



“DC-UPS” uninterruptible power supply solutions
Make Your system better over its Life Time

DC-UPS

ADELSYSTEM

Integrated Electronic Solutions

Connect

The new ADELSYSTEM platform communication ADELBus allows the connection of all the components in a simple but very powerful way. A single communication protocol based on MODbus-RTU or CANbus technology depending on the application field. It allows you to communicate with all the devices provided by ADELSYSTEM and to develop an independent system for electrical continuity. Monitoring and control of all parameters in the system, even from the other side of the world, by means of application tools and Cloud. ADELSYSTEM allows you to implement very simple but sophisticated monitoring and control for your energy system and opens your mind to new ways to approach your applications.

Everything and more !

- More efficiency for the battery thanks to continuous control over time.
- More monitoring features in the main connection modes: input , output load, battery.
- Event logging: number of battery charging cycles, charge cycles completed, aborted charge cycles, Ah charged, charging time, total number of transitions stand-by /back-up etc...
- Event Management: checking the load output, shutdown management of PCs (UPS function), RESET management of a generic equipment.
- Flexibility of usage: customization of the entire battery charging curve, battery type setting, setting boost voltage, absorption, float, etc... configuration as Batteries Charger, Enabling power supply function.

Multimediality

ADELVIEW SYSTEM

Comprehensive suite for remote monitoring and management of Adel System devices connected in an ADELBus network.

- ADELView System is a PC-based software developed to monitor in real time every important parameter of the Device. A simple and intuitive user's interface allows monitoring of battery parameters, load output, temperature sensor, mains presence and all alarm and diagnostic flags. All features are displayed on a single screen.
- ADELView app, application for tablet, you can visualize in real time data stored on your own device.
- ADELView Cloud, a suite available to all customers. Main function as Data Logger for all parameters coming from the connected devices.
- ADELView Config: interface that allows application engineers to configure the system, customize battery charging curve, set alarm thresholds, configure parameters, Demo for customers.

Everything is available in free download on the Web page.

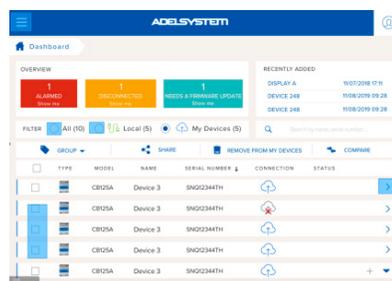
ADELVIEW GRAPHIC

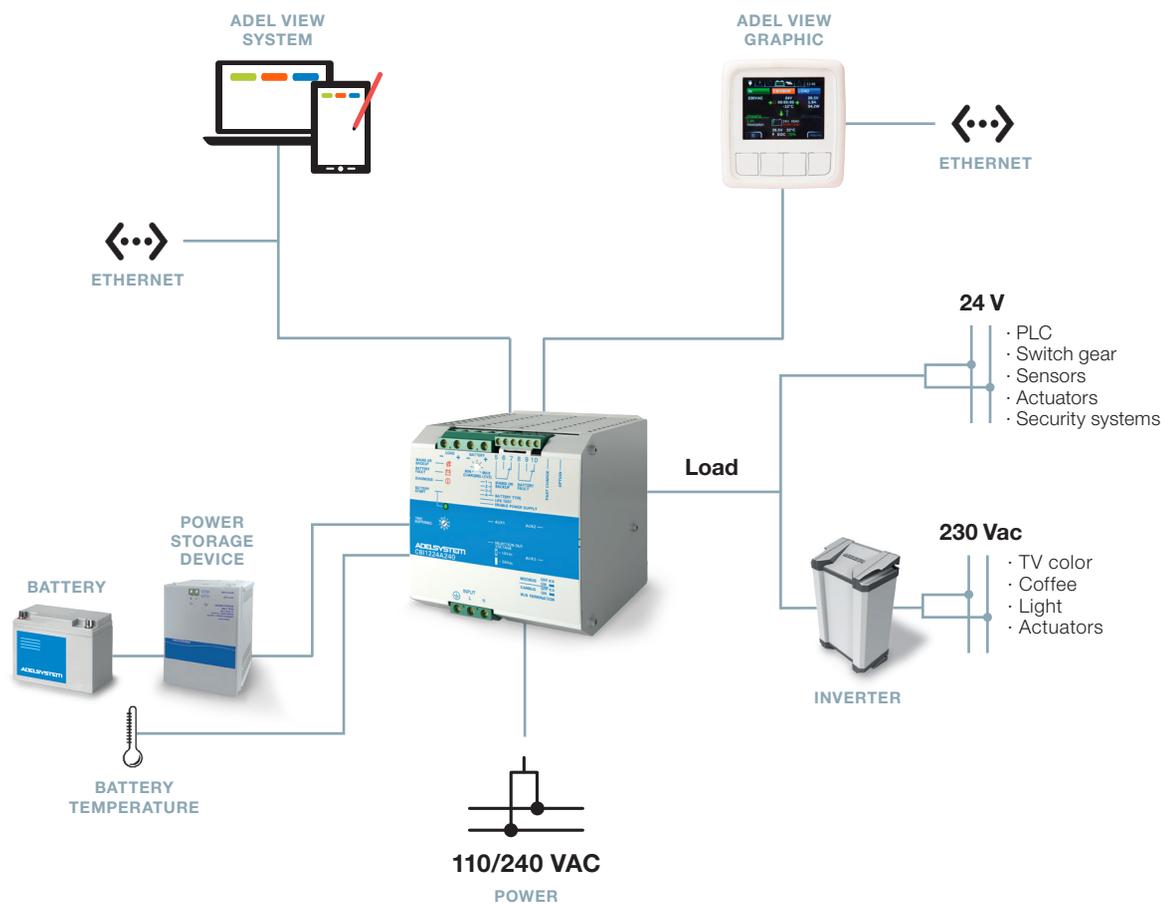
The Device is a robust multifunction display. It allows to monitor, configure and manage the Adel System's devices connected in an ADELBus network. It has a high-brightness and wide viewing-angle 3.5" TFT-LCD screen which guarantees an optimum visibility in any operating condition. The user interface is clear, intuitive and allows configuring and managing the connected devices in a quick and straightforward way. Moreover, by using the on-board Ethernet interface it is possible to remotely manages the ADELBus network through Internet with a PC or a mobile device. At the same time, the Device can act as a gateway that implements standard protocols such as Modbus TCP/IP and SNMP. From the Display you can manages all the connected devices allowing:

