bi-Technology / B: Booster]

Valuable Package

Wide range output capacity fit by the combination of Main + Booster.

Combination of packages is possible

The combination of DC regenerative power supply packages is also possible, such as 40 kW + 20 kW = 60 kW by TOWER + TALL.



TOWER 40kW



TALL 20kW



DOUBLE 10kW



BASIC 5kW

biATLAS-D525

Product Name	Model Name	Output Voltage (DC)	Power Capacity	Output Current (DC)	
biATLAS-D525 BASIC	HBPS-A2D525-502N	525V	5kW	±30A	
biATLAS-D525 Booster	HBPS-A2D525-502B	525V	5kW	±30A	
biATLAS-D525 DOUBLE	HBPS-A2D525-103NP	525V	10kW	±60A	
biATLAS-D525 DOUBLE Compatible	HBPS-A2D1000-103NP	1000V 525V	10kW	±30A ±60A	
biATLAS-D525 TALL	HBPS-A2D525-203NP	1000V	20kW	±120A	
biATLAS-D525 TALL Compatible	HBPS-A2D1000-203NP	1000V 525V	20kW	±60A ±120A	
biATLAS-D525 TOWER	HBPS-A2D525-403NP	525V	40kW	±240A	
biATLAS-D525 TOWER Compatible	HBPS-A2D1000-403NP	1000V 525V	40kW	±120A ±240A	

biATLAS-D80

Product Name	Model Name	Output Voltage (DC)	Power Capacity	Output Current (DC)	
biATLAS-D80	HBPS-A2D080-502N	80V	5kW	±150A	
biATLAS-D80 Booster	HBPS-A2D080-502B	80V	5kW	±150A	

biATLAS-D525 Load

Product Name	Model Name	Output Voltage (DC)	Power Capacity	Output Current (DC)	
biATLAS-D525 Load	HBPS-A2D525-502LN	525V	-5kW	-30A	
biATLAS-D525 Load Booster	HBPS-A2D525-502LB	525V	-5kW	-30A	

biATLAS-D525



High Voltage Type DC Regenerative Power Supply For High Voltage System

The DC regenerative power supply 'biATLAS-D525' committed to usability. Aside from the portable size and weight carried by one person, can be combined in units of 5 kW, so the flexible use is possible in a wide range of applications. Capable as a power supply for testings and evaluations of power electronics equipments and in the application of integrating in a facility.

Power Supply Portable by One Person

Conventional DC regenerative power supply had the size and weight that cannot be carried by one person even it is in a 10 kW class.

Large storage space should have been secured even when not to use, and reconfigure to share with other teams was a hard timepains.

biATLAS-D was reduced its size and weight as a power supply itself.

1.5U of a rack mount size and 18kg of a weight per unit enable to reconfigure even by one person.

Therefore, even in case 5 kW testing today and 20 kW testing needs to be suddenly the next day; the facility can be rearranged more rapidly than before.

✓ Power Supply Portable by One Person

Flexible and easy rearrange or change of system capable

✓ High Voltage 1000 V

2 units in series enable the output up to DC 1000 V and 10 kW
Applicable even for the voltage increasing rapidly in EV sector

✓ From 5 kW! Power supply with high flexibility and scalability

Capable to respond to wide scene
Capable to add capacity or options even later

Realized downsizing by SiC utilization

- Utilized next generation power semiconductor SiC

Realized the Down-sizing and Weight-saving in the industry-leading level

- Down-sizing enabled to move and to sytem up by less people



Downsizing



High Efficiency,
High Speed



Weight-saving



Low Cost



Compatible type products can perform high voltage 1000 V output

Connection in series enables 1000 V output.

DOUBLE-S	10kW	36kg	1000V 525V	30A 60A
TALL-S	20kW	72kg	1000V 525V	60A 120A
TOWER-S	40kW	144kg	1000V 525V	120A 240A

* Wiring change enables the operation shown in the 525V operating range graph of the below figure.
Two types of operating ranges are applicable by wiring change.

