# Megger.



## **BITE5 Advanced**

## **Battery tester**

User Guide

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Introduction

## 1. Introduction

This document is the user guide for the Megger BITE5 ADVANCED Battery Tester. It provides a description of the operation of the unit as well as operating instructions. Read this manual before installing or using the equipment. Special emphasis should be placed on all safety discussions.

## 1.1 Product description

The Megger BITE5 ADVANCED Battery Tester has been designed with emphasis on reliability, simplicity, and ease of use. It will provide you with the information you need to reliably test batteries.

## 1.2 Included with the BITE5

- BITE5 ADVANCED battery tester
- Duplex probes
- Voltage leads
- Charger
- microSD card
- microSD card reader
- Mini USB cable
- Neck strap
- Zero bar
- Stylus

#### 1.3 Applications

Battery testing

#### 1.4 Company web site

Occasionally an information bulletin may be issued via the Megger web site. This may concern new accessories, new usage instructions or a software update. Please occasionally check on the Megger web site for anything applicable to your Megger instruments.

www.megger.com

## 2. Safety Warnings and Standards

WARNING : Death, serious injury, or fire hazard could result from improper use/installation of this instrument. Read and understand this user guide before installing this instrument.

Installation of this instrument MUST be performed in compliance with the National Electric Code and any additional safety requirements applicable to your installation.

Installation, operation, and maintenance of this instrument MUST be performed by qualified personnel only. The National Electrical Code defines a qualified person as one familiar with the construction and operation of the equipment and the hazards involved.

### 2.1 Warnings, Cautions and Notes

This user guide follows the internationally recognised definition. These instructions must be adhered to at all times.

Description				
<b>DANIGER</b> injury or	<b>DANGER</b> Indicates a dangerous situation which, if ignored, could lead to death, serious injury or health problems.			
WARNING serious in	WARNING : Indicates a potentially dangerous situation which, if ignored, could lead to death, serious injury or health problems.			
ATTENTIO problems.	ATTENTION : Indicates a dangerous situation which, if ignored, could lead to injuries or health problems.			
CAUTION	CAUTION : Indicates a situation which could lead to damage of the equipment or environment			
NOTE : Inc efficiently	<b>NOTE :</b> Indicates important instructions to be followed to perform the relevant process safely and efficiently.			
lcon	Description			
	<b>EN ISO 7010 P007</b> Interference to the operation of or damage to active implanted cardiac devices from this equipment which generates strong electromagnetic fields. No access for people with active implanted cardiac devices.			
n	<b>EN ISO 7010 W006</b> Warning of the presence of strong magnetic field.			
	<b>EN ISO 7010 W001</b> Warning to consult the user instructions. Caution is necessary when operating the device or control close to where this symbol is placed, or to indicate that an operation needs operator awareness and protective action in order to avoid hazardous situations.			
<u>/</u>	HIGH VOLTAGE, Risk of electric shock			
	Earth/Ground			

## 2.2 Safety warnings

The following safety precautions MUST be taken whenever the instrument is installed:

- Wear safety glasses and insulated gloves when making connections to power circuits
- Hands, shoes, floor/ground must be dry when making any connection to a powered line

Safety Warnings and Standards

## 2.3 Installation category definitions:

**CAT IV** - Measurement category IV: Equipment connected between the origin of the low-voltage mains supply and distribution panel.

**CAT III** -Measurement category III: Equipment connected between the distribution panel and electrical outlets.

CAT II - Measurement category II: Equipment connected between the electrical outlets and user's equipment.

Measurement equipment may be safely connected to circuits at the marked rating or lower. The connection rating is that of the lowest rated component in the measurement circuit.

#### 2.4 Safety, Hazard and Warning symbols on the instrument

This paragraph details the various safety and hazard icons on the instrument's outer case.

lcon	Description
4	Warning: High Voltage, risk of electric shock
	Caution: Refer to user guide.
UK CA	UK conformity. This equipment complies with current UK legislation
CE	EU conformity. Equipment complies with current EU directives.
	Conforms to relevant Australian Safety and EMC standards
	Do not dispose of to landfill, in sewage systems or by fire.
	Equipment protected throughout by double insulation.
<u> </u>	Reference earth connection. Not a protective earth terminal

## 3. Instrument Overview

## 3.1 Instrument layout

One or more relavent viewpoints of the instrument with numbered arrows to reference the table below



Item	Description	Item	Description
1	Voltage lead input -	8	Lock and unlock screen
2	Current probe input	9	Ohmic testing
3	Mini USB input and micro SD card slot	10	VA testing
4	DC power adapter input	11	Data and string records
5	ON/OFF switch	12	Recorded data charts
6	Impedance probe inputs	13	Instrument configuration
7	Voltage lead input +		



Zero adjustment

## 4. Zero adjustment

For accurate ohmic measurements, it is recommended that a zero adjust is performed when changing probes. To perform a zero adjust, use the included zero bar.

When performing a zero adjustment, place the source pin on the outer copper surface of the zero bar and place the sensor pin in one of the holes of the zero adjust bar.



## 4.1 Zero adjustment procedure

#### Select "0-ADJ".

The BITE5 ADVANCED will prompt you to make a zero adjustment bar. Select YES.

NOTE: Place the probes on the zero adjustment bar as shown within 10 seconds of selecting YES, or the BITE5 ADVANCED will time out.

This zero adjustment will begin. Hold probes on zero bar until adjustment is complete.



## 5. Configuration of BITE5 ADVANCED

The BITE5 ADVANCED allows you to customize the unit for your needs.

To configure the ur	nit, select the CONFIGURATION ICON.	Impedance Meter Ω READY ✓A ∴ ∴ ∴ ∴ ∴ ∴ ∴ ∴ ∴ ∴ ↓ ∴ ∴ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ <	- Meter String Discharg 100 150 2 004 v 2 Range <auto></auto>	e Ω 250 3.4 °	300 C Hold	Hold	<b>∢</b> v)) <b>())</b> 0-Adj
IMPEDANCE TAB							
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CT Source	Set to internal for series strings or parallel for parallel strings.	C Display Unit CT Source CT Source High Curren	s Ohn Inter	nal V	Nolse avoldance	OFF	¥
High Current	Set tets current to 700mA or 100mA.	Meas.	e Celsi				
Temperature	Set temperature units to ei- ther Celsius or Fahrenheit.	Voltage Pol	arity Disreg	jard 🔻			
Voltage Polarity	Set unit to record or disregard voltage polarity.						
Noise Avoidance	Alter the test frequency to reduce effect of noisy stings.						
ETC TAB							
Language	Select desired language.	Setting Impedance	Etc		24/03/*	12 03:46:37 💾 1	\$ <b>∢</b> ∞) Œ⊃•
Date Format	Select desired date format.	Ω Language	Engl	sh 🔻	Time	Time	-
Brightness	Adjust the brightness of the display.	VA Date Forma Brightness Display Off	t yy/mr 10 OFI	Vdd ▼ ▼ F ▼	Buzzer Auto P.Off SD Card	3 60 m Forma	in 🔻
Display Off	Set automatic display turn off time.	<b></b>			Reset Settings	Rese	t
Time	Set the date and time.	\$				Build Time : Mar B Serial Num : KR182	2024 17:56:33 4031001
Buzzer	Set the buzzer volume.						
Auto P Off	Set automatic power down time.						
SD Card	Format SD Card						
Reset Settings	Reset BITE5.						

**Configuration of string** 

## 6. Configuration of string

The BITE5 ADVANCED allows you to configure strings to be tested.



## 7. Performing a quick test (Meter Mode)

In the meter mode the BITE5 will take ohmic measurements but will not save the recordings to a programmed string configuration.



#### Performing a quick test (Meter Mode)

This screen will allow you to program a warning and alarm limit for the impedance value and a lower limit for the voltage. This is an optional step. Select OK when done.

Note: This feature can be disabled as well by selecting OFF.

Start testing by placing the probes across the battery.

The BITE5 ADVANCED will beep when the measurement is complete.

Press "Hold" to freeze the value on the screen.

Select "Auto Hold" and the BITE5 ADVANCED will automatically save any measurement with a date and time stamp.



## 8. Performing an impedance test on a battery string.

In this mode the BITE5 will take impedance measurements and will save the record values to a programmed string configuration.





## 9. Performing a NERC terminal mode impedance test on a battery string.

This is a NERC compliance test. In this mode the BITE5 will take the terminal impedance measurements in addition to the cell and strap impedance measurements. All values will be saved to the selected string configuration.



Performing a NERC terminal mode impedance test on a battery string.



#### Performing a NERC terminal mode impedance test on a battery string.

Continue taking measurement of each cell and strap in sequence until you reach the last cell in the string. When the BITE5 ADVANCED measures the last cell in the string, it will display a summary.

To record the negative terminal connection, close the summary and measure from the end of the negative charger lead to the last post on the last battery. This value will be saved as a strap.



## 10. Performing an impedance test on a parallel battery string.

When performing a ohmic test on a parallel string some of the test current escapes through the parallel path. This leads to inaccuracies in the measurement. In this mode the BITE5 will take impedance measurements, while recording the escape current, through the parallel path. This will provide accurate measurements avoiding the need to segment the string. The recorded values will be saved to the selected string configuration.









Performing a conductance test on a battery string.

## **11.** Performing a conductance test on a battery string.

The BITE5 can record the measured data as either milliohms or in Siemens. This test will record the data in Siemens. All the data will be saved to the selected string.

NOTE: All limits in the selected string will need to be in Siemens.





Select "New Test" to start a new test on the selected string.

Start testing by placing the probes on the first cell. The unit will beep when the measurement is complete and save the measured values to memory. The results will be displayed on the screen.

Move to the next battery.

The recorded values will be displayed on the screen.

NOTE: The unit can be used to measure intercell connections is Siemens, however it is not recommended. Since Siemens is the reciprocal of resistance, the measured values of the straps will be very high. This may be seen as an OL.

Continue taking measurement of each cell and strap in sequence until you reach the last cell in the string. When the BITE5 ADVANCED measures the last cell in the string, it will display a summary.



## 12. Performing an impedance test on a battery pack.

In this mode the BITE5 will take a single impedance measurement across a battery pack or across an entire battery string (UP to 500Vdc) This test is applicable to mobile battery packs, such as in forklifts. The batteries do need to be fully charged.



Performing an impedance test on a battery pack.



## 13. Measuring battery (DC) float and (AC) ripple voltages and currents

The BITE5 ADVANCED can be used to measure and record any of the following,

- 1. DC Voltage (Up to 1000Vdc)
- 2. AC Voltage (Up to 600Vac)
- 3. DC Current from 1A to 1000A.
- 4. AC Current 1A to 100A

#### 13.1 VA Meter Mode

In the meter mode the BITE5 will take the above measurements but will not save the data to a programmed string configuration.