- Monitoring
- Configuration
- Alarms management
- Events program, i.e. programmed actions that are coordinated among the devices

BATTERY BANK

No matter how large or small the capacity of the battery storage needed in the system, ADELSYSTEM DC-UPS devices allow simple and effective integration. ADELSYSTEM has been a pioneer in the development of automatic charging and monitoring the battery. Thanks to Adel Battery Care technology every battery will be taken care of and will last longer. Continuous system monitoring and life test checking allows preventive replacement and therefore increased system reliability. For a compact and optimized integration, ADELSYSTEM supplies Batt VRLA battery modules.





TEMPERATURE COMPENSATED CHARGING

By installing the battery temperature probe “RJ Temp”, the charge voltage is automatically adapted to battery temperatures.

When the battery temperature is low, the charge voltage increases.

Conversely, when battery temperature is high, charge voltage is decreased. Over charge and gassing are thus prevented.

This will extend battery life (ADEL’s Philosophy of Battery Care).

ADELBUS

ADELSYSTEM network, interconnect all Devices in Canbus and Modbus.

ADELVIEW BAR GRAPH

“ADELView Bar Graph” is a circular LED display device for panel mount. Simple and sturdy, it displays the current charge mode, state of charge and system diagnostics at a glance.

LOAD

The DC-UPS unit mission is to always keep the load supplied. The Load Output is the source of power for the whole electric system and has been designed to perform this duty under the most critical conditions, no matter if during stand-by or back-up modes.

BATTERY

You can recharge and Test all Battery types: Open Lead Acid, Sealed Lead Acid, AGM Sealed Lead Acid, Gel, Ni/ Cd, Li-Ion. Any Size is taken in Care.

INVERTER

Among the loads there are sometime devices which requires AC power. In this case an inverter must be installed. ADELSYSTEM DC-UPSs allow connection of inverters up to 1500W.

Power continuity

DC-UPS:

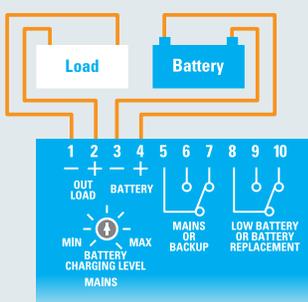
- POWER SUPPLY
- BATTERY CHARGER
- BACK UP MODULE

Double Output, Optimized Power Management

Thanks to the DC-UPS units, it will be possible to smart-manage the available power. It will be automatically allocated between load and battery. Supplying power to the load is the first priority of the unit; thus it is not necessary to double the power, and also the power available for the battery will go to the load if the load requires so.

Output Load:
12, 24, 48

Power Boost:
In x 2 Continuous
In x 3 max 4 sec.



In **Power Boost** mode the maximum current on the load output is the 2 times the rated current ($2 \times I_n$) in continuous operation and 3 times the rated current ($3 \times I_n$) for max. 4 seconds.

Output load

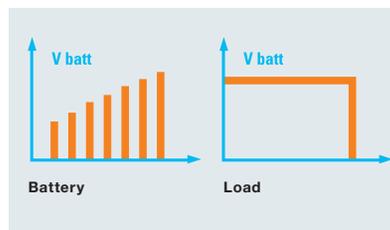
In	I_n	
2 In	I_n	I_{batt} > 4 min.
3 In	I_n	I_{batt} max. 4 sec.

SMART BATTERY MANAGEMENT

Load output will not be affected by battery conditions

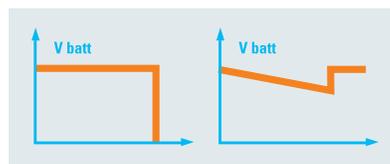
The DC-UPS ensures continuous power supply to the load even in conditions of completely discharged batteries. The automatic multi-stage operation optimizes and adapts to the battery status.