1000V ↔ 525V
compatible

In the case of the 10kW model
1000V 30A ↔ 525V 60A

Standard



Parallel 0 - 525 V

Optional

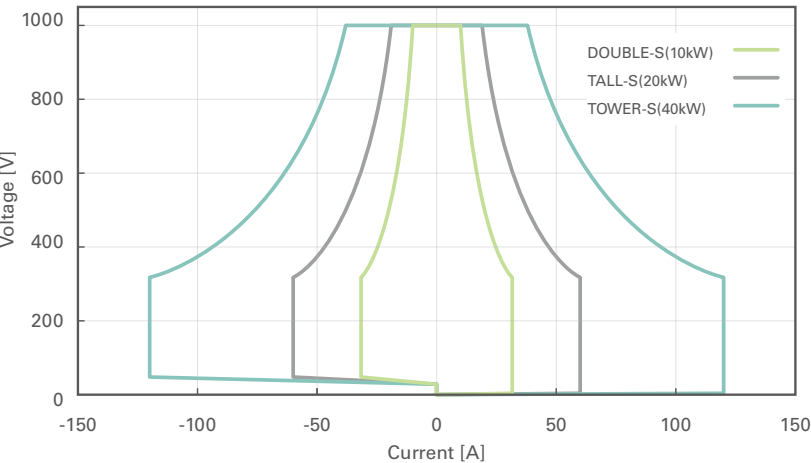
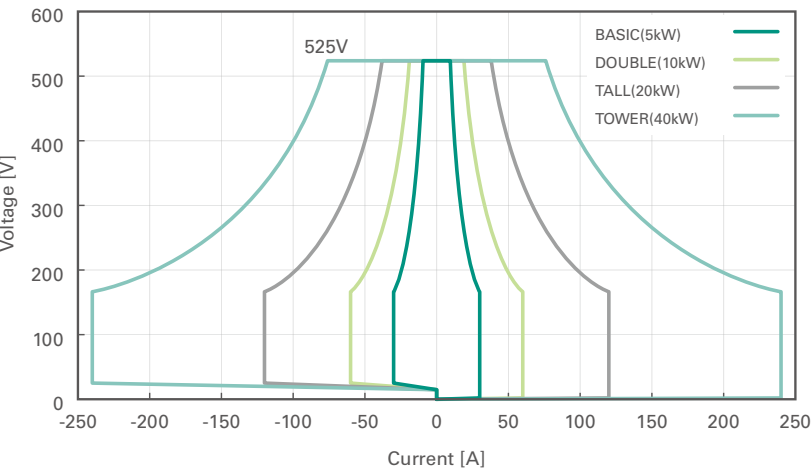


Series 0 - 1000 V

Configuration possible in units of 5 kW

Power supply with high flexibility and scalability

BASIC	5kW	18kg	525V	30A
DOUBLE	10kW	36kg	525V	60A
TALL	20kW	72kg	525V	120A
TOWER	40kW	144kg	525V	240A



Flexible configuration like building blocks is possible. The lowest capacity 5 kW, 10 kW by two units, in addition 1000 V and 10 kW by a series connection option etc can be selected to match the testing environment.

BASIC



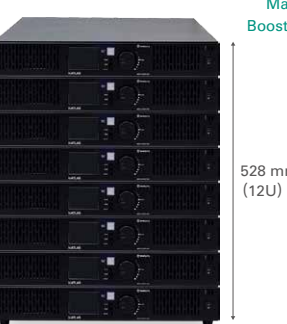
DOUBLE



TALL



TOWER



biATLAS-D80



Large Current Type DC Regenerative Power Supply For Large Current System

Large-current version of biATLAS-D debut! Which is a DC regenerative power supply committed to usability. Its scalability by combining in units of 5 kW allows to use flexibly for wide applications. Compact body but large current realized. It can achieve 0V & 150A used for a battery disposal, since it's capable to operate in the whole range of $\pm 150\text{A}$ even when 0V output. Usable for the evaluation of the charge / discharge system for 48 V batteries and e-mobility systems.

Compact body but large current of $\pm 150\text{A}$

Large current system version of the small and light biATLAS-D debut. Although most large current power supplies are large and heavy, the biATLAS-D80 realizes large current by its compact body. 20 units at maximum can be connected and capable of up to 3000A output. Capable to construct the environment flexibly in low voltage and large current applications with fitting test environments.



✓ Large current $\pm 150\text{A}$

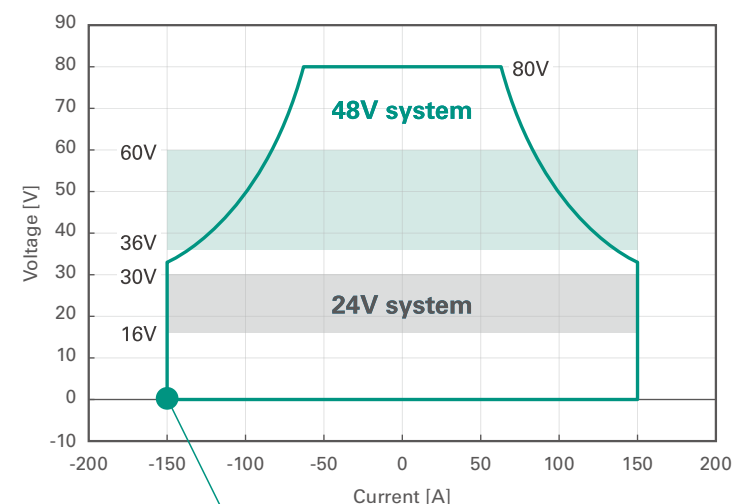
Capable of output from 150 A per unit to 3000 A at max. 2U and 30kg of compact body but 150 A of output.

