

Battery External Load Unit **BXL – A**

- Lightweight – only 12,5 kg (26 lbs)
- Instrument max discharge power – up to 25,4 kW
- Voltage measurement range: 5 V - 300 V DC
- Measurement resolution – current 1 A, voltage 1 V
- Discharge current – up to 250 A
- Discharge process controlled by BLU device
- Connected directly to the battery



Description

BXL-A is a Battery Extra Load Unit designed for use together with Battery Load Unit BLU series as an additional load when higher discharge current is required.

Based on a state-of-the-art technology, using the most advanced power electronics solutions with fans integrated into the device, BXL-A provides discharge current with values up to 320 A, for 6 – 300 V battery

systems. BXL-A units can be connected directly to the batteries. For the connection between several BXL - A units and the BLU unit, the daisy chain set up is used.

Overview of maximal currents for several battery voltage ranges is shown in the table below.

Battery voltage	6 V		12 V		24 V		48 V		60 V		110/120 V		220/240 V	
Min-Max voltage (V)	5,40	7,05	10,8	14,1	21,6	28,2	43,2	56,4	54,0	70,5	99,0	141,0	198,0	282,0
Maximum current at 2,35 V per cell	80 A		160 A		250 A		250 A		110 A		180 A		90 A	

Application

The list of the instrument application includes:

- Efficient supplement to Battery Load Unit series during large battery discharge testing

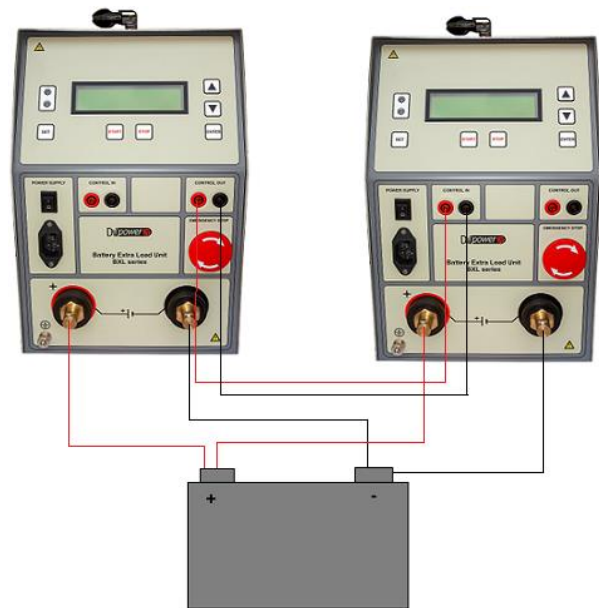
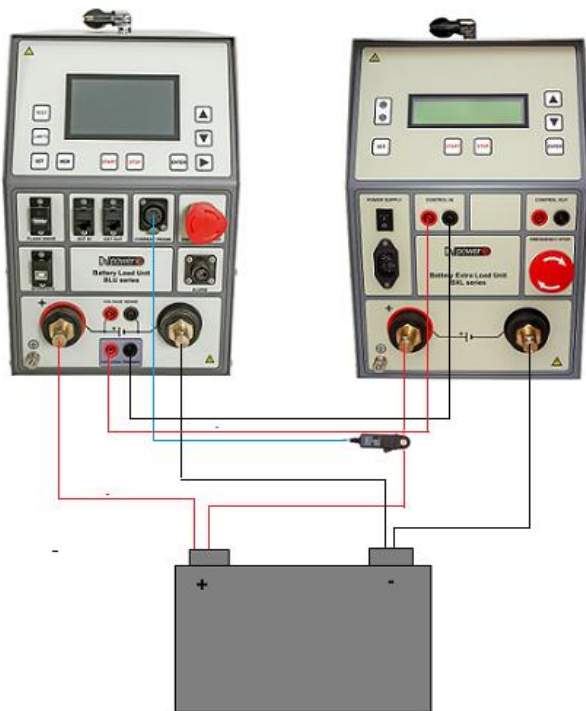
- Parallel mode operation of multiple BXL-A units enabled
- Triggering function enabled in parallel mode operation with **BLU** series of devices or multiple BXL – A devices, via Control IN/OUT channels

Connection to Test Object

Multiple BXL-A devices can be connected in parallel with an additional feature for triggering the discharge process. Current clamps needs to be used in order to measure current drawn from the battery by BXL. According to current value measured by current clamps BLU regulates discharge process. Connection with a BLU device, is established with the EXT LOAD TRIGGER channel on the BLU instrument (as show in figure below), and

thereby the discharge process of BXL-A is followed by the discharge in the main BLU unit.

In case of multiple BXL-A devices connection, channels CONTROL OUT/IN are used. A parallel connection scheme for two BXL-A units is shown in figure below.



Technical Data

Mains Power Supply

- Input voltage 90 – 264 V AC
50/60 Hz
- Power consumption 200 VA
- Fuse 2 A / 250 V, type F

Measurement

	Measuring range:	Resolution:
Voltage	5-300 V DC	1 V
Internal current	0-250 A DC	1 A

- Typical accuracy:

Voltage: 0,5% rdg + 0,5 V

Current: 0,5% rdg + 0,5 A

Display

- LCD screen 16 characters by 2 lines, LCD display with backlight, visible in bright sunlight

Environment conditions

- Temperature:
-10 °C - +45 °C / 14 °F - +113 °F

- Maximum relative humidity 95 % for temperatures up to 31 °C, decreasing linearly to 40 % relative humidity at 55 °C

Dimensions and Weight

- Dimensions (L x W x D):
560 mm x 221 mm x 355 mm
22 in x 9 in x 14 in
- Weight: 12,5 kg / 26 lbs

Warranty

- Three years

Applicable Standards

- Installation/overvoltage: category II
- Pollution: degree 2
- Safety: LVD 2006/95/EC (CE Confirm)
EN61010-1
- EMC: Directive 2004/108/EC (CE Confirm)
Standard EN 61326-1:2006
- CAN/CSA-C22.2 No. 61010-1, 2nd edition, including Amendment1

All specifications herein are valid at ambient temperature of + 25 °C and recommended accessories. Specifications are subject to change without notice.



Current cables



Extension cable



Transport case

Order Info

Instrument with included accessories	Article No
Battery External Load Unit BXL-A	BXL400X-N-00
Transport case	
Mains power cable	
Ground (PE) cable	

Recommended	Article No
Cable bag	CABLE-BAG-00
Current cables 2 x 3 m 35 mm ² (9.8 ft, 2 AWG) with alligator clamps (A4) isolated	C2-03-35VA3I
Cable set 2 x 2 m (6.5 ft) for parallel operation	PO-02-00BPBP

Optional	Article No
Extension cables 2 x 5 m (16.4 ft, 2 AWG) 35 mm ²	E2-05-35VA3I
Cable set 2 x 5 m for (16.4 ft) parallel operation	PO-05-00BPBP