DC-UPS can recharge deeply discharged batteries even when their voltage is close to zero, thus allowing recharge and complete recovery of flat batteries.



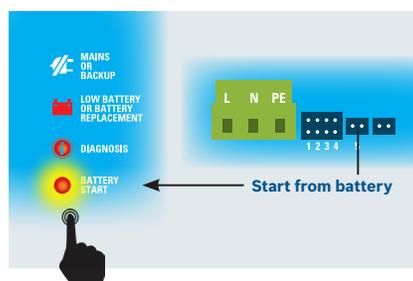
AVOID DEEP BATTERY DISCHARGE

In case of mains failure, the battery will supply the load until battery voltage reaches 1.5 Vpc (Volt per cell). Below this level the device automatically switches off to prevent deep discharge and battery damage.



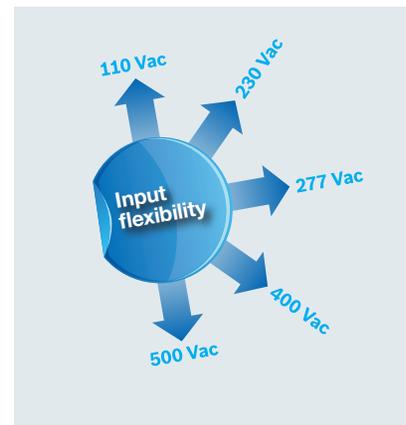
START FROM BATTERY WITHOUT MAIN

If you want to restart the system while the mains is off, a battery restart function is available, via RTCONN cable connections, or via pushbutton on the front panel.



WIDE INPUT VOLTAGE RANGE

Flexibility is given also by the wide range input voltage. The range of the devices accept input voltage 110 - 230 - 277 - 400 - 500 Vac.



TIME BUFFERING

Time buffering is enabled when in back-up mode. Buffering time setting is possible by operating the rotary switch on the front panel.



ONE DEVICE FOR OUTPUT 12 OR 24 VDC

You can select the voltage between 12 or 24 Vdc just before installing the device in your panel. (Available on Some products in the ADELSYSTEM range)

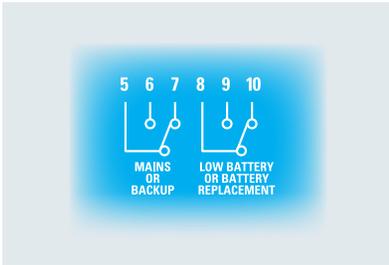
Connections & Monitoring

MONITOR SIGNALS

Clear definition of each system operation, via LED indications and Relay contact:

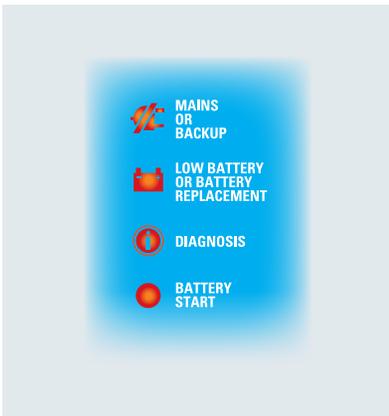
Contact Port signals. Galvanic insulated

- Main or back-up conditions
- Battery or system fault
- Flat battery



Display Signals by LED

- Input Main On Off
- Battery Fault
- Low battery (capacity less than 30%)
- Type of Battery charge mode
- Help through “blinking code”

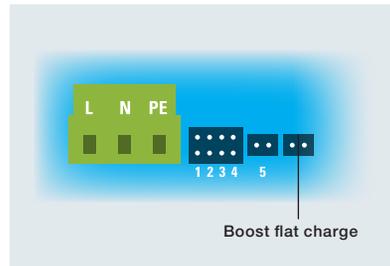


DRIVER COMMAND

Remote link for selection of trickle/boost charging

Via RTCONN remote connections cable it is possible to drive the devices from Trickle to Bulk.

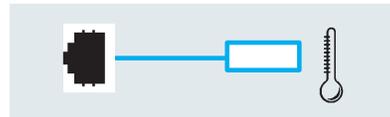
It is also possible to permanently put a jumper for Boost - Bulk Charging.



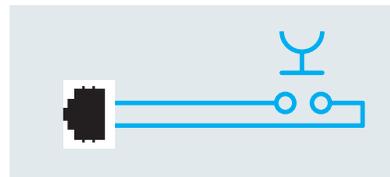
ACCESSORIES

All DC-UPS units can be made available with the following options by Rj45 or Rj11 connector:

Temperature sensor Probe, for ambient temperature compensation charging.