✓ Charge / discharge of 48 V batteries realized by one unit

Can be used as a charge / discharge inspection system by insulated bidirectional. Most suitable for system evaluation of e-mobility.

✓ Optimum for battery simulations

Realized the accuracy and the precision allowing to simulate a battery. Usable for various systems consisting batteries.



It can achieve 0V & 150A used for a battery disposal

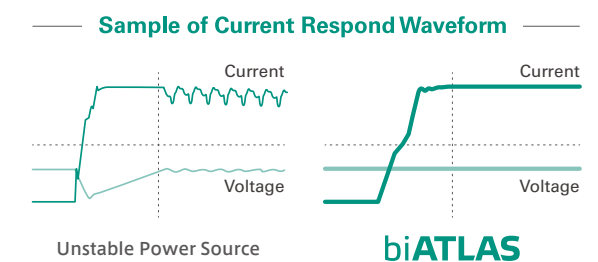
Ecological system for regenerative power supply capable to utilize for battery charge / discharge

The concept of 'biATLAS-D80' is 'small DC regenerative power supply', under that it can provide large current at max 150 A per unit in lower voltage system, such as 12V/24V/48V often used for batteries. Plus, it can be used for various testings by the circuit topology enabling charge / discharge at 150A even in 0V output. The ecological system can be realized that can circulate the energy, which has been consumed so far as load in the conventional charge / discharge testing using resistance or electronic load.

- Can charge / discharge at max 5 kW, 80 V and 150 A per unit
- Can charge / discharge at $\pm 150\text{A}$ even in 0V output
- Can configure 100 kW with max 3 - series / max 20 - parallel

Optimum voltage and current waveforms for a charge / discharge testing

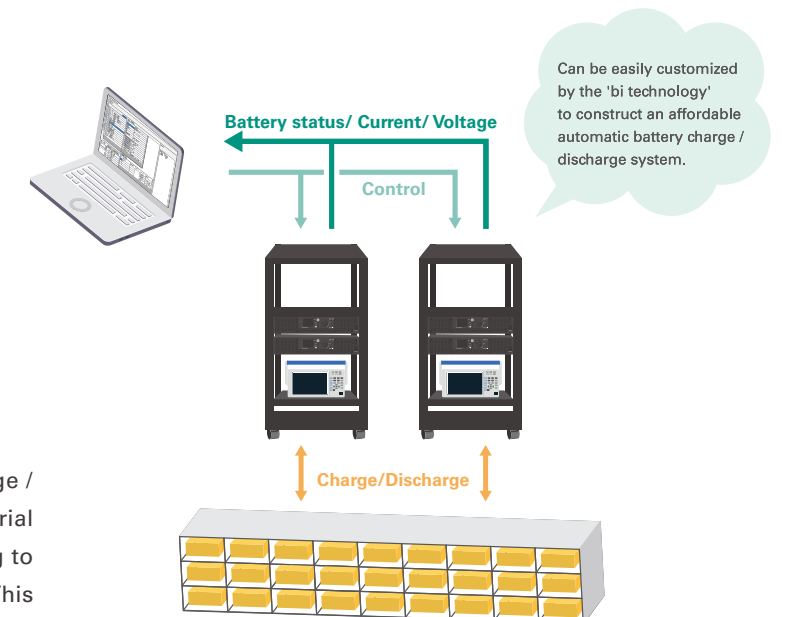
Stability of voltage and current important for batteries charge / discharge has been realized by using high precision sensors and a **Real-Time Stabilizer** capable of stable control even for load. Such super stable power supply enables testing with reproducibility.



Can easily construct a charge / discharge system for batteries

Who is recommended for

- Who is aiming to develop a battery pack or to construct a charge / discharge testing system.
- Who is seeking easily customizable power supplies for a charge / discharge system.