Measuring battery (DC) float and (AC) ripple voltages and currents



Measuring battery (DC) float and (AC) ripple voltages and currents



Adding a Ripple (AC) Voltage, Ripple (AC)Current or a Float (DC) Current value to a string.

## 14. Adding a Ripple (AC) Voltage, Ripple (AC)Current or a Float (DC) Current value to a string.

In this mode the BITE5 ADVANCED will allow take a ripple or float measurement and add that measurement to the selected string.



#### Adding a Ripple (AC) Voltage, Ripple (AC)Current or a Float (DC) Current value to a string.



Measuring voltages only on a battery string.

## 15. Measuring voltages only on a battery string.

The BITE5 ADVANCED can be used to measure and record voltage only on a battery string. The recorded data will be saved to the selected string configuration.



#### Measuring voltages only on a battery string.



Start testing by place the banana probes across the first cell. The BITE5 ADVANCED will automatically save the value.

Proceed to the next cell. The BITE5 ADVANCED will automatically save and number the measured values.

Continue through the string until the last cell is measured. At this point the BITE5 will display a summary of the test.


# 16. Performing a discharge test

The BITE5 ADVANCED can be used in conjunction with the Megger Torkel discharge tester. Program the Torkel for the desired discharge test. Place the Torkel across the battery string and start the discharge test. The BITE5 ADVANCED can then be used to take manual measurements of the cell voltage throughout the discharge process.

In this mode, the unit will record the DC voltage of each cell as well as the DC current through the string if the optional Hall Effect CT is used.



#### Performing a discharge test



#### Performing a discharge test

Start the discharge on the load bank.

Take measurement of the first cell. The measurements will be saved with a date and time stamp.

Take measurement of each following cell. Each measurement shall be saved in sequence with a cell number, date, and time stamp.

Continue through the string until the last cell is measured. At this point the BITE5 will display a summary of this pass through the string.

The unit will then prompt the user to either end the test or select "next" to perform the next pass through the string. Press when ready to perform another pass through the string. Press END to end the test.



Performing an impedance and discharge test (special testing)

# 17. Performing an impedance and discharge test (special testing)

The BITE5 ADVANCED can measure the voltage and temperature and impedance throughout a discharge test. Performing this test will allow the trending of the cell impedance throughout the discharge process. This will allow the operator to establish an ohmic value that correlates with the discharged battery. This value can then be set as the ohmic alarm limit for the string.

Program the Torkel for the desired discharge test. Place the Torkel across the battery string and start the discharge test. The BITE5 ADVANCED can then be used to take manual measurements of the cell voltage throughout the discharge process.

In this mode, the BITE5 ADVANCED will record the DC voltage of each cell as cell impedance and cell temperature.



#### Performing an impedance and discharge test (special testing)



Take measurement of each following cell. Each measurement shall be saved in sequence with a cell number, date and time stamp.

Continue through the string until the last cell is measured. At this point the BITE5 will display a summary of this pass through the string.

The unit will then prompt the user to either end the test or select "next" to perform the next pass through the string. Press when ready to perform another pass through the string. Press END to end the test.

**NOTE** : This value will be associated with the internal impedance changes associated with sulfated plates. It may not correlate with other causes of cell aging such as plate corrosion.

**NOTE** : In this mode the BITE5 ADVANCED will also measure the cell temperature during the discharge. The temperature will be taken off the negative plate. This will be valid only for sealed batteries. Flooded cells the temperature should be taken from the electrolyte.

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2.236 V

2.236 V 23.0 °C

22.9 °C

001 Test 01

10

11 12 1.892mΩ

1.890mQ

Hold

001 Test 01

δmΩ

9mΩ

3mΩ

2m0

0mΩ

8mΩ

8mO

9mΩ

28mQ

Hold

1.844mQ

001 Test

1.836mΩ

6mΩ

9mΩ

3mQ

2mΩ

RmΩ

8mΩ

9mΩ

8mO

C Hold

1.844mΩ

23

24 / 03 / 21 04 : 23 : 07 🛗 🏌 📢 🚛

2.221 V

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24.2 °

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0-Adl

Ê+1024

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24.0 °C

24.1 °C

24.1 °C

747 °C

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24.6 °C

24.2

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2.236 v

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String

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100mA

Select

5000 1.00

2.196 v

MIN

MAX AVG

Sele

Mete

Ą,

String SMIT 1

String

Warning 2.500 mΩAlarm 03.00 mΩUpper 2.300 V

**1.890**mΩ 🔥

1.00m 1.50m 2.00m 2.50m 3.00m

23.0 °c

Logge

Cell 20

24.7 °c

Do you want to continue measuring the next test?

Lower 2.000 V Idx

Do you want to continue measuring the next test?  $0m\Omega$ 

Warning **2.500 m**Ω<sup>Alarm</sup> **03.00 m**Ω<sup>Upper</sup> **2.300 V** <u>13</u> <u>1.836 m</u>Ω

1.828mΩ

1.898mΩ Cell 7

1.865mΩ

Discharge

Warning 2.500m ΩAlarm 03.00m ΩUpper 2.300 V 13

1.898mΩ 1.865mΩ

1.828mΩ Cell 20 1.898mΩ Cell 7

24.7 °c

Manual cell select.

Summarv

A R MIN MAX AVG

.

Lower 2.000 V Idx

Logger

Lower 2.000 V Idx

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Ω

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Met

String SMIT 1

# 18. Trending recorded data

The BITE5 ADVANCED will allow trending of all recorded string data. The BITE5 ADVANCED will trend string data; the value of each cell during a single test. The BITE5 ADVANCED can also trend the all the historical test data for each individual cell.

## 18.1 Trending String Test Data

Trending string data will trend all the cells on the X axis for each individual test.



#### Trending recorded data



# **19. Trending Cell Test Data**

Trending cell data will trend all the measured historical values on the X axis for each cell in the string...



#### Trending Cell Test Data

		4	Analyzer					;	24/03/20 0	6:28:45	🗏 🖇 📣 🎟
		•	Impedance		▼_	Cell Ω	String (	Ω			
		0	Press 'Select'	Select Ba	ttery 5	string					
		22	S VA	SMIT 1				Lead Acid	VF1		
	V. Then press	VA		STRING	2			Lead Acid	3CC-3N		
Select the desired battery string to view. T OK.								50 Ah Lead Acid	4 Cell 3CC-3N		
		≣	List is	NOTERI		Æ		50 Ah Lead Acid	6 Cell		
				B5A LEA	D ANT	IMONY		50 Ah	6 Cell		
		$\sim$		B5A LEA	D CALC	CIUM S	_	Lead Acid	لار ۱۸ ما	_	
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			0	02		7	1.961mΩ	2.252 V	°℃	24/03/	15 03:40:49
		VA	0	03	_	6	1.981mΩ	2.244 V	30.4 °C	24/03/	08 04:31:51
				-04		4	1.971mΩ	2.244 V	29.5 °C	24/03/	08 04:28:46
Select desired cell in the left column.		:=				3	1.970mΩ	2.244 V	29.9 °C	24/03/	08 04:27:32
						2.500m					
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		1/4	0	03		6	1.981mΩ	2.244 V	30.4 °C	24/03/	08 04:31:51
Select "Chart" to change the parameter	heina	VA	0	04	_	5	1.977mΩ 1.971mΩ	2.244 V 2.244 V	30.0 °C	24/03/	08 04:30:38 08 04:28:46
Sciect chart to change the parameter	being				- 1	3	1.970mΩ	2.244 V	29.9 °C	24/03/	08 04:27:32
trended.						2.500m		Impedance			
		10				2.000m-		Voltage			
		ΪĤ				1.500m		Temperatu	e		
		~				1.000m	5 10	Strap	35	40 45	50 55 60
			Select	C	Recor	d 🗲	Chart	Chart <impedance< td=""><td>5</td><td></td><td></td></impedance<>	5		

<Impedance>

# 20. Viewing a record

The BITE5 ADVANCED allows the viewing of various recorded values or records. These records include the following:

**Meter**  $\Omega$  - These will be the individual recorded impedance measurements that were made with the BITE5 ADVANCED. These recorded values are not associated with any battery strings.

**String**  $\Omega$  - These will be the recorded values of individual impedance tests made on strings.

**D Ω String** - These will be the recorded values of individual impedance measurements made during a discharge test on a string.

**Meter VA** - These will be the individual recorded voltage and current measurements that were made with the BITE5 ADVANCED. These recorded value are not associated with any battery strings.

String VA - These will be the recorded values of voltage and current measurements made on strings.

**D VA String** - These will be the recorded values of the voltage and current measurements made during a discharge test on a string.

Current – Will display current measurements made on a string.