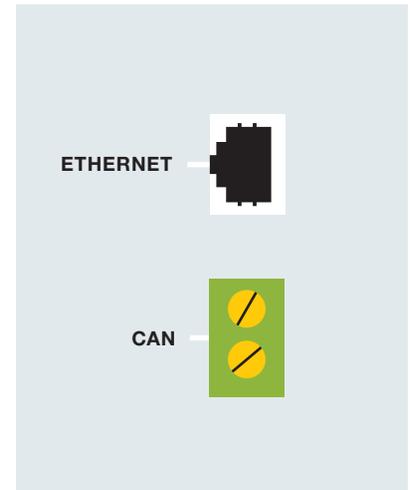


Battery Start UP cable



AUXILIARY OUTPUT “AUX 2 AND AUX 3”

Auxiliary Input-Output gateway ADELBus. Interconnect all Devices in Canbus and Modbus and Ethernet. Standard protocols for Ethernet connection such as Modbus TCP/IP and SNMP.



Battery Care

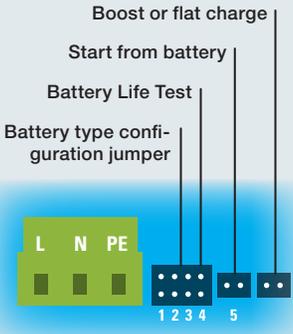
All devices are completely automatic and can charge any kind of battery using factory pre-set charging curve suitable to the most common accumulator technologies: open lead acid, sealed lead acid, lead gel, Ni-Cd, Li-Ion. These devices are very flexible and can be customized to meet the needs of the user and the application requirements. After the first applications, it is possible to carry out functional SW updates just by using ADELView System or ADELView Graphic. Doing so, your system can always be updated to charging requirement. The Battery Care concept is based on algorithms that assist to implement rapid and automatic charging curve and detect battery and system failure, during the time. Battery faults such as battery sulphated, element in short circuit, accidental reverse battery connection, can be easily detected, identified and removed. The DC UPS Series meet the highest standards of quality and insure high reliability, with MTBF values up to 300.000 hours.

ONE DEVICE FOR ALL BATTERY TYPES

All devices are suitable to charge most batteries types thanks to user selectable charging curves, they can charge open lead acid, sealed lead acid, Gel, Ni-Cd, Ni-MH, Li Ion batteries. It is possible to change or add other charging curves by connecting the device to a portable PC. Charging mode is then completely automated.

JUMPER POSITIONS

	Open Lead Acid: Trickle 2.23V Boost 2.40V (factory preset)
	Sealed Lead Acid (1): Trickle 2.25 Boost 2.40V
	AGM Sealed Lead Acid (2): Trickle 2.27 Boost 2.40V
	Gel: Trickle 2.30V Boost 2.40V Ni/Cd Li-Ion



Boost or flat charge

Start from battery

Battery Life Test

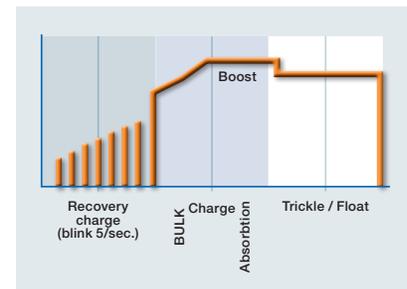
Battery type configuration jumper

Boost or float charge.

MULTI-STAGE CHARGING FOUR CHARGING MODES

Automatic multi-stage operation and real time diagnostic allow fast recharge and recovery of deeply discharged batteries, adding value and reliability to the system hosting the DC-UPS device. The type of charging is Voltages stabilized and Current stabilized IUoU. CBI battery chargers feature four charging modes, identified by a flashing code in a LED.

- Recovery able to recharge batteries even when their voltage is close to zero
- Boost - Bulk
- Absorption
- Trickle - Float



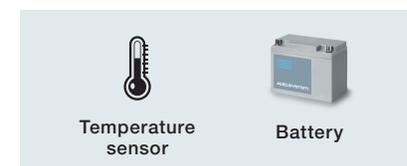
ADJUSTABLE MAXIMUM BATTERY CHARGING CURRENT

The maximum battery charging current can be set from 10% to 100% of the device rated value.



TEMPERATURE COMPENSATION

In special application like fire fighting equipment, you can recharge the battery also with the temperature compensation charging function, for the best condition of your battery in the temperature fluctuation.



General Data

DIAGNOSIS FOR BATTERY AND DEVICE

All CBI devices support the user during installation and operation. A LED flashing sequence code allows to discriminate among various possible faults.

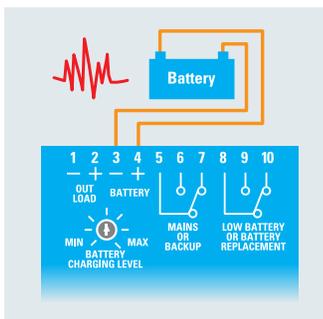
Error conditions, LED Fault ON and LED Diagnosis flashing with sequence of:

- 1 flash = Reverse polarity, wrong battery voltage
- 2 flashes= Disconnected battery
- 3 flashes = Battery element in short circuit
- 4 flashes = Overload
- 5 flashes = Battery to be replaced (Internal impedance Bad or Bad battery wire connection)



BATTERY LIFE TEST

It guarantees battery reliability in time by continuously testing the internal impedance. It avoids any possible risk of damages and grants also a permanent, reliable and safe connection of the battery to the power supply. The system, through a battery stimulation circuit with algorithms of evaluation of the detected parameter, is able to recognize sulphated batteries or batteries with a short-circuited cell.