The biATLAS-D80 enables to easily construct a charge / discharge system for a battery pack in EVs and industrial sectors with equipped the 'bi technology' connecting to various measuring instruments and power supplies. This can be recommended for customers who want to construct a small-scale charge / discharge system for battery pack development and who construct a charge / discharge system in linkage with an external system through CAN/LAN. In case constructing a charge / discharge system, the status of a battery is monitored by a controller or a PC controlling charge and discharge, and

the charge or discharge commands to be sent to the biATLAS depending on the battery status. the biATLAS can offer even the current and voltage information for charge and discharge.



biATLAS-D525 Load

Electronic Load DC Regenerative Electronic Load For High Voltage System

For the evaluation and inspection of the large-capacity DC power supply equipment and DCDC converter, a resistance load is widely used. Although a resistance load is utilized for various purposes due to its comparatively low cost and stable operation, input energy is converted into heat entirely, so large equipment size and system power consumption increase are problems.

biATLAS-D Load is an electronic load capable to regenerate into AC supply the energy having conventionally converted to heat.

By using the biATLAS-D Load instead of a resistance load, the ecological and compact evaluation and inspection system with low electric power consumption can be constructed.

Usability and low price realized

Basic functions as a load equipment were made simple and useful configuration.

In addition, that realizes the low price.

Even high degree function can be easily realized by utilizing 'bi technology'.

Large Capacity 5kW, 10kW, 20kW, 30kW, 40kW, 50kW, 100kW

High Voltage Up to 525 V by single unit, Up to 1000 V by 2 units in series

Available to grade up for a fee to a programmable DC regenerative power supply 'biATLAS-D525'!

✓ 'Usability' and 'low price' realized regenerative electronic load

Realized up to 100kW regenerative load in one 19-inch rack
Easy rearrangement at facility change due to small size and light weight

By just the minimum essential functions equipped, low price electronic load realized which used to be expensive

✓ Configured Ecological system

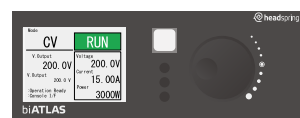
Capable to reuse the electric energy used to be converted into heat and disposed

Energy circulation type evaluation and inspection system can be constructed

Large capacity equipments can be evaluated and inspected at just minimum power

✓ CR/CC/CV/CP Modes equipped

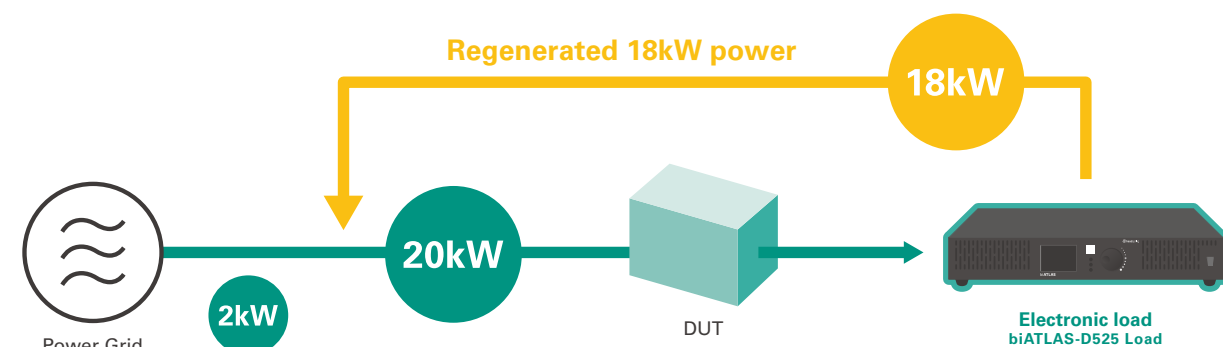
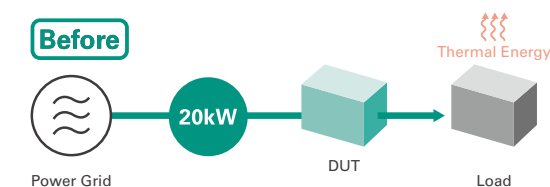
By CR mode, simulating resistance load can be operated
Load resistance value can be adjusted consecutively without changing connections



Configured Ecological System

The biATLAS-D525 Load is capable to regenerate into AC supply the electric energy sorked as an electronic load.

Since the energy having conventionally converted into heat and disposed can be reused, electricity rate can be reduced.



Furthermore, by the connection of the biATLAS-D525 Load to the power distribution panel common to the power supply equipment for an evaluation and inspection system, the regenerated energy can be used by the power supply equipment again, and the evaluation and inspection system in an energy circulation type can be constructed. The device under target with large capacity can be evaluated at only low power from the power grid.

