

# **SLB-Series**

# **Frequently Asked Questions**

# What is the importance of load testing?

Load testing is the only verifiable method to determine the actual capacity of your battery strings

# What is the benefit of DAC monitoring?

As important as string load testing is, without individual cell monitoring you can't identify why your string failed. DAC are vital to load testing because they capture each cell's performance from beginning to end. This enables us to target weak cells for replacement. By replacing only weak cells we ensure a healthy string that remains in service longer. DACs also save money by allowing technicians to perform other duties instead of taking cell measurements every 15 minutes. This prevents user error, increases productivity, and gives us quality measurement data to make decisions

# How do the DACs function?

DACs are connected to the positive terminals of each cell by robust alligator clips. The clips connect to wiring harnesses which power the DACs. The DAC then wirelessly transfer the data to the SLB unit

## What is the power requirement of the DAC and how much current do they draw?

DAC get their power from the batteries they are connected to. They require a minimum of 8V and use 30mA for operation

## Does the SLB-Series come with software?

Each SLB comes standard with dataview software. This software allows us to live monitor, view test data, and export reports to Microsoft Excel

## What if I do not have access to a PC while testing?

No problem! All cells and information can be viewed on the LCD screen of any SLB. Test data can be exported via USB flash drive then to PC for report creation

## Are DAC compatible with any SLB?

Yes! DACs work with every SLB model

#### What is the life expectancy of the DAC?

Similar to all electronics life expectancy varies based on use and abuse. Our average lifespan for DAC is 5+ years!

## Can DAC packages be purchased separately from my SLB?



Absolutely. Standard 48V/125V DAC kits can be bought anytime for pairing with an SLB. In addition, you can purchase extra DACs for testing on 1.2V systems

#### Is there a delay in communication from the DAC to software?

DAC data is captured in real-time and depending on distance from the tester, data is transmitted every 5-10 seconds

#### How is a discharge test stopped?

Testing can be stopped in various ways. The user is able to manually stop the test at any time. The test will auto-shutdown if any of (4) programmable parameters are met. These parameter settings are based on time, capacity, low string voltage, and low cell voltage. Each SLB is further equipped with safety features that will result in test shut down; overload circuit breakers and fused input VAC surge protection

## Could the SLB be used with a different load bank?

Yes, the SLB can be used for several supportive duties by using the optional current clamp described below

## Could the SLB be used in an online application?

Yes, although we always recommend that the SLB be used in offline applications. This is because an offline(disconnected) string prevents the impact of an active external load and protects the string from being overly discharged in the case of an outage event. This could cause system failure and catastrophic damage to the string

#### What is the power requirement for the SLB?

The exact power consumption of an SLB varies with model and discharge current, however expect the draw to be less than 9A at max current. A 15A circuit breaker is sufficient for power needs

#### What are the safety features of the SLB?

Please see 'How is a discharge test stopped?' for an overview of the safety features

#### How many tests can the SLB store?

The internal storage is 16MB. This generally will hold several tests. The exact amount will vary with different string sizes and discharge durations. We recommend transferring data to the software database after testing

#### How does the SLB communicate?

The SLB transmits data by RF at the frequency of 433M Hz

#### What is the optional current clamp used for?



The optional current clamp is used for special testing. Assistive discharge is most common. In this role the SLB is used to add supplemental current to another discharging non-SLB load bank. The SLB will measure the discharge from the external load bank and supply the necessary current to reach max discharge. In an external discharge test the SLB will act in a data logger capacity and record a discharge event. Finally, in charge monitoring the SLB acts in a data collection role to record cell voltages and float charge

#### When is the optional parallel cable used?

Parallel can be used between to SLB-Series load banks. It allows for a main unit to operate both machines to increase current output

#### How many batteries does a DAC connect to?

Depending on the battery type either 4 or 12 batteries. DACs can connect 12 1.2V, 2V, and 4V cells. 4 cells can be connected for battery types 6V & 12V.

#### How many DAC/cells could be connected to one SLB?

One SLB can connect up to 600 cells. This amounts to either 50 1.2, 2, 4V DACS or 150 6V and 12V DACS. In other words, it should work for any conceivable application!

## How large of USB do I need for data collection?

Currently the SLB supports up to 4GB USB drives.