DIAGNOSTIC CHECKS "DURING FUNCTIONAL TIME"

Accidental disconnection cables DC-UPS detects accidental disconnection and immediately switches off output power.

Battery not connected

If the battery is not connected the battery output is disabled.

Wire testing connection impedance

During trickle charge the resistance on the battery connection is checked every 20 sec. This to detect if the cable connection has been properly made.

Battery in Open Circuit or Sulphated

Every Two hours DC-UPS tests of internal impedance, while in trickle charging mode.

Reverse Polarity

If the battery is connected with inverted polarity, DC-UPS is automatically protected.

Battery voltage connections

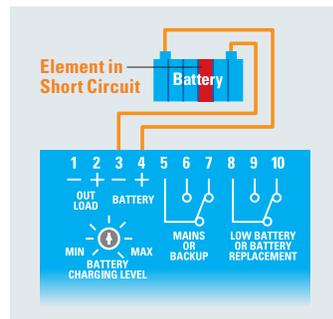
Appropriate voltage check, to prevent connection of wrong battery types.

End of Charge

When the battery is completely full, the device automatically switches to trickle charging mode.

Battery Cells in short circuit

Thanks to specific testing algorithms, the DC-UPS recognize batteries with cells in internal short circuit.



MAXIMUM SAFETY AND PROTECTION

The DC-UPS series is designed to provide safe operation and long power supply and battery life. The following protections are standard features

- Outputs protected against short circuit and overload
- Outputs in conformity to SELV and PELV conditions
- High insulation between primary and secondary
- Protection against deep battery discharge
- Protection against reverse polarity connection
- Detection of batteries with wrong rated voltage

All protections have automatic reset. No thermal fuse to be replaced.

ROBUST CONSTRUCTION AND EASY INSTALLATION

All the units in the range have aluminium casing, DIN rail fastening clip and are light and compact. IP20 protection degree.

NORMS

In Conformity to: IEC/EN 60335-2-29 Battery chargers; EN60950 / UL1950; Electrical safety EN54-4 Fire Detection and fire alarm systems; EMC Directive; DIN41773 (Charging cycle).

TECHNOLOGY

The DC-UPS range is based on Four strategic know-how elements

Switching technology

ADELSYSTEM has a 25 year experience in design of advanced stabilized switching technology power supplies. A power supply/battery charger unit based on this technology is much more efficient.

Back UP Module and Battery Care

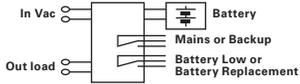
Unlike most other state-of-the-art battery chargers, the DC-UPS series is equipped with complex algorithms which controls the charging process and enable several monitoring functions. The firmware implements the extended Adel battery care know-how, result of many years of experience in this field.

Power Management

Power Sharing on Load Output side. Inside the device, manage automatically power to and from the battery, power from internal power supply. Over Load and Short circuit depend on the state of the device, the aim is to maintain the best power the Load, by a complex algorithm.