#### 20.1 Viewing records



#### Viewing a record

	Sel	ect string.							
Select the desired string.	SN SN	ALT 1			Lead Acld 50 Ah	VF1 24 Cell	2.20	0/ 2.000/ 2.: 0/ 2.500/ 03.	300 V 00mΩ
	CT.	DINCO			Lead Acid	3CC-3M	2.20	0/ 2.000/ 2.3	300 V
NOTE: If "Matar O" or "Matar $VA$ " was salacted po	A 🗋	RINGZ			50 Ah	4 Cell	1.90	0/ 2.300/ 2.5	00mΩ
NOTE. II WIELEI 12 OF WIELEI VA Was selected ho	NI	O TERM MO	DF		Lead Acid	3CC-3M	2.20	0/ 2.000/ 2.3	300 V
string poods to be selected. Recorded Mater data is not		o renavi ivio			50 Ah	6 Cell	1.90	0/ 2.200/ 2.5	00mΩ
string needs to be selected. Necorded Mieter data is not	84	A LEAD AN	TIMONY		Lead Acid	LA	2.20	0/ 2.000/ 2.3	300 V
associated with a string. Therefore, all recorded motor	_				50 Ah	6 Cell	1.90	0/ 2.500/ 03.	00mΩ
associated with a stilling. Therefore, all recorded meter	BS	5A LEAD CAL	CIUM S		Lead Acid	LC	2.20	0/ 2.000/ 2.3	300 V
data is displayed	<u> </u>				50 Ah	6 Cell	10.0	0/ 20.00/ 030	).0mΩ
uata is uisplayeu.	BS	5A LEAD CAL	CIUM P		Lead Acid	LL.	2.20	U/ 2.000/ 2.:	SUU V
					SU AN	6 Cell	1.00	J/ 20.00/ 030	1.0mL1
	B.5	5A NICD			NI-CO	NICD	1.50	0/1.000/1.	500 V
		Select	Add		Сору	Edlt			Delete String
	Re	cord				247	03/20 06	: 45 : 38 💾 >	( <b>1</b> 0) 💷
	M	leter Ω	String Ω	D Ω Strin	g Meter VA	String VA	D VA Stri	ng Curre	ent
	Sel	ect string.							
•	2				Lead Acid	VF1	2.20	0/ 2.000/ 2.3	300 V
	20	NTI 1			50 Ah	24 Cell	2.00	0/ 2.500/ 03.	00mΩ
	ст	DIMOD			Lead Acid	3CC-3M	2.20	0/ 2.000/ 2.3	300 V
V	A	MINUZ			50 Ah	4 Cell	1.90	0/ 2.300/ 2.5	00mΩ
	N	O TERM MO	DF		Lead Acid	3CC-3M	2.20	0/ 2.000/ 2.3	300 V
Press "Select".		• • • • • • • • • • • • •			50 Ah	6 Cell	1.90	0/2.200/2.5	00mΩ
	BS	5A LEAD AN	TIMONY		Lead Acid	LA	2.20	0/ 2.000/ 2.3	300 V
	-				50 Ah	6 Cell	1.90	0/ 2.500/ 03.	00mΩ
	BS	5A LEAD CAL	CIUM S		Lead Acid	E Coll	2.20	U/ 2.000/ 2.:	
	í –				IN UC	l Cell	10.0	0/20.00/050	200.1/
	B5	5A I <mark>EA</mark> D CAL	CIUM P		50 Ah	6 Cell	10.0	70, 2.000, 2 1/ 70 00/ 03/	10m0
					Ni-Cd	NICD	1.30	0/ 1.000/ 1.	500 V
	B.9	5A NCD							
		Select	Add		Сору	Edit			Delete String
									5611119
	Re	cord				24/	03/20 06	: 45 : 50 🕮 🛇	k 📣 🎟
		lotor O	String O	D O Strin	a Motoc)/A	String 1/A	D VA Sed	na Curre	
	IV.	letel 17	Sunig 12	0.0.50.00	g weter va	ouning viv	D WASU	ng corre	anu
	007	CTDINC?	_						
	2	24/03/15	; 4	Min	1.909mΩ	Cell	4	24/03/15 0	4:17:18
	08	1.939mC	2.259 V	Мах	1.970mΩ	Cell	1	24/03/15 0	4:16:21
	07	, 24/03/15	5 4	Avg	1.939mΩ				
VA	A V	1.947mC	) 2.258 V	0A	0.400mΩ	0.000 V	°C	24/03/15 0	4:16:06
	06	24/03/08	3 4	1	1.970mΩ	2.252 V	:- °C	24/03/15 0	4:16:21
Select desired test in the left column.	00	΄ 1.986mΩ	1 2.253 V	1A	0.075mΩ	0.000 V	:- °C	24/03/15 0	4:16:31
	05	24/03/08	4	2	1.942mΩ	2.257 V	°C	24/03/15 0	4:16:39
	_	1.985mC	2.253 V	ZA	0.047mΩ	0.000 V	°C	24/03/15 0	4:16:49
	04	24/03/08	4	3	1.936mΩ	2.256 V	℃	24/03/15 0	4:16:59
	^ <u> </u>	1.978mC	1 2.253 V	3A	0.090mΩ	0.000 V	°C	24/03/15 0	4:17:07
	03	24/03/08	4	4	1.909mΩ	2.270 V	:- °C	24/03/15 0	4:17:18
	1	1.978mL	1 Z.253 V	4A	0.022mΩ	0.000 V	:- °C	24/03/15 0	4:18:03
	02	24/05/08	4						
		Select -		ple	Select	Delete	Dele	te	
		peleu	select	ion	All	Test	Reco	rd	

 Record
 24 / 03 / 20 06 : 45 : 38 <sup>m</sup>/<sub>2</sub> ★ ◀ 1) <sup>m</sup>/<sub>2</sub>

 Meter Ω
 String Ω
 DΩ String
 Meter VA
 String VA
 D VA String
 Current

# 21. Deleting recorded meter data

# 21.1 Deleting Meter $\Omega$ and Meter VA $\,\Omega$ data

This refers to recorded ohmic or voltage measurements that are not associated with a battery string.

	Record 24/03/20 06:45:27 💾 ◀)) 🎟
On the BITE5 ADVANCED select the record ICON.	Ω VA E List is empty
Select either Meter $\Omega$ or Meter VA.	Record       24/03/20 06:53:54 <sup>™</sup> ♀ ↓)) Ⅲ         Meter Ω       String Ω       D Ω String       Meter VA       String VA       D VA String       Current         Ω       24/03/20 04:52:10       26.15 Vdc       0.016 Vripp       24/03/20 04:51:47       26.15 Vdc       0.019 Vripp         24/03/14 03:13:23       0.026 Vdc       0.023 Vripp       24/03/14 03:13:22       0.044 Vdc       0.023 Vripp         24/03/14 03:13:21       0.061 Vdc       0.011 Vripp       0.011 Vripp       0.011 Vripp
	Record         24/03/20 06:54:01 → \$\frac{10}{24}\$         \$\frac{1}{24}\$         \$\frac{1}{24}\$
Select the desired measurement to delete	24/03/14 03:13:23 0.024 Vrtpp 24/03/14 03:13:22 0.044 Vdc 0.023 Vrtpp VA 24/03/14 03:13:21 0.051 Vdc 0.011 Vrtpn
NOTE: To deleted all measurements, select "Select All".	Multiple     Select     Delete       Selection     All     Record
	Record 24/03/20 06:54:01 🗒 🔰 📣 🎟
Press "Delete Record"	Meter Ω         String Ω         D Ω String         Meter VA         String VA         D VA String         Current           Q         24/03/20 04:51:47         26.15 Vdc         0.016 Vripp         24/03/20 04:51:47         26.15 Vdc         0.019 Vripp           24/03/20 04:51:47         26.15 Vdc         0.019 Vripp         24/03/20 04:51:47         26.15 Vdc         0.029 Vripp           24/03/14 03:13:23         0.026 Vdc         0.023 Vripp         24/03/14 03:13:22         0.044 Vdc         0.023 Vripp           VA         24/03/14 03:13:21         0.061 Vdc         0.011 Vripp         0.011 Vripp
	Image: Multiple Select Delete Record
	24/03/20 04532110         26.15 Vac         0.0116 Vrtpp           24/03/20 0453147         26.15 Vac         0.019 Vrtpp           24/03/14 03:13:23         0.026 Vdc         0.024 Vrtpp
A window will open asking "Delete Record?". Select	24/03/14/03:13:22         0.044 Vdc         0.023 Vripp           VA         24/03/14/03:13:21         Question
"Yes" to delete record.	Are you sure?
	No Yes

Deleting recorded meter data

#### 21.2 Deleting recorded string data

This refers to measurements that are saved to a configured string

This can include the following.

- **String**  $\Omega$  These will be the recorded values of individual impedance tests made on strings.
- **D Ω String** These will be the recorded values of individual impedance measurements made during a discharge test on a string.
- String VA These will be the recorded values of voltage and current measurements made on strings.
- **D VA String** These will be the recorded values of the voltage and current measurements made during a discharge test on a string.