CV/CC/CP/CR Modes equipped

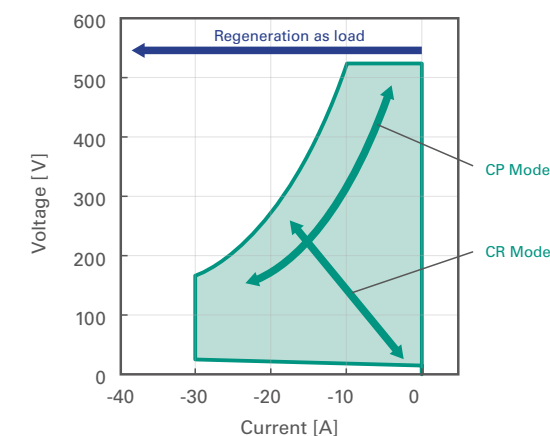
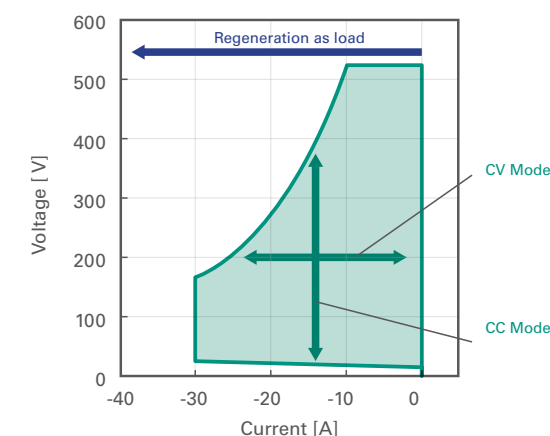
4 operation modes are equipped.

CV Mode Constant Voltage Mode
Make current change at a constant voltage

CC Mode Constant Current Mode
Make voltage change at a constant current

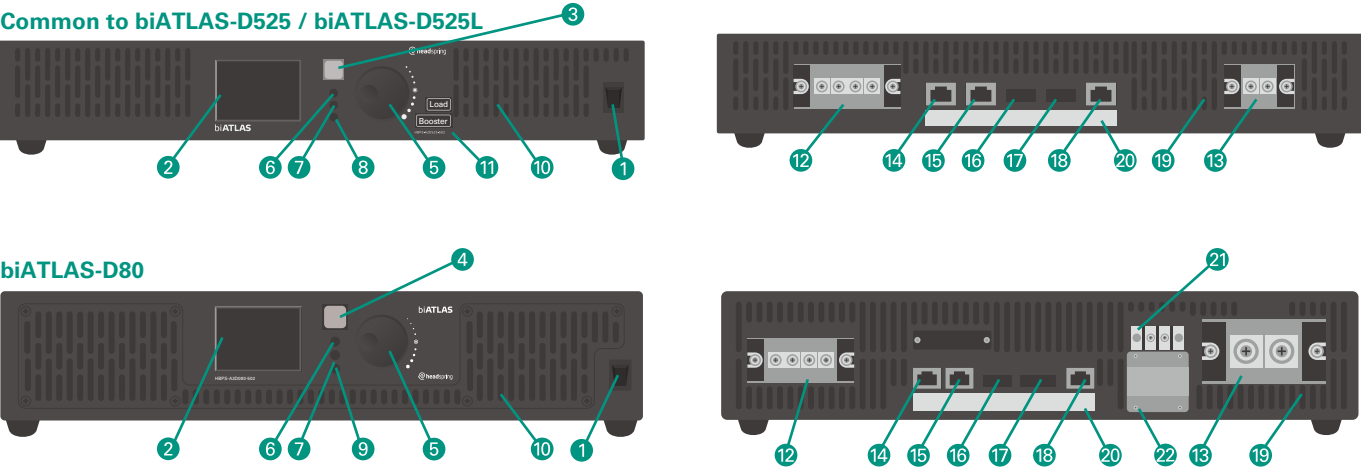
CP Mode Constant Power Mode
Make voltage and current change at a constant power

CR Mode Constant Resistance Mode
Make voltage and current change at a constant resistance