DC-Ups



Input (Volt) 115-230-277 Vac
 Frequency 47-63 Hz

12-24 Vdc	12 Vdc
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MODEL	CBI2801224A	CBI123A	CBI6012A	CBI126A	CBI1210A	CBI1235A	
OUTPUT	12/24Vdc 15/10A 280W	12Vdc 3A 36W	12Vdc 5A 60W	12Vdc 6A 72W	12Vdc 10A 120W	12Vdc 35A 420W	
OUTPUT DATA	Output Vdc / IN	12Vdc 15A 24Vdc 10A	12Vdc - 3A	12Vdc - 5A	12Vdc - 6A	12Vdc - 10A	12Vdc - 35A
	Efficiency (50% of In)	> 91%	≥ 90%	> 90%	≥ 90%	≥ 90%	> 91%
LOAD OUTPUT	Output voltage (at at In) Vdc	10 - 14.4Vdc (15.5Vdc Ni-Cd) 22 - 28.8Vdc (31Vdc for Ni-Cd)	10 - 14.4Vdc (15Vdc Ni-Cd)				
	Continuous current (without battery) Iload = In	15A 12Vdc 10A 24Vdc	3A	5A	6A	10A	35A
	Max continuous current (with battery) Iload = In + Ibatt	30A 12Vdc 20A 24Vdc	6A	10A	12A	20A	70A
	Max current Output Load: (Main Input) Iload (4sec.)	max. 45A 12Vdc 30A 24Vdc	9A max	15A	18A max	30A max	105A max
	Max current Output Load: (Back Up) Iload (4sec.)	max. 30A 12Vdc 20A 24Vdc	6A max	10A	12A max	20A max	70A max
	Start from Battery only, without main	✓	✓	✓	✓	✓	✓
	Time Buffering	✓	✓ ²	✓	✓ ²	✓ ²	✓
BATTERY OUTPUT	Fast Charge - Boost Charge	14.4Vdc / 28.8Vdc (2.4V/Cell)	14.4Vdc (2.4V/Cell); Nicd 1.5V/cell				
	Max. Time Boost/Fast charge (Typ. at IN)	15h	15h	15h	15h	15h	15h
	Max. Time Bulk charge (Typ. at IN)	15h	15h	15h	15h	15h	15h
	Trickle Charge: Depend on Battery type (V cell)						2.23 V/cell Open Lead, 2.25 V/cell Sealed
	Recovery Charge	2-10V / 2-20V	2-9V	2-9V	2-9V	2-9V	2-9V
	Charging Current Limiting IN (Iadj)	10 ÷ 100% / Ibatt	20 ÷ 100% / Ibatt	20 ÷ 100% / Ibatt	20 ÷ 100% / Ibatt	20 ÷ 100% / Ibatt	10 ÷ 100% / Ibatt
Remote Input Control (AMP Type connector)	Bulk / Trickle	Bulk / Trickle	Bulk / Trickle	Bulk / Trickle	Bulk / Trickle	Bulk / Trickle	
Charging Curve							
SIGNAL OUTPUT (RELAY)	Main or Backup Power	✓	✓	✓	✓	✓	✓
	Low Battery / Device Fault	✓	✓	✓	✓	✓	✓
AUXILIARY OUTPUT	UPS Enabling	✓	✗	✓	✗	✗	✗
	Communication Protocol	Modbus RTU	✗	Ethernet / Can	✗	✗	Modbus RTU
CLIMATIC DATA	Ambient Temperature operation						
	De rating T° > (In)						
	Ambient Temperature Storage						
	Humidity at 25 °C						
Cooling							
GENERAL DATA	Isolation Voltage (IN / OUT)	3000Vac	3000Vac	3000Vac	3000Vac	3000Vac	3000Vac
	Isolation Voltage (IN / PE)	1605Vac	1605Vac	1605Vac	1605Vac	1605Vac	1605Vac
	Isolation Voltage (OUT / PE)	500Vac	500Vac	500Vac	500Vac	500Vac	500Vac
	Protection Class (EN/IEC 60529)	IP 20	IP 20	IP 20	IP 20	IP 20	IP 20
	Reliability (MTBF IEC 61709)	> 300 000 h	> 300 000 h	> 300 000 h	> 300 000 h	> 300 000 h	> 300 000 h
	Dimension (w-h-d)	110x115x135	65x115x135	70x91x57	65x115x135	65x115x135	150x115x135
	Safety Standard Approval	CE	CE UL60950 ³	CE	CE UL60950 ³	CE UL60950 ³	CE
OPTIONAL	Power View Bargraph	✓		✓			✓
	ADEL View Graphic (Display 3.5")	✓		✓			✓
	ADEL View System (Sw for PC; Cloud)	✓	✓	✓	✓	✓	✓
	Battery temp. compensation Probe RJTemp; 2 m length	✓	✓	✓	✓	✓	✓

(1) Options to be defined by Order/S (ex: CBIXXA/S), Push Button not available

(2) Yes if required by order /TB1/TB2/TB3..

(3) US

24 Vdc

48 Vdc



CBI6024A

CBI243A

CBI245A

CBI2410A

CBI2420A

CBI485A

CBI4810A

24Vdc
2.5A
60W

24Vdc
3A
72W

24Vdc
5A
120W

24Vdc
10A
240W

24Vdc
20A
500W

48Vdc
5A
240W

48Vdc
10A
500W

24Vdc - 2.5A

24Vdc - 3A

24Vdc - 5A

24Vdc - 10A

24Vdc - 20A

48Vdc - 5A

48Vdc - 10A

> 90%

≥ 90%

≥ 90%

≥ 83%

> 91%

≥ 83%

> 90%

22 - 28.8Vdc (30Vdc Ni-Cd)

44 - 57.6Vdc (60Vdc Ni-Cd)

2,5A

3A

5A

10A

20A

5A

10A

5A

6A

10A

20A

40A

10A

20A

7.5A max

9A max

15A max

30A max

60A max

15A max

30A max

5A max

6A max

10A max

20A max

40A max

10A max

20A max

✓

✓

✓

✓¹

✓

✓¹

✓

✓

✓²

✓²

✓²

✓

✓²

✓

28.8Vdc (2.4V/Cell); Nicd 1.5V/cell

57.6Vdc (2.4V/Cell); Nicd 1.5V/cell

15h

d Lead, 2.27 V/cell Sealed Lead, 2.3 V/cell gel; NiCd 1.5V/cell (10 elem.) trickle (Imax 10%)