**Current** Will display current measurements made on a string.



#### Deleting recorded meter data

	â	Record	States 0	D.O.States	- Materia VA	24	/ 03 / 20 06	: 45 : 38 📕 💲 📢 N) 📖
		Select string.	String 12	U II String	Meter vA	String VA	DWASH	ng current
	Ω	SMIT 1			Lead Acid	VF1	2.20	00/ 2.000/ 2.300 V
	VA	STRING2			Lead Acid	3CC-3M	2.00	0/ 2.000/ 2.300 V
	VA	NO TERM MO	DE		Lead Acid	3CC-3M	2.20	0/ 2.000/ 2.300 V
Press "Select"		B5A LEAD AN	TIMONY		50 Ah Lead Acid	6 Cell	1.90	0/ 2.200/ 2.500mL1 00/ 2.000/ 2.300 V
		B5A LEAD CA			50 Ah Lead Acid	6 Cell LC	1.90	0/ 2.500/ 03.00mΩ 00/ 2.000/ 2.300 V
	<b>*</b>				50 Ah Lead Acid	6 Cell LC	10.0	0/ 20.00/ 030.0mΩ 00/ 2.000/ 2.300 V
		DEAL			50 Ah Ni-Cd	6 Cell NICD	10.0 1.30	0/ 20.00/ 030.0mΩ 00/ 1.000/ 1.500 V
	₽	Select	Add		Сору	Edit		Delete String
	2	Record				24	/03/20 06	: 45 : 50 ( 🖷 🗶 📢 אין 📖
	Ō	Meter Ω	String Ω	D Ω String	Meter VA	String VA	D VA Stri	ing Current
	0	002 CTRINC2						
	312	08 24/03/15 1.939m0	o 4 D 2.259 V	Min Max	1.909mΩ 1.970mΩ	Cell Cell	4	24/03/15 04:17:18 24/03/15 04:16:21
	VA	07 24/03/13 1.947m	5 4 0 2.258 V	Avg 0A	1.939mΩ 0.400mΩ	0.000 V	:- °C	24/03/15 04:16:06
Select the desired test to delete		06 24/03/08 1.986m0	3 4 D 2.253 V	1 1A	1.970mΩ 0.075mΩ	2.252 V 0.000 V	°C °C	24/03/15 04:16:21 24/03/15 04:16:31
NOTE: To delete all tests select "Select All".		05 24/03/0	3 4 1 2 253 V	2	1.942mΩ	2.257 V	°C	24/03/15 04:16:39
		04 24/03/04	3 4	2A 3	0.047mΩ 1.936mΩ	0.000 V 2.256 V	℃	24/03/15 04:16:49 24/03/15 04:16:59
	Ŷ	1.978ms 02 24/03/01	2.253 V 3 4	3A 4	0.090mΩ 1.909mΩ	0.000 V 2.270 V	℃ ℃	24/03/15 04:17:07 24/03/15 04:17:18
		1.978ml	0 2.253 V 3 4	4A	0.022mΩ	0.000 V	;- °C	24/03/15 04:18:03
	\$	Select	- Mult	iple tion	Select All	Delete Test	Dele Reco	te rd
								·
	$\sim$	Record				24	/03/20 06	5 : 45 : 50 🛗 🦹 📢 )) 🏢
	ô	Record Meter Ω	String Ω	DΩ String	g Meter VA	24 String VA	/ 03 / 20 06 D VA Str	::45:50 📕 💲 ┥୬) 📖 ing Current
	ĉ	Record Meter Ω 002 STRING2	String Ω	D Ω String	g Meter VA	24 String VA	/ 03 / 20 06 D VA Str	5:45:50 🖑 ≵ ◀ ୬) 🎟 ing Current
	ີ Ω	Record Meter Ω 002 STRING2 08 24/03/1 1.939m	String Ω 5 4 0 2.259 V	D Ω String Min Max	3 Meter VA 1.909mΩ 1.970mΩ	24 String VA Cell Cell	/ 03 / 20 06 D VA Str 4 1	::45:50 (
	ີ Ω VA	Record Meter Ω 002 STRING2 08 24/03/1 1,939ma 07 24/03/1 1,947ma	String Ω 5 4 0 2.259 V 5 4 0 2.258 V	D Ω String Min Max Avg	9 Meter VA 1.909mΩ 1.970mΩ 1.939mΩ 0.400mΩ	24 String VA Cell Cell	/03/20 06 D VA Str 4 1	24/03/15 04:17:18 24/03/15 04:17:18 24/03/15 04:16:21
	Ω	Record           Meter Ω           002 STRING2           08         24/03/1           07         24/03/1           1.947mil         24/03/1           06         24/03/0	String Ω           5         4           0         2.259 V           5         4           0         2.258 V           8         4           0         2.258 V	D Ω String Min Max Avg 0A 1	1.909mΩ 1.970mΩ 1.939mΩ 0.400mΩ 1.970mΩ	24 String VA Cell Cell 0.000 V 2.252 V	/ 03 / 20 00 D VA Str 4 1 °C °C	24/03/15 04:17:18 24/03/15 04:17:18 24/03/15 04:16:21 24/03/15 04:16:21
Press "Delete Test"	Ω νa	Record           Meter Ω           002 STRING2           08         24/03/1           07         24/03/1           07         24/03/1           06         24/03/1           07         24/03/1           06         1.939min           07         24/03/1           08         24/03/1           09         24/03/1           09         1.986min           05         24/03/0	String Ω           5         4           0         2.259 V           5         4           0         2.258 V           8         4           0         2.253 V           8         4           0         2.253 V           8         4	D Ω String Min Max Avg 0A 1 1A 2	1.909mΩ 1.970mΩ 1.970mΩ 0.400mΩ 0.400mΩ 0.075mΩ 1.942mΩ	24 String VA Cell Cell 0.000 V 2.252 V 0.000 V 2.257 V	/03/20 00 D VA Str 4 1 °C °C °C °C	24/03/15 04:17:18 24/03/15 04:17:18 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:31 24/03/15 04:16:31
Press "Delete Test"	0Ω νΑ	Record           Meter Ω           002 STRING2           08         24/03/1           07         24/03/1           06         24/03/0           06         24/03/0           07         24/03/0           06         24/03/0           1.986mi         24/03/0           05         24/03/0           1.985mi         24/03/0	String Ω 5 4 1 2.259 V 5 4 1 2.258 V 8 4 1 2.253 V 8 4 2.253 V 8 4	D Ω String Min Max Avg 0A 1 1A 2 2A	1.909mΩ 1.970mΩ 1.970mΩ 1.939mΩ 0.400mΩ 1.970mΩ 0.075mΩ 1.942mΩ 0.047mΩ	24 String VA Cell Cell 0.000 V 2.252 V 0.000 V 2.257 V 0.000 V 2.257 V	/ 03 / 20 00 D VA Str 4 1 °C °C °C °C °C	24/03/15 04:17:18 24/03/15 04:17:18 24/03/15 04:16:06 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:31 24/03/15 04:16:32 24/03/15 04:16:39 24/03/15 04:16:49
Press "Delete Test"	⊡ Ω ∨A ∭	Record           Meter Ω           002 STRING2           08         24/03/1           07         24/03/1           06         1.939mi           07         24/03/0           08         24/03/0           09         1.986mi           09         1.986mi           09         1.985mi           04/03/0         1.978mi           04/03/0         1.978mi	String Ω 5 4 2.259 V 5 4 1 2.258 V 8 4 1 2.253 V 8 4 1 2.253 V 8 4 1 2.253 V	D Ω String Min Max Avg OA 1 1 1A 2 2A 3 3A	1.909mΩ 1.970mΩ 1.970mΩ 0.400mΩ 1.970mΩ 0.075mΩ 1.942mΩ 0.047mΩ 1.935mΩ 0.090mΩ	24 String VA Cell Cell 0.000 V 2.252 V 0.000 V 2.257 V 0.000 V 2.256 V 0.000 V	/03/20 06 D VA Str 4 1 	24/03/15 04:17:18 24/03/15 04:17:18 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:39 24/03/15 04:16:39 24/03/15 04:16:59 24/03/15 04:17:07
Press "Delete Test"	⊡ Ω ∨A ∭	Record           Meter Ω           002 STRING2           08         24/03/1           07         1.939min           07         1.947min           06         24/03/0           07         1.947min           02         24/03/0           04         1.936min           04         24/03/0           03         24/03/0           04         1.978min           03         24/03/0	String Ω           5         4           1         2.259 V           5         4           1         2.258 V           8         4           1         2.253 V	D Ω String Min Max Avg 0A 1 1 1A 2 2A 3 3A 4 4 0A	1.909mΩ 1.970mΩ 1.970mΩ 1.970mΩ 0.400mΩ 1.970mΩ 0.075mΩ 1.942mΩ 0.047mΩ 1.936mΩ 0.090mΩ 1.936mΩ	24 String VA Cell Cell 0.000 V 2.252 V 0.000 V 2.257 V 0.000 V 2.255 V 0.000 V 2.256 V 0.000 V 2.256 V 0.000 V	/03/20 06 D VA Str 4 1 	24/03/15 04:17:18 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:31 24/03/15 04:16:31 24/03/15 04:16:39 24/03/15 04:16:49 24/03/15 04:17:07 24/03/15 04:17:07 24/03/15 04:17:07 24/03/15 04:17:07
Press "Delete Test"	Ω ∨A Ⅲ ¾	Record           Meter Ω           002 STRING2           08         24/03/1           07         24/03/0           06         24/03/0           06         24/03/0           07         1.936mm           04         24/03/0           03         24/03/0           04         1.978mm           03         24/03/0           1.978mm         02	String Ω           5         4           2.259 V         -           6         4           2.258 V         -           8         4           2.253 V         -	D Ω String Min Max Avg OA 1 1 A 2 2A 3 3A 4 4 4A	Meter VA           1.909mΩ           1.970mΩ           1.939mΩ           0.400mΩ           1.970mΩ           0.075mΩ           1.942mΩ           0.047mΩ           1.936mΩ           0.047mΩ           1.936mΩ           0.0490mΩ           1.936mΩ           0.022mΩ	24 String VA Cell Cell 0.000 V 2.252 V 0.000 V 2.252 V 0.000 V 2.255 V 0.000 V 2.256 V 0.000 V 2.256 V 0.000 V 0.0	/03/20 06 D VA Str 4 1 	24/03/15 04:17:18 24/03/15 04:17:18 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:39 24/03/15 04:16:49 24/03/15 04:16:59 24/03/15 04:17:07 24/03/15 04:17:07 24/03/15 04:17:07 24/03/15 04:18:03
Press "Delete Test"	⊡ ∝ ∞ ∭	Record           Meter Ω           002 STRING2           08         24/03/1           07         1.939min           07         1.947min           06         24/03/0           07         1.9367min           06         24/03/0           07         1.9367min           04         24/03/0           03         1.978min           04         24/03/0           1.978min         0.2           02         24/03/0           03         1.978min           04         24/03/0           1.978min         0.2           02         24/03/0	String Ω           5         4           7         2.259 V           5         4           1         2.258 V           8         4           1         2.253 V	D Ω String Min Max Avg 0A 1 1A 2 2A 3 3A 4 4 4A	Meter VA     1.909mΩ     1.970mΩ     1.970mΩ     0.400mΩ     1.970mΩ     0.075mΩ     1.942mΩ     0.047mΩ     0.047mΩ     0.047mΩ     0.047mΩ     0.022mΩ     Select     All	24 String VA Cell Cell 0.000 V 2.252 V 0.000 V 2.257 V 0.000 V 2.255 V 0.000 V 0.255 V 0.000 V 0.0	/ 03 / 20 06 D VA Str 4 1 	24/03/15 04:17:18 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:39 24/03/15 04:16:39 24/03/15 04:16:59 24/03/15 04:17:18 24/03/15 04:
Press "Delete Test"	⊡ ∝ ≣ ∰	Record           Meter Ω           002 STRING2           08         24/03/1           07         1.939mm           07         24/03/0           06         24/03/0           07         1.986mm           04         1.978mm           03         24/03/0           03         24/03/0           04         1.978mm           05         24/03/0           1.978mm         02           02         24/03/0           1.978mm         02           04         1.978mm           05         24/03/0	String Ω           5         4           2.259 V         4           2.258 V         4           2.253 V         8           3         4           2.253 V         8           4         2.253 V           8         4           2.253 V         8           4         2.253 V           8         4           2.253 V         8           4         0           9         4	D Ω String Min Max Avg OA 1 1 1 A 2 2 A 3 3 A 4 4 A 4 4 A	Meter VA           1.909mΩ           1.970mΩ           1.939mΩ           0.400mΩ           1.970mΩ           0.075mΩ           0.047mΩ           1.936mΩ           0.090mΩ           0.990mΩ           0.022mΩ           Select All	24 String VA Cell Cell 0.000 V 2.252 V 0.000 V 2.255 V 0.000 V 2.250 V 0.000 V 2.250 V 0.000 V 2.250 V 0.000 V 2.250 V 0.000 V 2.270 V 0.000 V 2.270 V 0.000 V 2.270 V 0.000 V 2.270 V 0.000 V 2.270 V 0.000 V 2.220 V 0.000 V 2.220 V 0.000 V 2.220 V 0.000 V 2.220 V 0.000 V 2.220 V 0.000 V 0.0	/03/20 06 D VA Str 4 1 	24/03/15 04:17:18 24/03/15 04:17:18 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:31 24/03/15 04:16:49 24/03/15 04:16:49 24/03/15 04:17:07 24/03/15 04:
Press "Delete Test"	⊡ ∨A Ⅲ ☆	Record           Meter Ω           002 STRING2           08         24/03/1           07         24/03/1           06         1.939min           06         24/03/0           05         24/03/0           05         24/03/0           03         24/03/0           03         24/03/0           03         24/03/0           03         24/03/0           04         1.978min           07         24/03/0           08         24/03/0           09         24/03/0           09         24/03/0           09         24/03/0           09         24/03/0           09         24/03/0           00         24/03/0           01         1.978min           02         24/03/0           Select         Record           Meter Ω         Meter Ω	String Ω       5     4       0     2.259 V       3     4       1     2.258 V       8     4       1     2.253 V       8     4       1     2.253 V       8     4       2.253 V     8       8     4       3     4       3     4       4     5       4     5       5     6       6     6       6     7       7     8       8     8       8 <td>D Ω String Min Max Avg OA 1 1 1 A 2 2A 3 3 4 4 4 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5</td> <td>Meter VA 1.909mΩ 1.970mΩ 1.970mΩ 0.400mΩ 1.970mΩ 0.400mΩ 1.970mΩ 0.047mΩ 1.942mΩ 0.047mΩ 1.936mΩ 0.090mΩ 0.022mΩ Select All Meter VA</td> <td>24 String VA Cell Cell 0.000 V 2.252 V 0.000 V 2.255 V 0.000 V 2.257 V 0.000 V 0.000 V 2.257 V 0.000 V 0.000 V 2.257 V 0.000 V 0.0</td> <td>/ 03 / 20 06 D VA Str 4 1 </td> <td>24/03/15 04:17:18 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:31 24/03/15 04:16:49 24/03/15 04:16:49 24/03/15 04:16:49 24/03/15 04:16:49 24/03/15 04:17:07 24/03/15 04:17:07 24/03/15 04:17:07 24/03/15 04:17:03 24/03/15 04:17:07 24/03/15 04:10:03 24/03/15 04:10:07 24/03/15 04:100 24/03/15 04:10:07 24/03/15 04:10</td>	D Ω String Min Max Avg OA 1 1 1 A 2 2A 3 3 4 4 4 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5	Meter VA 1.909mΩ 1.970mΩ 1.970mΩ 0.400mΩ 1.970mΩ 0.400mΩ 1.970mΩ 0.047mΩ 1.942mΩ 0.047mΩ 1.936mΩ 0.090mΩ 0.022mΩ Select All Meter VA	24 String VA Cell Cell 0.000 V 2.252 V 0.000 V 2.255 V 0.000 V 2.257 V 0.000 V 0.000 V 2.257 V 0.000 V 0.000 V 2.257 V 0.000 V 0.0	/ 03 / 20 06 D VA Str 4 1 	24/03/15 04:17:18 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:31 24/03/15 04:16:49 24/03/15 04:16:49 24/03/15 04:16:49 24/03/15 04:16:49 24/03/15 04:17:07 24/03/15 04:17:07 24/03/15 04:17:07 24/03/15 04:17:03 24/03/15 04:17:07 24/03/15 04:10:03 24/03/15 04:10:07 24/03/15 04:100 24/03/15 04:10:07 24/03/15 04:10
Press "Delete Test"	⊡ Ω ✓▲ Ⅲ ∰ ∰	Record           Meter Ω           002 STRING2           08         24/03/1           07         24/03/1           07         24/03/0           08         24/03/0           09         24/03/0           01         1.936mt           04         24/03/0           05         24/03/0           03         24/03/0           1.978mt         24/03/0           03         24/03/0           03         24/03/0           03         24/03/0           04         1.978mt           07         24/03/0           08         24/03/0           09         24/03/0           02         Select           Record         Meter Ω           002 STRING2         24/03/0	String Ω       5     4       0     2.259 V       3     4       1     2.253 V       8     4       1     3       1     1       1     1       1     1       1     1	D Ω String Min Max Avg 0A 1 1 1A 2 2A 3 3A 4 4A 4A D Ω String D Ω String	Meter VA           1.909mΩ           1.970mΩ           1.939mΩ           0.400mΩ           1.9370mQ           0.400mΩ           1.938mΩ           0.400mΩ           1.9370mQ           0.075mQ           0.075mQ           0.047mΩ           1.936mQ           0.099mQ           0.022mQ           Select           All           Meter VA           1.909mQ	24 String VA Cell Cell 0.000 V 2.252 V 0.000 V 2.255 V 0.000 V 0.000 V 2.255 V 0.000 V 0.0	/ 03 / 20 06 D VA Str 4 1 	24/03/15 04:17:18 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:33 24/03/15 04:16:59 24/03/15 04:16:59 24/03/15 04:16:59 24/03/15 04:17:18 24/03/15 04:
Press "Delete Test"	⊡ ∝ ∞ ∭ ∰ ∰ Ω	Record           Meter Ω           002 STRING2           08         24/03/1           07         1.939mm           06         24/03/0           05         24/03/0           06         24/03/0           07         1.985mm           04         24/03/0           03         24/03/0           04         1.978mi           02         Select           Record           Meter Ω         002           02         STRING2           08         24/03/1	String Ω       5     4       5     4       1     2.258 V       5     4       2     2.253 V       8     4       1     2.253 V       8     4       2     2.253 V       8     4       1     2.253 V       8     4       2     2.253 V	D Ω String Min Max Avg OA 1 1 1A 2 2A 3 3A 4 4 4A D Ω String D Ω String	Meter VA 1.909mQ 1.970mQ 1.939mQ 0.400mQ 1.970mQ 0.075mQ 1.970mQ 0.047mQ 1.970mQ 0.047mQ 1.936mQ 0.047mQ 1.936mQ 0.022mQ Select All Meter VA	24 String VA Cell Cell 0.000 V 2.252 V 0.000 V 2.255 V 0.000 V 2.256 V 0.000 V 2.257 V 0.000 V 2.256 V 0.000 V 2.257 V 0.000 V 2.256 V 0.000 V 2.250 V 0.000 V 0.0	/ 03 / 20 06 D VA Str 4 1 	24/03/15 04:17:18 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:39 24/03/15 04:16:39 24/03/15 04:16:59 24/03/15 04:17:18 24/03/15 04:17:18 24/03/15 04:17:18 24/03/15 04:17:18 24/03/15 04:17:18 24/03/15 04:17:18 24/03/15 04:17:18 24/03/15 04:17:18 24/03/15 04:17:18 24/03/15 04:16:21
Press "Delete Test"	<ul> <li>Ω</li> <li>∨A</li> <li>Ⅲ</li> <li>₩</li> <li>Φ</li> <li>Ω</li> <li>∨A</li> </ul>	Record           Meter Ω           002 STRING2           08         24/03/1           07         24/03/1           06         24/03/0           05         24/03/0           04         1.938mi           02         24/03/0           03         24/03/0           04         1.978mi           02         24/03/0           03         24/03/0           03         24/03/0           04         1.978mi           05         24/03/0           02         Select           Record           Meter Ω         0002 STRING2           08         24/03/1           1.939mi         1.939mi           07         24/03/1           1.939mi         1.939mi           07         24/03/1           1.939mi         1.939mi	String Ω       5     4       2.259 V       5     4       2.258 V       8     4       2.253 V       8     4       String Ω       String Ω       5     4       2.259 V       5     4       2.259 V       5     4       2.259 V       5     4       2.259 V       5     4       2.258 V	D Ω String Min Max Avg OA 1 1 1A 2 2A 3 3A 4 4 A 4A 1 10 10 2 7 2A 3 3A 4 4 A 4 2 2A 3 3A 4 4 4 4 4 10 10 10 10 10 10 10 10 10 10 10 10 10	Meter VA 1.909mΩ 1.970mΩ 1.939mΩ 0.400mΩ 1.970mΩ 0.075mΩ 0.047mΩ 1.936mΩ 0.047mΩ 1.936mΩ 0.090mΩ 1.909mΩ 0.022mΩ Select All Meter VA	24 String VA Cell Cell 0.000 V 2.252 V 0.000 V 2.255 V 0.000 V 2.256 V 0.000 V 2.256 V 0.000 V 2.256 V 0.000 V 2.256 V 0.00 V 2.270 V Delete Test 24 String VA Cell Cell Cell	/03/20 06 D VA Str 4 1 	24/03/15 04:17:18 24/03/15 04:17:18 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:31 24/03/15 04:16:49 24/03/15 04:16:49 24/03/15 04:17:18 24/03/15 04:17:18 24/03/15 04:17:18 24/03/15 04:17:18 24/03/15 04:17:18 24/03/15 04:17:18 24/03/15 04:17:18 24/03/15 04:17:18 24/03/15 04:16:21 24/03/15 04:16:21
Press "Delete Test" A window will open asking "Do you want to delete	⊡ Ω VA Ⅲ ∰ ✿ Ω VA	Record           Meter Ω           002 STRING2           08         24/03/1           07         24/03/0           06         24/03/0           07         24/03/0           08         24/03/0           09         24/03/0           09         24/03/0           04         1.978mi           03         24/03/0           3         24/03/0           03         24/03/0           Select         1.978mi           002 STRING2         0           002 STRING2         24/03/1           02         24/03/1           03         24/03/1           04         1.938mi           07         24/03/1           1.939mi         0           08         24/03/1           1.939mi         24/03/1           04/04/00         1.939mi           07         24/03/1           1.947min         1.947min           06         24/03/0	String Ω       5     4       1     2.259 V       5     4       1     2.258 V       8     4       1     2.253 V       5     4       1     2.253 V       5     4       1     2.258 V       3     4       1     2.258 V       3     4	D Ω String Min Max Avg OA 1 1 1 A 2 2 A 3 3 A 4 4 A 4 A 4 A 4 A 4 A 4 A 4 A 4	Meter VA 1.909mQ 1.970mQ 1.970mQ 0.400mQ 1.970mQ 0.075mQ 0.075mQ 0.075mQ 0.047mQ 1.936mQ 0.047mQ 1.936mQ 0.022mQ Select All 1.909mQ 1.970mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.939mQ 1.9390mQ 1.939mQ 1.939mQ 1.939m	24 String VA Cell Cell 0.000 V 2.252 V 0.000 V 2.255 V 0.000 V 2.256 V 0.000 V 2.256 V 0.000 V 2.256 V 0.000 V 2.256 V 0.000 V 2.250 V 0.000 V 0.000 V 2.250 V 0.000 V	/ 03 / 20 06 D VA Str 4 1 	24/03/15 04:17:18 24/03/15 04:17:18 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:31 24/03/15 04:16:31 24/03/15 04:16:39 24/03/15 04:16:49 24/03/15 04:17:18 24/03/15 04:17:18 24/03/15 04:17:18 24/03/15 04:17:18 24/03/15 04:16:21 24/03/15 04:
