

# RIO Box

Remote Input /  
Output



## Features & Benefits

Are bundles of cords crowding your battery testing lab? Bitrode's RIO (Remote Input / Output) Box is the solution to keeping your lab testing area organized and free of large bundles of wires. The RIO Box is an interface box that conveniently allows a single cable to exit the main Bitrode testing unit and connect to a box with output connections. This enables test sensors to be closer to the Water Baths, Temperature Chambers, Chillers, Vibration Tables, or other additional equipment in your lab without adding unnecessary tripping hazards or wasting space. The RIO Box moves temperature and cell voltage monitoring closer to the device until test (DUT).

The RIO Box also expands existing cardcage of Bitrode tester (8 card slots each).

## For Voltage, Temperature and Other Additional Testing Equipment

With each added component, such as water baths, chillers, chambers, or vibration tables, your testing will receive helpful data along with large wire bundles. The Bitrode RIO Box is designed to give you shorter wire bundles for organized voltage and temperature data collection. The RIO Controller Card plugs into the controller rack and communicates the data to your MPU via a dual port RAM. Bitrode's VisualCN™ software allows for acquisition of the collected data in the forms of assignable data channels. All data is automatically collected and stored with cycler data by the VisualCN™ software. Whether you use additional testing equipment with your Bitrode tester or not, the RIO Box will keep your lab organized and safer.

## General Specifications

- 19.5 in L x 16.5 in W x 14.5 in H
- Each RIO Box supports 8 card slots
- Can daisy chain up to 4 RIO Boxes for a total of 512 sensor connections
- Works with other Bitrode Equipment and Testers (list on back)

## Applications

- Allows for expanded card cages
- Reduces long wiring runs to your device under test
- Single RS485 Communication line to the controlling tester
- Keeps labs with added components (Water Baths, Chillers, Temperature Chambers, and Water Tables) organized and without extra tripping hazards



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## Potential Configuration

### RIO Unit

Maximum of 8 slide-in cards per RIO Box  
Maximum of 4 RIO Boxes in series

### Temperature

Type J, K, & T: 16 inputs per slide-in card  
PT-100: 8 inputs per slide-in card

### Voltage Sensing (CVM)

Voltage Range: 8, 10, 20, and 100V  
16 inputs per slide-in card

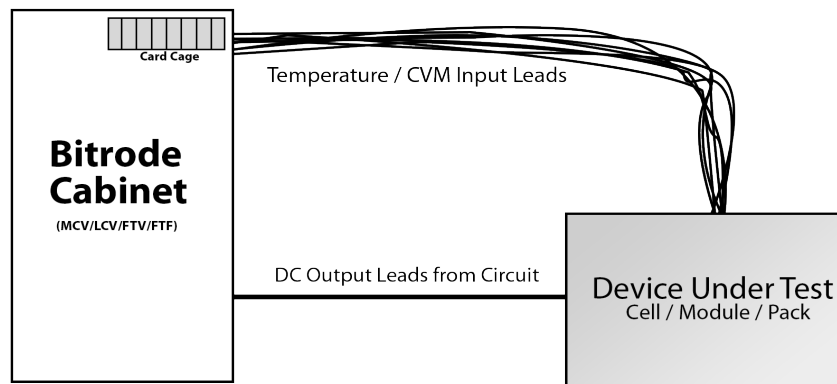
\*Contact Bitrode for the latest available configurations and price estimate

## Works with Bitrode Testers:

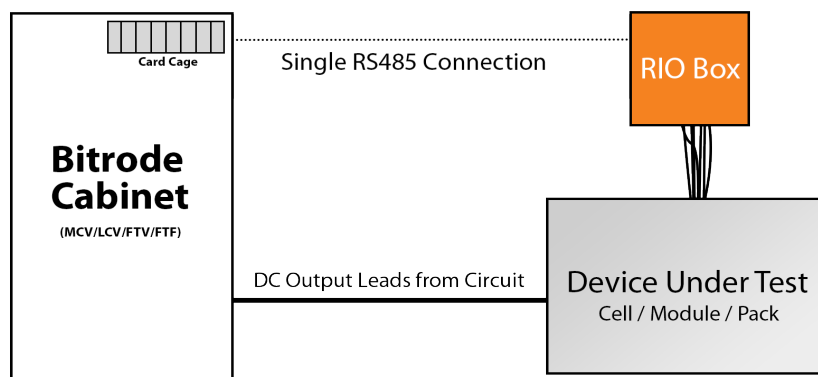
- MCV / CV
- LCV
- FTV
- FTF
- FTF - HP
- FTF - HV

## Example Configuration

### Configuration W/O RIO Box



### Configuration with RIO Box



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