2-24V

2-24V

2-24V

2-24V

2-24V

2-24V

2-24V

20 ÷ 100% / Ibatt

10 ÷ 100% / Ibatt

20 ÷ 100% / Ibatt

10 ÷ 100% / Ibatt

Bulk / Trickle

IUoU, Automatic, 4 stage

✓

✓

✓

✓

✓

✓

✓

✓

✓

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✓

✓

✓

✓

✓

✗

✗

✗

✗

✗

✗

Ethernet / Can

✗

✗

✗

Modbus RTU

✗

Modbus RTU

-25 ÷ +70°C

> 50° -2.5%(In) / °C

-40 ÷ +85°C

95% to 25°C

Auto Convection

3000Vac

3000Vac

3000Vac

3000Vac

3000Vac

3000Vac

3000Vac

1605Vac

1605Vac

1605Vac

1605Vac

1605Vac

1605Vac

1605Vac

500Vac

500Vac

500Vac

500Vac

500Vac

500Vac

500Vac

IP 20

> 300 000 h

70x91x57

65x115x135

65x115x135

100x115x135

150x115x135

100x115x135

150x115x135

CE

CE UL60950³

CE UL60950³

CE

CE

CE

CE

✓

✓

✓

✓

✓

✓

✓

✓

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✓

✓

✓

Optional for auxiliary Output: Temp Charging probe 1m or 3m lenght. Remote monitoring Display. Modbus/Can Bus Cable. Paralleling Cable.

Battery modules

VRLA

They are traditional and Rugged Battery Module for DC UPS range. They are composed maintenance-free lead-acid VRLA batteries with serial fuse. Simple connection with screws. Size: 1.2 Ah, 3 Ah, 7.2 Ah and 12 Ah. Battery Modules: 2 x 12 Vdc.

12 Vdc 24 Vdc



Model	BATT 123 12V - 3.2Ah	BATT 127 12V - 7.2Ah	BATT 1.2 Ah 24V - 1.2Ah	BATT 3 Ah 24V - 3.2Ah	BATT 7.2 Ah 24V - 7.2Ah	BATT 12 Ah 24V - 12Ah	
Output							
FEATURE	End-of-charge voltage (trickle charge)						27.5 Vdc (20°C) ; 27 Vdc (30°C); 26.5 Vdc (40°C)
	Max. permissible charging current	0.80 A	1.70 A	0.30 A	0.80 A	1.70 A	3 A
	Short-circuit protection	■	■	■	■	■	■
	Protection fuse	25 A	25 A	25 A	25 A	25 A	25 A
	Ambient temperature (operation)	+5 ÷ +40 °C	+5 ÷ +40 °C	+5 ÷ +40 °C	+5 ÷ +40 °C	+5 ÷ +40 °C	+5 ÷ +40 °C
	Ambient temperature (storage)	-20 ÷ +50 °C	-20 ÷ +50 °C	-20 ÷ +50 °C	-20 ÷ +50 °C	-20 ÷ +50 °C	-20 ÷ +50 °C
	Self-discharge rate	20 °C 15% per month					
GENERIC DATA	Dimension (w-h-d)	105 x 175 x 90	105 x 175x120	170 x 100 x 80	170 x 140 x 90	170 x 155x120	235 x 155x120
	Weight	0.7 Kg approx	1.1 Kg approx	1.55Kg approx	3 Kg approx	5.5 Kg approx	9 Kg
	Protection class	IP20	IP20	IP20	IP20	IP20	IP20
	Assembly using 4 holes	For hanging onto M4 screws					

Small VRLA

Compact and fully enclosed improve safety and maintenance, transmit information on the temperature and type of batteries. They save space and improve the efficiency of the DC UPS "All In One".. Size for 24 Vdc: 1.2 Ah, 3 Ah, 7.2 Ah and 12 Ah.

24 Vdc

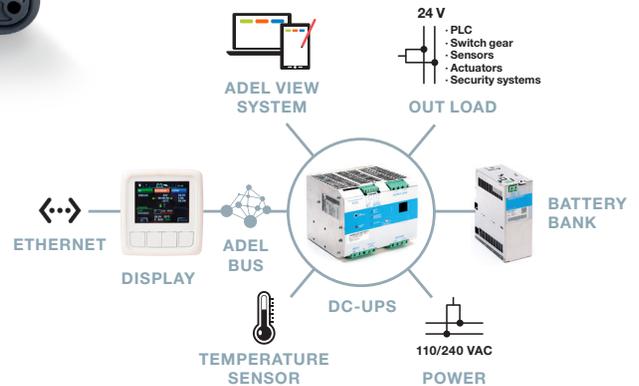


Model	BAT1.2 VRLA 24V - 1.2Ah	BAT3.4 VRLA 24V - 3.2Ah	BAT7.2 VRLA 24V - 7.2Ah	BAT12 VRLA 24V - 12Ah	
Output					
INPUT DATA	End-of-charge voltage (trickle charge)				27.5 Vdc (20°C) ; 27 Vdc (30°C); 26.5 Vdc (40°C)
	Max. permissible charging current	0.30 A	0.80 A	1.70 A	3 A
	Short-circuit protection	✓	✓	✓	✓
OUTPUT DATA	Protection fuse	25 A	25 A	25 A	25 A
	Output current	max. 25 A	max. 25 A	max. 25 A	max. 25 A
GENERIC DATA	Mounting position	DIN Rail / Wall Mount	DIN Rail / Wall Mount	DIN Rail / Wall Mount	Wall Mount
	Assembly using 4 holes	for hanging onto M4 screws			
	Ambient temperature (operation)	0 ÷ +40 °C	0 ÷ +40 °C	0 ÷ +40 °C	0 ÷ +40 °C
	Ambient temperature (storage)	-20 ÷ +50 °C	-20 ÷ +50 °C	-20 ÷ +50 °C	-20 ÷ +50 °C
	Self-discharge rate	20 °C 15% per month			
	Dimension (w-h-d)	62 x 175 x 120	82 x 200 x 160	145 x 210 x 130	210 x 210x210
Weight	1.5 Kg approx	3 Kg approx	5.5 Kg approx	9 Kg	
Protection class	IP20	IP20	IP20	IP20	