Press "Delete Test" A window will open asking "Do you want to delete test?". Select "Yes" to delete the test.	⊡ Ω	Record           Meter Ω           002 STRING2           08         24/03/1           07         24/03/1           06         1.939min           06         24/03/0           07         24/03/0           08         24/03/0           09         1.986min           04         1.978min           03         24/03/0           03         24/03/0           04/03/0         Select           Record           Meter Ω         002 STRING2           08         24/03/1           07         24/03/1           07         24/03/10           1.939min         24/03/10           07         24/03/10           1.939min         24/03/10           07         24/03/10           1.936min         24/03/10           05         24/03/10	String Ω       5     4       1     2.259 V       5     4       1     2.258 V       8     4       1     2.253 V       5     4       1     2.253 V       5     4       1     2.253 V       3     4       1     2.253 V	D Ω String Min Max Avg OA 1 1 1 A 2 2 A 3 A 4 4 A 4 A 4 A 4 A 0 Ω String D Ω String D Ω String D Ω String	Meter VA 1.909mQ 1.970mQ 1.970mQ 0.400mQ 1.970mQ 0.075mQ 0.007mQ 0.047mQ 1.970mQ 0.022mQ Select All 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 0.022mQ Select All 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 0.022mQ Select 1.970mQ 1.970mQ 1.970mQ 0.022mQ Select 1.970mQ 1.970mQ 1.970mQ 0.022mQ Select 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.973mQ 1.970mQ 1.973mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ 1.970mQ	24 String VA Cell Cell 0.000 V 2.252 V 0.000 V 2.255 V 0.000 V 2.256 V 0.000 V 0.000 V 2.256 V 0.000 V	/03/20 06 D VA Str 4 1 	24/03/15 04:17:18 24/03/15 04:17:18 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:39 24/03/15 04:16:49 24/03/15 04:16:49 24/03/15 04:16:49 24/03/15 04:16:49 24/03/15 04:17:07 24/03/15 04:17:07 24/03/15 04:17:18 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:23 24/03/15 04:16:23 24/03/15 04:16:21 24/03/15 04:16:23
Press "Delete Test" A window will open asking "Do you want to delete test?". Select "Yes" to delete the test.	<ul> <li>Ω</li> <li>∨A</li> <li>Ⅲ</li> <li>¾</li> <li>Φ</li> <li>Ω</li> <li>∨A</li> <li>Ⅲ</li> <li>✓A</li> <li>✓A</li> <li>Ⅲ</li> </ul>	Record           Meter Ω           002 STRING2           08         24/03/1           07         24/03/1           06         1.939min           06         1.947min           06         1.936min           07         24/03/0           08         24/03/0           09         24/03/0           03         24/03/0           03         24/03/0           04         1.978min           07         24/03/0           08         24/03/0           09         Select           Record           Meter Ω         002           08         24/03/0           07         24/03/1           1.939min         24/03/0           02         1.936min           05         1.986min           05         1.986min           05         1.985min	String Ω       5     4       0     2.258 V       3     4       1     2.253 V       8     4       1     2.253 V       8     4       1     2.253 V       8     4       2.253 V       5     4       2.253 V       8     4       2.253 V       8     4       2.253 V       8     4       2.253 V       8     4       2.253 V	D Ω String Min Max Avg OA 1 1 1 A 2 2 A 3 3 A 4 4 A 4 4 A 5 5 0 Ω String D Ω String D Ω String D Ω String	Meter VA           1.909mΩ           1.970mΩ           1.939mΩ           0.400mΩ           1.970mΩ           0.075mΩ           0.047mΩ           1.970mΩ           0.047mΩ           1.936mΩ           0.022mΩ           Select           All           1.970mΩ           1.970mΩ           1.970mΩ           1.970mΩ           1.970mΩ           1.939mΩ           ion           Are you su           No	24 String VA Cell Cell 0.000 V 2.252 V 0.000 V 2.255 V 0.000 V	/03/20 06 D VA Str 4 1 	24/03/15 04:17:18 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:31 24/03/15 04:16:39 24/03/15 04:16:49 24/03/15 04:16:49 24/03/15 04:17:18 24/03/15 04:17:18 24/03/15 04:16:21 24/03/15 04:
Press "Delete Test" A window will open asking "Do you want to delete test?". Select "Yes" to delete the test.	⊡ Ω	Record           Meter Ω           002 STRING2           08         24/03/1           07         1.939mt           07         24/03/1           06         1.939mt           06         1.937mt           06         1.936mt           07         24/03/0           08         24/03/0           03         24/03/0           03         24/03/0           04         1.938mt           07         24/03/0           08         24/03/0           09         24/03/0           01.978mt         24/03/0           02         Select           Record           Meter Ω         002           08         24/03/0           1.939mt         24/03/0           02         1.938mt           02         24/03/0           03         1.938mt           04         24/03/0           04         1.938mt           04         24/03/0	String Ω       5     4       2.259 v       5     4       2.253 v       8       4       2.253 v       8       4       2.253 v	D Ω String Min Max Avg QA 1 1 1 A 2 2A 3 A 4 4 A 4 A 4 A 4 A 4 A 3 C 2A 3 A 3 A 4 4 A 3 C 2A 3 A 3 A 4 4 4 A 3 3 A 3 A 3 4 4 4 4 5 4 5 5 10 10 10 10 10 10 10 10 10 10 10 10 10	Meter VA  1.909m  1.970m  0.400m  0.400m  0.400m  1.970m  0.075m  0.07	24 String VA Cell Cell 0.000 V 2.252 V 0.000 V 2.255 V 0.000 V 2.257 V 0.000 V	/03/20 06 D VA Str 4 1 	24/03/15 04:17:18 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:31 24/03/15 04:16:31 24/03/15 04:16:49 24/03/15 04:16:49 24/03/15 04:16:49 24/03/15 04:16:49 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:31 24/03/15 04:16:31 24/03/15 04:16:31 24/03/15 04:16:31 24/03/15 04:16:31 24/03/15 04:16:31 24/03/15 04:16:31 24/03/15 04:16:31 24/03/15 04:16:39 24/03/15 04:16:39 24/03/15 04:16:39
Press "Delete Test" A window will open asking "Do you want to delete test?". Select "Yes" to delete the test.	<ul> <li></li></ul>	Record           Meter Ω           002 STRING2           08         24/03/1           07         24/03/0           08         24/03/0           04         1.936mi           05         24/03/0           05         24/03/0           03         24/03/0           04         1.978mi           03         24/03/0           04         1.978mi           07         24/03/0           08         24/03/0           092         Select           Record           Meter Ω         0002 STRING2           002         STRING2           07         24/03/0           1.936mi         24/03/0           03         24/03/0           1.936mi         24/03/0           04         1.936mi           02         24/03/0           1.936mi         24/03/0           03         24/03/0           1.936mi         24/03/0           03         24/03/0           1.936mi         24/03/0           03         24/03/0           1.978mi         24/03/0 <td< td=""><td>String Ω       5     4       2.258 v       3     4       2.253 v       8     4       2.255 v       5     4       2.255 v       5     4       2.255 v       5     4       2.253 v       8     4       2.253 v</td><td>D Ω String Min Max Avg QA 1 1 1A 2 2A 3 3A 4 4A D Ω String D Ω String Quest 3A 4 4A</td><td>Meter VA  1.909mQ  1.970mQ  0.400mQ  0.400mQ  0.400mQ  0.075mQ  0.075mQ  0.075mQ  0.047mQ  0.047mQ  1.936mQ  0.022mQ  Select All  1.909mQ  1.909mQ  1.909mQ  1.939mQ  1.939mQ  0.022mQ  No  0.090mQ  1.900mQ  1.90</td><td>24 String VA Cell Cell 0.000 V 2.252 V 0.000 V 2.255 V 0.000 V 2.255 V 0.000 V 2.255 V 0.000 V 2.270 V 0.000 V 2.270 V Cell Cell Cell Cell Cell Cell Cell Cel</td><td>/03/20 06 D VA Str 4 1 </td><td>24/03/15 04:17:18 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:39 24/03/15 04:16:39 24/03/15 04:16:59 24/03/15 04:17:18 24/03/15 04:17:18 24/03/15 04:16:21 24/03/15 04:16:31 24/03/15 04:16:39 24/03/15 04:16:59 24/03/15 04:16:59 24/03/15 04:16:59 24/03/15 04:17:18 24/03/15 04:16:59 24/03/15 04:16:59 24/03/15 04:17:18 24/03/15 04:16:59</td></td<>	String Ω       5     4       2.258 v       3     4       2.253 v       8     4       2.255 v       5     4       2.255 v       5     4       2.255 v       5     4       2.253 v       8     4       2.253 v	D Ω String Min Max Avg QA 1 1 1A 2 2A 3 3A 4 4A D Ω String D Ω String Quest 3A 4 4A	Meter VA  1.909mQ  1.970mQ  0.400mQ  0.400mQ  0.400mQ  0.075mQ  0.075mQ  0.075mQ  0.047mQ  0.047mQ  1.936mQ  0.022mQ  Select All  1.909mQ  1.909mQ  1.909mQ  1.939mQ  1.939mQ  0.022mQ  No  0.090mQ  1.900mQ  1.90	24 String VA Cell Cell 0.000 V 2.252 V 0.000 V 2.255 V 0.000 V 2.255 V 0.000 V 2.255 V 0.000 V 2.270 V 0.000 V 2.270 V Cell Cell Cell Cell Cell Cell Cell Cel	/03/20 06 D VA Str 4 1 	24/03/15 04:17:18 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:39 24/03/15 04:16:39 24/03/15 04:16:59 24/03/15 04:17:18 24/03/15 04:17:18 24/03/15 04:16:21 24/03/15 04:16:31 24/03/15 04:16:39 24/03/15 04:16:59 24/03/15 04:16:59 24/03/15 04:16:59 24/03/15 04:17:18 24/03/15 04:16:59 24/03/15 04:16:59 24/03/15 04:17:18 24/03/15 04:16:59
Press "Delete Test" A window will open asking "Do you want to delete test?". Select "Yes" to delete the test.	<ul> <li></li></ul>	Record           Meter Ω           002 ST RING2           08         24/03/1           07         24/03/1           06         24/03/0           07         24/03/0           05         24/03/0           05         24/03/0           03         1.978mi           04         1.978mi           02         24/03/0           03         1.978mi           04         24/03/0           03         24/03/0           04         1.978mi           05         24/03/0           1.9386mi         24/03/0           02         String2           002         STRING2           002         STRING2           01         1.939mi           02         24/03/0           1.936mi         24/03/0           1.936mi         24/03/0           1.937mi         24/03/0           03         24/03/0           1.978mi         24/03/0           03         24/03/0           1.978mi         24/03/0           03         24/03/0           1.978mi         24/03/0	String Ω       5     4       2.258 V       5     4       2.258 V       8     4       2.253 V       8     4       2.255 V       5     4       2.255 V       5     4       2.255 V       5     4       2.255 V       5     4       2.255 V       6     4       2.253 V       8       4       2.253 V       8       4       2.253 V       7	D $\Omega$ String Min Max Avg OA 1 1 1 A 2 2 A 3 3 A 4 4 A D $\Omega$ String D $\Omega$ String Quest Min Max Avg Quest	Meter VA  1.909mQ  1.970mQ  1.970mQ  0.400mQ  0.400mQ  0.400mQ  0.075mQ  0.075mQ  0.075mQ  0.047mQ  1.936mQ  0.022mQ  Select All  Select All  1.909mQ  1.970mQ  1.939mQ  1.970mQ  1.939mQ  1.920mQ  1.939mQ  1.920mQ  1.939mQ  0.022mQ  No	24 String VA Cell Cell 2252 V 0.000 V 2.252 V 0.000 V 2.255 V 0.000 V 2.255 V 0.000 V 2.255 V 0.000 V 2.270 V 0.000 V 2.270 V 0.000 V Cell Cell Cell Cell Cell Cell Cell Cel	/03/20 06 D VA Str 4 1 	24/03/15 04:17:18 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:21 24/03/15 04:16:39 24/03/15 04:16:39 24/03/15 04:16:39 24/03/15 04:16:49 24/03/15 04:16:49 24/03/15 04:16:49 24/03/15 04:16:49 24/03/15 04:16:49 24/03/15 04:16:21 24/03/15 04:16:39 24/03/15 04:16:48 24/03/15 04:16:49 24/03/15 04:

