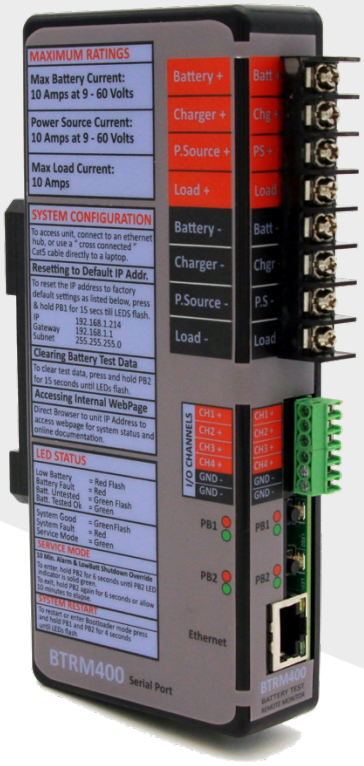

BTRM

Frequently Asked Questions

Part Number: BTRM-300 and BTRM-400
Product Release Date: June 24, 2021
Software Version: BTRM400v4619-202106-23

Question: If a technician removes a battery while testing, what happens?

ANSWER: Battery removal from the BTRM while testing will trigger a Low Battery in Test condition. When detected, the BTRM instantly returns all connected DC sources to power the load to ensure connected loads are not affected.

To service a battery connected to the BTRM, enter BTRM Service Mode by pressing the PB2 button for six seconds (available in firmware versions V131E and up). This ends any test in progress and blocks any untended alarms for 10 minutes. Entering Service Mode can also be used to wake up the system from low battery shutdown due to extended loss of power. After 10 minutes, holding PB2 again for six seconds, normal operation will resume.

Question: If AC power fails and the battery is already low, will the BTRM do a scheduled test?

ANSWER: The BTRM will not run a manual or scheduled test if the AC power has failed or if the battery is less than fully charged.

Question: Can you setup a test for only 15 minutes? Does it have to be a full two-hour test?

ANSWER: It would be convenient to get accurate results from a short 15-minute test, however, there are several complications with this approach. When a battery is initially placed in Run Test and the load applied, the battery voltage will fall steeply and then rise back for up to 30 minutes, in some cases exceeding the initial battery voltage before resuming a normal discharge slope. Since the battery voltage discharge profile under load is related to expected run time, even batteries in poor health during this period could be calculated to have greater than 100 percent capacity. Running a test for one-to-two hours, depending on the load demand, allows the battery voltage to settle to the expected discharge curve and averages out the effect of variable loads, resulting in a more actuate result. The BTRM Run Test expects to evaluate the battery in the one-to-two-hour range, using 20 percent or less of its reserve capacity to a maximum of four hours.

Question: Can a technician manually force a battery test while on site?

ANSWER: There are two ways to force a battery test while on site. The first method is to access the BTRM Web interface with a laptop. The Manual Test page gives the option of starting a test immediately or in a specified number of hours. Ideally, if the battery has just been replaced, to achieve a good result, the battery should be connected for four-to-eight hours to the system to ensure it is both fully charged and had time to rest after charging, should the battery temperature become elevated before starting a test. The second method can be used when installing a new battery and resetting the battery data. This will initiate a test to start in the next 10 hours.

Question: Does the BTRM perform any kind of pre-test to make sure the battery can support the load before it takes AC power offline?

ANSWER: Yes, the BTRM does do an initial evaluation of the battery before entering a scheduled test.