Battery type	1.2 Ah	3.2 Ah	7.2 Ah	12 Ah
Load 1.5 A	20	60	200	400
Load 3 A	8	30	120	240
Load 5 A	3	15	55	100
Load 7.5 A	2	10	30	60

Battery type	1.2 Ah	3.2 Ah	7.2 Ah	12 Ah
Load 10 A	-	7	20	45
Load 12 A	-	3	12	30
Load 15 A	-	-	9	20
Load 20 A	-	-	7	13

Adel View Graphic



The DPY351 is a robust and versatile multifunction display that allows monitoring, configuring and managing the Adel System devices connected in an ADELBus network. It is equipped with a high-brightness and wide viewing-angle 3.5" TFT screen which guarantees an optimum visibility in any operating condition. The user interface is clear, intuitive and allows configuring and managing the connected devices in a quick and straightforward way. Moreover, using the on-board Ethernet interface it is possible to remotely manage the ADELBus network through Internet with a PC or a mobile device. At the same time, the DPY351 can act as a gateway that implements standard protocols such as Modbus TCP/IP and SNMP.

WHAT DOES IT DO?

From ADELBus network (Adel System network) manages all the connected devices allowing:

Monitoring

- Event logging: number of battery charging cycles, charge cycles completed, aborted charge cycles, Ah charged, charging time, total number of transitions stand-by /back-up etc.
- Status of Charging Battery

Configuration

- Charging curve,
- Battery type,
- Limitation charging Current
- Enabling power supply function.
- Timer...

Alarms and Recorder management

- Setting Alarm threshold
- Receive Message from other devices
- Event Record

Events program, i.e. programmed actions

- Coordinated action among devices
- Program Event to other device to change the type of charging curve
- Checking the load output, shutdown management Reset.

PRODUCT RANGE



DC UPS "ALL IN ONE"
DC UPS "All In One" DC Power Back Up units. Multi-function devices: power supply, battery charger and back-up module in the same casing together with Adel Battery Care software.



FLEX
DIN rail Switching Power Supplies. Very compact in size, 150% power boost, wide input voltage range 110 - 230 - 400 - 500 Vac. Selectable output protection mode.



D-FLEX
High efficiency Power Supply in Mini Size Dimension, for all kind of small power request in a flat control panel. For Domestic, Domestic and Industrial field.



CB
The Best generation of Battery Charger with 4 level of charge, Auto Diagnosis system inside. One product for all battery types.



**POWER SUPPLY
LOW INPUT VOLTAGE**
Switching power supply for direct connection to secondary transformer. In 24 Vac. Out 12 - 24 - 48 Vdc Watt: 25 - 460.



DC/DC CONVERTER
Dc / Dc Converter, step Up and Step down. Input - Output isolated, low voltage. With or without DIN Rail.



INTERFACES
Wide range of passive interfaces units for Input and Output connections, for PLC and CNC machine.



BATTERY BANK
Power Storage Devices, for connection to DC Ups Products. Battery size: 1.2; 3; 7,2; 12 Ah, 24 Vdc.



AUXILIARY MODULE
Decoupling Modules for redundancy applications. Electronic Fuses for Over Load output control, up to 4 channel.



SFP SAFETY POWER
Power continuity solutions for alarm systems and fire alarms. Available as a fully enclosed device conforming with EN54.4 or as a component to be integrated in other instrumentation.



POWER VIEW GRAPHIC
Robust Display wide viewing-angle 3.5" TFT. ADELSys network. Gateway for Ethernet in Modbus TCP and SNMP.



ADEL VIEW SYSTEM
Suite for remote monitoring and management devices connected in an ADELSys network. Features: PC software; iOS and Android; Cloud platform; Advanced features for installation and demonstration purposes.

INNOVATION AND MULTIMEDIAILITY

ADELSYSTEM continues to implement its offering of innovative and functional products as a company specializing in the electrical continuity for the DIN Rail field. The wide range of available products is now involved in the Interconnection field through the ADELSys protocol implemented in the main devices of our products range. Every new device developed

comes with ADELSys inside. The Power Continuity products ADELSys are enhanced by Multimedia devices like Display and Software Applications for the new way towards Industry 4.0. These, are innovative solutions has been developed by the ADELSYSTEM R&D team for the expert electrical designer and the user who need to change their

point of view in the search of innovation. ADELSys, the ADELViewsystem and the ADELViewgraphic are the connecting elements to DC Ups, Power Supply and Battery Charger for catching all of the parameters inside the device. All of this, to involve you into a new evolution of Actions both for today and next-future life.

ADELSYSTEM

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