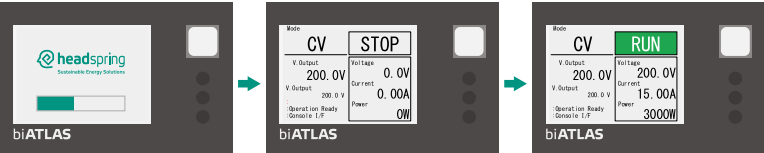
Product Specifications and Options

Controls and Connectors

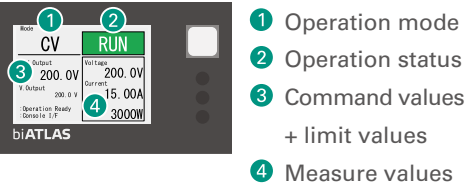


1 Main Power Switch	Switch for the main power. Press upward to ON. Press downward to OFF.
2 LCD	Diverse info is displayed.
3 Start/Stop Button	To operate start and stop.
4 Output Button	Green in operation, red in abnormal, and yellow during standby. Otherwise unlit.
5 Control Knob	Rotate to set values and select items. Clockwise for increases and counterclockwise for decreases. Press enables to set value or to determine item.
6 Mode Button	To switch CC, CV, CP and CR modes.
7 Shift Button	To switch digits when manipulating values.
8 Cancel Button	To switch setting screen. Plus, capable also to go back the screen.
9 Menu / Esc Button	
10 Air Inlet	Air inlet for fan to cool inside. Never block off these inlets.
11 Booster/Load Label	To display it in case of Booster/Load.
12 AC Input / Protective Earth Terminals	For the commercial three-phase mains and the earthing.
13 DC Output Terminals	DC output terminal block.
14 LINK IN	To be used at series-parallel operation.
15 LINK OUT	Connect bundled LAN cable or terminating resistor at series-parallel operation.
16 CAN Port	To be used to control this equipment via CAN.
17 Contact I/O Port	To be used to control this equipment by contact I/O.
18 LAN Port	To be used to control this equipment via LAN.
19 Air Exit	Air exit for fan to cool inside. Never block off these exits.
20 Rating Label	Describing the main circuit input/output specs for this equipment
21 Voltage Sensing Terminal	DC voltage detection terminal. Always connect to the DC side.
22 Maintenance Terminal	Can not be used. Never open the cover.

biATLAS-D has simple operation until start.
Pressing the switch after setting can start operation immediately.



Displayed items on the screen
narrowed down to four required at minimum.