Deleting recorded meter data

# 21.3 Deleting a string configuration

This allows deletion of an entire string configuration.

	A	Record			24	/03/21 04:31:	20 📶 🛛 📢 >>)) 💷 🕨
	Ŀ	Meter Ω	String Ω	D Ω String Mete	r VA String VA	D VA String	Current
		24/02/21 0	3,47,72	07.72m0	0.000.1/	22.4.90	_
	Ω	24/03/21 0	2:16:24	07.74mΩ	0.000 V	21.8 °C	
		24/03/21 0	2:16:13	07.69mΩ	0.000 V	21.6 °C	
On the BITE5 ADVANCED select the record ICON.							
	VA						
	==						
	0	Record			24	/03/21 04:31:	25 📶 🗶 📣) 🎟 🕨
	⊡	Meter $\Omega$	String Ω	DΩ String Mete	r VA String VA	D VA String	Current
		Calash sheke a					
		select string.					
		SMIT 1		Lead Ack	3 VF1 24 Cell	2.200/ 2	.000/ 2.300 V 500/ 03.00mO
		at publica		Lead Acid	3CC-3M	2.200/ 2	.000/ 2.300 V
	VA	STRINGZ		50 Ah	4 Cell	1.900/ 2.	300/ 2.500mΩ
		NO TERM M	ODE	Lead Acid	3CC-3M	2.200/2	.000/ 2.300 V
Select "String "				50 Ah	6 Cell	2 200/ 2.	2007 2.500mΩ
	:==	B5A LEAD AN	NTIMONY	50 Ah	6 Cell	1.900/ 2.	500/ 03.00mΩ
		B5A LEAD CA	UCTUM S	Lead Acid	i LC	2.200/ 2	.000/ 2.300 V
	$\sim$			50 Ah	6 Cell	10.00/20	L00/ 030.0mΩ
		B5A LEAD CA	ALCIUM P	Lead Ack	) LL 6 Cell	2.200/ 2	.000/ 2.300 V
				Ni-Cd	NICD	1.300/ 1	.000/ 1.500 V
	•	B5A NICD					Delete
		Select	Add.	Сору	Edlt		String
	â	Record			24	/03/21 04:31:	42 🛗 💃 📢 🗤) 💷 🕨
		Meter Ω	String Ω	D Ω String Mete	r VA String VA	D VA String	Current
		Select string.					
	Ω			NI-Cd	NICD	1.300/1	.000/ 1.500 V
		B5A NICD		20 Ah	6 Cell	10.00/ 20	.00/ 030.0mΩ
	140	PARALLEL		Lead Acid	STRAP	12.00/1	0.50/ 15.00 V
	VA			100 Ah	1 Cell	10.00/20	L00/ 030.0mΩ
Salact desired string to delate		SIEMENS TE	ST	50 Ah	6 Cell	1.887/ 2.	000/ 2.222m0
Select desiled stilling to delete.	:==	PATTERY PA	cv	Lead Acid	1 24	26.40/ 2	5.40/ 27.40 V
		DATIERT		100 Ah	1 Cell	10.00/ 20	1.00/ 030.0mΩ
		VONLY		Lead Acid	1 LA	2.200/2	.100/ 2.300 V
	$\sim$			50 All	12 Cell	10.00/ 20	1.007 030.01102
	-						
	•	Coloct	hhA.	Conv	Edit		Delete
		Jeleut	huu	copy	cont		String
	0	Record			24	/03/21 04:31:	42 🗐 🖹 📣 🕪 💷 🖿
	⊡	Meter $\Omega$	String Ω	DΩString Mete	r VA String VA	D VA String	Current
		Colored at the second					
		select string.			hirab		
		B5A NICD		NI-Cd 20.4b	NICD 6 Cell	1.300/1	.000/ 1.500 V
		DADALLEL		Lead Acid	STRAP	12.00/ 1	0.50/ 15.00 V
	VA	PAKALLEL		100 Ah	1 Cell	10.00/ 20	.00/ 030.0mΩ
		SIEMENS TE	ST	Lead Acid	LA CON	2.200/ 2	.000/ 2.300 V
Select Delete String	:			Lead Acid	d 24	26.40/ 2	5.40/ 27.40 V
		BATTERY PA	СК	100 Ah	1 Cell	10.00/ 20	.00/ 030.0mΩ
		VONLY		Lead Acid	LA LA	2.200/ 2	.100/ 2.300 V
	$\sim$			50 Ah	12 Cell	10.00/ 20	1.007 030.0mΩ
	•	Solect	6.44	Come	Edit		Delete
		select	Aud.		con		String
		Record				/03/21 04-24-	42 🕮 🖈 🛋 🗤 📖 🖓
	Ô	Meter O	String O	D.O.String Mate	cVA String VA	D VA Series	Current
		Weter 17	Suring 12	ousuing Mete	r va String VA	D VA String	current
		Select string.					
	12	B5A NICD		NI-Cd	NICD	1.300/ 1	.000/ 1.500 V
				20 Ah	6 Cell	10.00/ 20	L00/ 030.0mΩ
A window will open asking "Do you want to delete the	VA	PARALLEL		Question		12.00/1	0.30/ 13.00 v
		STEMENIC TO	ST	De	elete the Other	2.200/ 2	.000/ 2.300 V
string?". Select "Yes" to delete the test.		STEWENS IE	51	Do you want to d	elete the String?	1.887/ 2.	000/ 2.222mΩ
		BATTERY PA	ск	No	Vec	26.40/2	5.40/ 27.40 V
		WONKY				2.200/ 2	.100/ 2.300 V
	$\sim$	VONLY		50 Ah	12 Cell	10.00/ 20	l.00/ 030.0mΩ

# 22. Data Logging

The BITE5 Advanced provides data logging capabilities. This allows for prolonged automatic logging of impedance, voltage and temperature values.

#### 22.1 Logging Data



#### **Data Logging**

	Impedance - Logger 24/03/21 04:49:04 💾 🖹 📢 1) 🎟
Select the "Primary" value to record. (Impedance, Voltage or Temperature)	Meter         Stilling         Discillarge         Cogget           Ω         6.000        Ω         4.000         0.001 V           Q         2.000         Start Time        //           Q         000.0u          Q           Q         000.0u        /        /           -2.000         Record Length        d::           -2.000         Voltage             Yoltage           Num of Samples           -5.000         -             Yoltage
Select the "Secondary" value to record. (Impedance, Voltage or Temperature)	Impedance - Logger       24/03/21 04:49:10 ™ \$ ◀ 𝔅) ♥         Meter       String       Discharge       Logger         6.000       Ω         4.000       4.000       0.001 V         2.000       2000       Start Time         00.0u      //         -2.000       Impedance         -4.000       Impedance         -4.000       Temperature         Primary       Secondary       Interval       Range       Load       Start
Select "Interval" and then desired recording interval.	Impedance - Logger       24/03/21 04:49:16 (□) ≥ < ↓)) (□)         Meter       String       Discharge       Logger         6.000      Ω       4.000       4.000       0.000 V         4.000       2.000       Start Time      //         000.0u       1 min      //      //         -2.000       2 min      /      /         -2.000       2 min      /      /         -4.000       10 min      /      /         -6.000       30 min      /       Num of Samples         -6.000       -       30 min      /
Select "Range" and then desired recording range.	Impedance - Logger       24/03/21 04:49:21 () * < √)) ()         Meter       String       Discharge       Logger         Ω       4.000       3mΩ       4.000       Ω         4.000       3mΩ       30mΩ       0.000 V       2.000         000.0u       300mΩ       300mΩ           -2.000       3Ω       300           4.000       300Ω       300Ω        Num of Samples

#### **Data Logging**

24/03/15/03:08:17 🚆 🚽 📢 🏢



Impedance - Meter

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#### 22.2 Viewing a Recorded Data Log

Select the Ohm ( $\Omega$ ) ICON.

When the Ohm  $(\Omega)$  ICON is selected to configures the unit to record ohmic values, voltage and temperature.

String Ω VA Ω List is empty 100 150 200 250 300  $\sim$ 0.005 v °C ¢ 24/03/21 04:48:59 🛗 Impedance - Loggei ) III) ô Meter String Discharge Logge 6.000 6.000 --.- Ω Ω 4.000 4.000 0.001 V 2.000 2.000 VA Start Time --/--/--000.00 000.00 --:--:---2.000 Record Length -2.000 --d:--:--:--4.000 -4.000 Ŷ Num of Samples -6.000 -6.000

Select "Logger"

#### **Data Logging**



# 23. RFID Tags

The BITE5 ADVANCED supports the use of RFID tags. A tag can be configured and placed on a battery string. The operator can then scan the RFID tag with the BITE5 ADVANCED and then proceed to start testing.