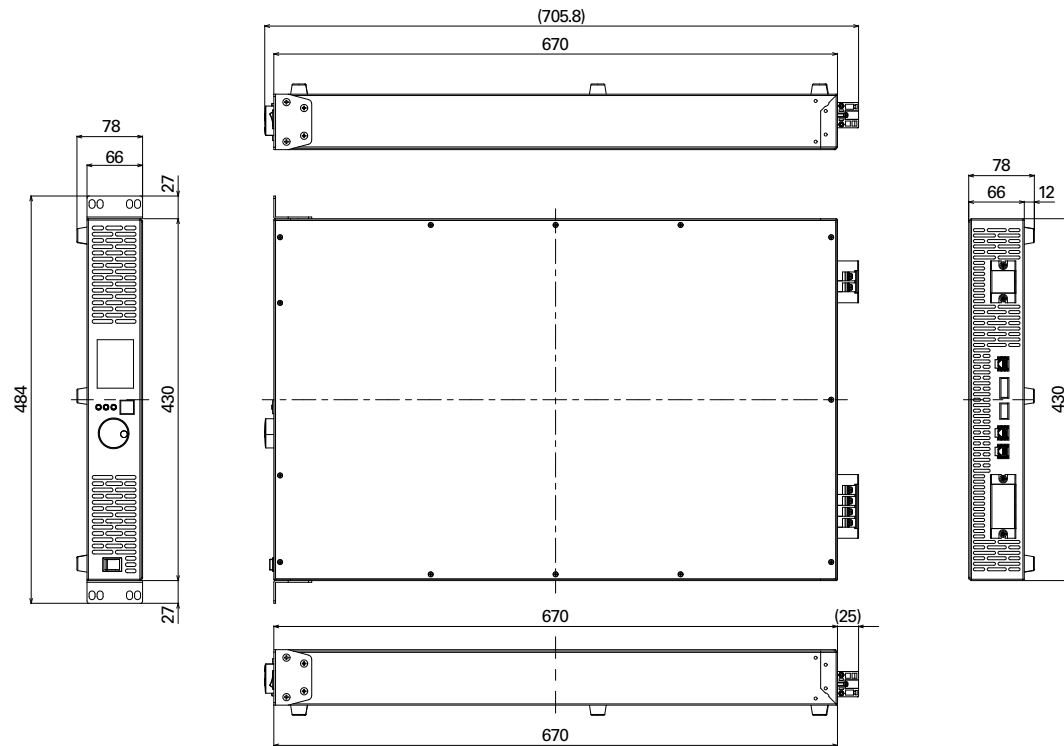


Product		biATLAS-D525		biATLAS-D525 Load		biATLAS-D80	
Rated Capacity		±5 kW (Power run and regenerate)		-5 kW (Power regenerate)		±5 kW (Power run and regenerate)	
Input/output Insulation Type		High freq transformer link					
Operation Mode		Constant voltage (CV) Constant current (CC) Constant power (CP) Constant resistance (CR)					
AC Electrical Specs	Rated Voltage	3-phase AC 200 V (3-phase 3-wire system)					
	Operation Voltage Range	3-phase AC 180–220 V					
	Rated Frequency	50 / 60Hz					
	Frequency Range	49.0~51.0Hz / 58.5~61.5Hz					
	Power Factor	0.95 or more (at Rated Power)					
	Efficiency	92%(at Rated Power)				80% (at Rated Power)	
DC Electrical Specs	Voltage Range	DC 0.00-525.00 V (CC mode) DC 2.0–525.0 V (CV and CP mode)				DC 0.00 - 80.00V	
	Current Range	±30.00 A		0 - –30.00 A		±150.0 A	
	Power Range	±5.0kW		0 - –5.0kW		±5.0kW	
	Voltage Accuracy	0.4% F.S.				0.06 %set. + 0.02 %F.S. *3	
	Current Accuracy	0.8% F.S.				0.05 %set. + 0.5 %F.S.*3	
	Power Accuracy	1.2% F.S.				0.7 %F.S.*3	
	Voltage Ripple	0.4%rms F.S.				0.175 %rms F.S. *4,5	
	Current Ripple	0.8%rms F.S.				0.55 %rms F.S. *4,5	
	Power Ripple	1.2%rms F.S.				1.4 %rms F.S.*4,5	
	Voltage Command Value Response	9msec *1				10msec *5,6	
	Current Command Value Response	5msec *2				1msec*5,7	
	Power Command Value Response	9 msec *1				10msec*5,7	
	General Specs	Weight	18kg				28kg
Size (excluding protrusions)		W430 mm D670 mm H66 mm				W430 mm D770 mm H88 mm	
19 inch rack		equiv to 1.5 U				equiv to 2 U	
Std Equipped Functions		Parallel Connection Function, Slew Rate Function, Internal Resistance Simulation Function, and Protection Function (Overvoltage, Overcurrent and Overpower) LAN Communication Function (CMD System And SCPI System)					
Optional Functions		CAN Communication Function And DIO Communication Function					
Cooling System		Forced Air Cooling					
Operating Ambient Temp Range		0 - 40 °C					
Accuracy Guaranteed Temp Range		25±5°C					
No. Capable To Connect In Series-parallel		Max 20 units (max 2 - series) (max 20 - parallel)*8				Max 20 units (max 3 - series) (max 20 - parallel)*8	

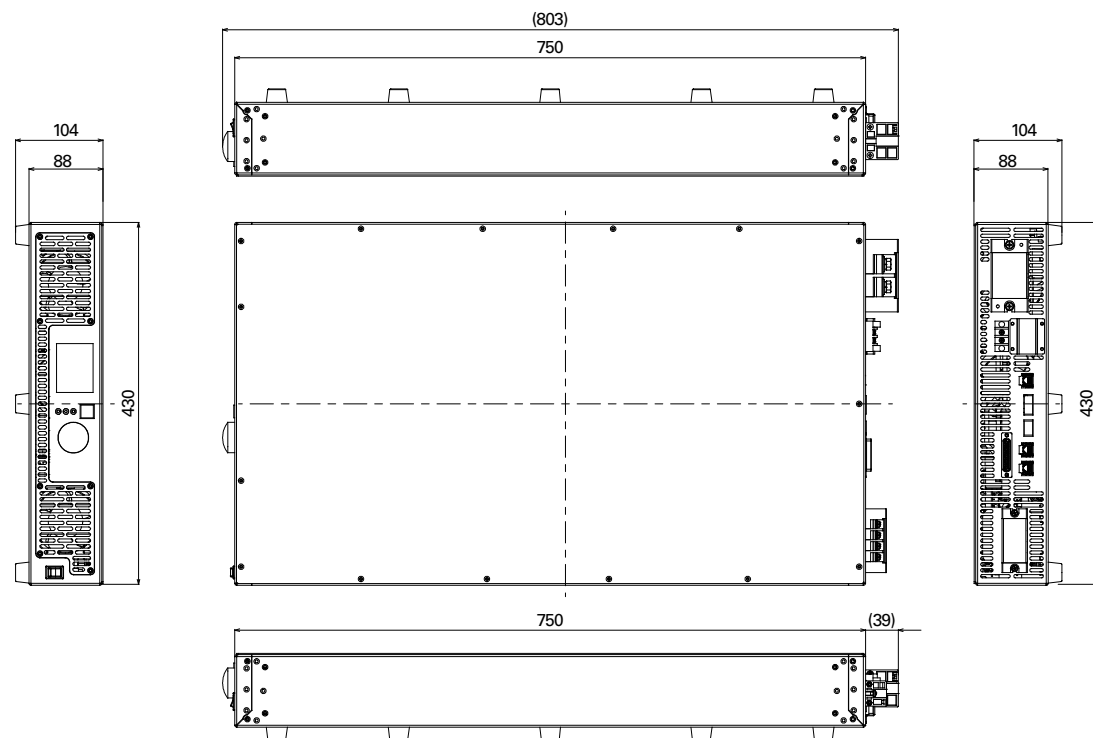
*1: Time in output voltage change by 10 → 90% with respect to the resistance load command value change by 30 → 525 V or 525 → 30 V
*2: Time in output change by 10 →90% with respect to the voltage source command value change by ±100% F.S.
*3: Within accuracy guaranteed temperature range
*4: At rated output and resistive load
*5: Wiring length 2 m or less for one side from DC output terminal to D.U.T.
*6: Time in output voltage change 10→90% with respect to the resistance load command value change by 0←→100%
*7: Time in output change by -90%→90% with respect to the voltage source command value change by ±100% F.S.
*8: Series function as an option

Dimentions

Common to biATLAS-D525 / biATLAS-D525L



biATLAS-D80



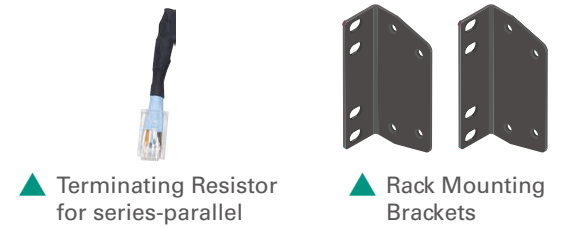
Standard Accessory

biATLAS-D525

biATLAS-D525
Load

Accessory	LAN Cable for series-parallel
	Terminating Resistor for series-parallel*
	A set of two Rack Mounting Brackets*

*Terminating resistor and rack mounting brackets can be additionally purchased as an option

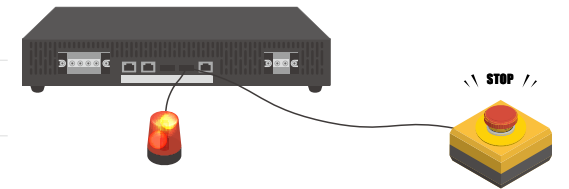


Options

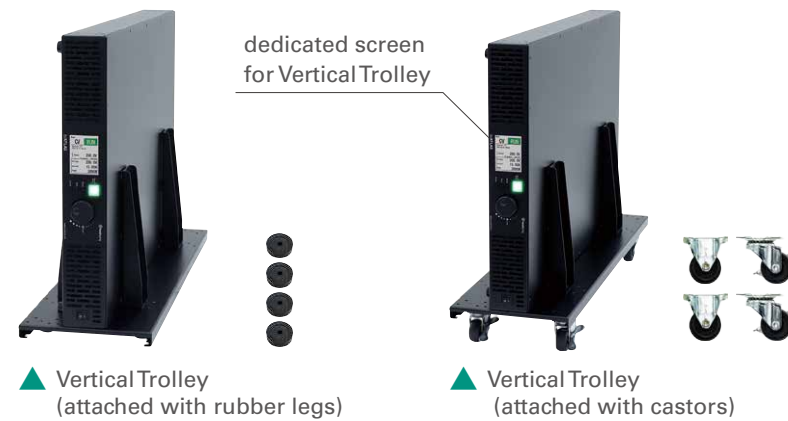
biATLAS-D525

biATLAS-D525
Load

Communication and Connection	Series Connection Function
	CAN Communication Function
	DIO Emergency Stop Function
Accessory	Vertical Trolley (For 1 To 2 Units)
	A Set Of Four Connection Fittings
	AC Bus Bar Set For Connecting 2
AC Bus Bar	AC Bus Bar Set For Connecting 3
	AC Bus Bar Set For Connecting 4
DC Bus Bar	DC Bus Bar Set For 2 In Parallel
	DC Bus Bar Set For 3 In Parallel
	DC Bus Bar Set For 4 In Parallel
	DC Bus Bar Set For 2 In Series
	DC Bus Bar Set For 2 In Series And 2 In Parallel



Example of using DIO Emergency Stop Function



biATLAS-D80

Communication and Connection	Series Connection Function
	CAN Communication Function
	DIO Emergency Stop Function
Accessory	LAN Cable for series-parallel
	Terminating Resistor for series-parallel
	A set of two Rack Mounting Brackets

Make society possible
where everyone on Earth can benefit from electricity