#### 23.1 Configuring a RFID tag. for new battery string configuration.

	Impedance - Meter 24/03/13 02:13:42 <sup>™</sup> ◀ ››) III Meter String Discharge Logger
Select the RECORD ICON.	Ω VA 50 100 150 200 250 300 50 100 150 200 250 300 0.001 v °C C Lint Range Auto Mold O-Adj
Select "String $\Omega$ ".	Record       24/03/13 02:13:50 ● ▲)) ●         Meter Ω       String Ω       D Ω String       Meter VA       String VA       D VA String       Current         Ω       ▲       ▲       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓       ↓
Select "Add"	Record         24/03/13 02:13:56         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *         *
Program the fields in the in the string configuration (See the String Configuration Section of this manual for details)	Record       24/03/13 02: 14: 05 ■ \$ ◀ 𝔅) ■          Meter Ω       String Ω       D Ω String       Meter VA       String VA       D VA String       Current         Ω       Idx       004 ▼       Name

When complete scan the RFID tag by placing near the back on the BITE5 ADVANCED. An audible beep will be made when the tag is read.



The RFID tag number will now show up on the configuration screen. Now when this tag is scanned this battery string configuration will be called.

Select "OK" to save.

Ľ	Meter Ω	String Ω	D Ω Strin						
0	New/Edit S	tring							
2	Idx	001 🔻	Name	SMIT 1					
/A	Туре	Lead Acid	Model	VF1					
	Cell	024	Capacity	0050	Ah 🔻		RFID	022	42543
	Ref Ω	2.000	mΩ	Ref V	2.200	۷	Strap	100	%
Ŷ	Warning	2.500	mΩ	Lower	2.000	۷			
	Alarm	3.000	mΩ	Upper	2.300	۷			
								2 I	Cancel
								`	
<b>↔</b>	Record					24	/03/22 02	: 27 : 26	🕮 🛠 ┥ 🗤 🎟 🗆
÷	Record Meter Ω	String Ω	D Ω Strin	g Meter	VA String	24. VA	/ 03 / 22 02 D VA Str	` ::27:26 ing (	🔲 💲 ┥ 🗤 🏛 Current
••	Record Meter Ω New/Edit S	String Ω tring	D Ω Strin	g Meter	VA String	24. VA	/ 03 / 22 02 D VA Str	` ::27:26  ing (	🎒 🤾 ◀ ơ) 🔟 Current
÷ ∂	Record Meter Ω New/Edit S Idx	String Ω tring 001 🔻	D Ω Strin Name	g Meter SMIT 1	VA String	24. VA	/03/22_02 D VA Str	` ::27:26 ing (	Current
Ω /A	Record Meter Ω New/Edit S Idx Type	String Ω tring 001 ▼ Lead Aclor	D Ω Strin Name Model	g Meter SMIT 1 VF1	VA String	24. VA	/03/22 02 D VA Str	` :: 27 : 26 ing (	Eurrent
Ω /A	Record Meter Ω New/Edit S Idx Type Cell	String Ω tring 001 ▼ Lead Aclor 024	D Ω Strin Name Model Capacity	g Meter SMIT 1 VF1 0050	VA String Ah 🔻	24. VA	/03/22 02 D VA Str	` :: 27 : 26 ing ( 022	© * <b>4</b> ∞) @ Current 242543
Ω Ω	Record Meter Ω New/Edit S Idx Type Cell Ref Ω	String Ω tring 001 ▼ Lead Aclor 024 2.000	D Ω Strin Name Model Capacity mΩ <b>v</b>	g Meter SMIT 1 VF1 0050 Ref V	VA String Ah <b>v</b> 2.200	24 VA	COMPARENT CONTRACTOR C	022 100	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)
Ω Ω /A	Record Meter Ω New/Edit S Idx Type Cell Ref Ω Warning	String Ω tring 001 ▼ Lead Actor 024 2.000 2.500	D Ω Strin Name Model Capacity mQ <del>y</del>	g Meter SMIT 1 VF1 0050 Ref V Lower	<ul> <li>VA String<sup>1</sup></li> <li>Ah ▼</li> <li>2.200</li> <li>2.000</li> </ul>	24 VA V	/03/22 02 D VA Str RFID Strap	022 100	242543 %
	Record Meter Ω New/Edit S Idx Type Cell Ref Ω Warning Alarm	String Ω tring 001 ▼ Lead Actor 024 2.000 2.500 3.000	D Ω Strin Name Model Capacity mΩr mΩr	g Meter SMIT 1 VF1 0050 Ref V Lower Upper	<ul> <li>VA String</li> <li>Ah▼</li> <li>2.200</li> <li>2.000</li> <li>2.300</li> </ul>	24 VA V V	roo / 22 02 D VA Str RFID Strap	022 100	
	Record Meter Ω New/Edit S Idx Type Cell Ref Ω Warning Alarm	String Ω tring 001 ▼ Lead Actor 024 2.000 2.500 3.000	D Ω Strin Name Model Capacity mΩr mΩr	g Meter SMIT 1 VF1 00500 Ref V Lower Upper	<ul> <li>VA String<sup>*</sup></li> <li>Ah ▼</li> <li>2.200</li> <li>2.000</li> <li>2.300</li> </ul>	24 VA V V	ro3/22 02 D VA Str RFID Strap	022 100	

24/03/22/02:27:26 🛗 🎗 📢) 🛄

# 23.2 Configuring a RFID tag. for an existing battery string configuration.

	Record Mater D	String O	D O String	Motor VA	24 String 1/4	/03/22 02:27:	: 13 💾 💃 📢 ə)) 🎟 🖬
	24/03/21 0	2:17:23	07.73mΩ	0.1	300 V	22.4 °C	corrent
	Q 24/03/21 0 24/03/21 0	2:16:24	07.74mΩ	0.0	V 000	21.8 °C	
	24/05/210	2.10.15	07.0511122	0.	00 4	21.0 C	
	VA						
Select the RECORD ICON.							
	ай III III III III III III III III III I						
	*	Multi	iple Se	lect		Delete	
		select	tion	All		Record	
	Record				24	/03/22 02:27:	:18 💾 🧏 📢 i) 🂷 i
	Meter Ω	String Ω	$D \Omega$ String	Meter VA	String VA	D VA String	Current
	Select string.						000 (0.000)
	SMIT 1		Le	ad Acid 50 Ah	VF1 24 Cell	2.200/ 2 2.000/ 2.	2.000/ 2.300 V 500/ 03.00mΩ
	VA STRING2		Le	ad Acid 50 Ah	3CC-3M	2.200/2	2.000/ 2.300 V 300/ 2.500m0
	NO TERM M	ODE	Le	ad Acid	3CC-3M	2.200/ 2	2.000/ 2.300 V
Select "String $\Omega$ ".		TIMONY	Le	50 Ah ad Acid	6 Cell LA	1.900/ 2. 2.200/ 2	200/ 2.500mΩ 2.000/ 2.300 V
	BSA LEAD AN	TIMONT		50 Ah ad Acid	6 Cell	1.900/2.	500/ 03.00mΩ
	B5A LEAD CA	ALCIUM S	Le	50 Ah	6 Cell	10.00/ 20	0.00/ 030.0mΩ
	B5A LEAD CA	ALCIUM P	Le	ad Acid 50 Ah	LC 6 Cell	2.200/ 2 10.00/ 20	1.000/ 2.300 V 3.00/ 030.0mΩ
	B5A NICD			Ni-Cd	NICD	1.300/ 1	.000/ 1.500 V
	Select	Add	. Co	ру	Edit		Delete String
	Decert				24	(02/20 02:27-	
	Meter Ω	String Ω	D Ω String	Meter VA	String VA	D VA String	Current
	Select string.						
	Ω Select string.		Le	ad Acid	VF1	2.200/ 2	.000/ 2.300 V
	Ω Select string. SMIT 1		Le	ad Acid 50 Ah ad Acid	VF1 24 Cell 3CC-3M	2.200/ 2 2.000/ 2. 2.200/ 2	.000/ 2.300 V 500/ 03.00mΩ .000/ 2.300 V
	Ω Select string. SMIT 1 STRING2		Le	ad Acid 50 Ah ad Acid 50 Ah ad Acid	VF1 24 Cell 3CC-3M 4 Cell 3CC-3M	2.200/ 2 2.000/ 2. 2.200/ 2 1.900/ 2. 2.200/ 2	000/ 2.300 V 500/ 03.00mΩ 000/ 2.300 V 300/ 2.500mΩ 000/ 2.300 V
Select the desired sting.	Ω Select string. SMIT 1 VA STRING2 NO TERM M	ODE	Le Le	ad Acid 50 Ah ad Acid 50 Ah ad Acid 50 Ah	VF1 24 Cell 3CC-3M 4 Cell 3CC-3M 6 Cell	2.200/ 2 2.000/ 2. 2.200/ 2. 1.900/ 2. 2.200/ 2 1.900/ 2.	1.000/ 2.300 V 500/ 03.00mΩ 1.000/ 2.300 V 300/ 2.500mΩ 1.000/ 2.300 V 200/ 2.500mΩ
Select the desired sting.	Ω     Select string.       SMIT 1     STRING2       NO TERM M     B5A LEAD AN	ODE NTIMONY	Le Le Le	ad Acid 50 Ah ad Acid 50 Ah ad Acid 50 Ah ad Acid 50 Ah	VF1 24 Cell 3CC-3M 4 Cell 3CC-3M 6 Cell LA 6 Cell	2.200/ 2 2.000/ 2. 2.200/ 2 1.900/ 2. 2.200/ 2 1.900/ 2. 2.200/ 2 1.900/ 2.	.000/ 2.300 V 50D/ 03.00mΩ .000/ 2.300 V 300/ 2.500mΩ .000/ 2.500mΩ .000/ 2.500mΩ .000/ 2.300 V 500/ 03.00mΩ
Select the desired sting.	Ω     Select string.       SMIT 1     STRING2       VA     STRING2       NO TERM M     B5A LEAD AT       B5A LEAD AT	ODE NTIMONY ALCIUM S	Le Le Le Le	ad Acid 50 Ah ad Acid 50 Ah ad Acid 50 Ah 50 Ah ad Acid 50 Ah	VF1 24 Cell 3CC-3M 4 Cell 3CC-3M 6 Cell LA 6 Cell LC 6 Cell	2.200/ 2 2.000 / 2. 2.200 / 2 1.900 / 2. 2.200 / 2 1.900 / 2. 2.200 / 2 1.900 / 2. 2.200 / 2 1.000 / 2	1.000/ 2.300 V 500/ 03.00mΩ 1.000/ 2.300 V 300/ 2.300 V 200/ 2.500mΩ 1.000/ 2.300 V 500/ 03.00mΩ 1.000/ 2.300 V 500/ 03.00mΩ
Select the desired sting.	Ω Select string. SMIT 1 VA STRING2 NO TERM M B5A LEAD AI B5A LEAD C/ B5A LEAD C/	ODE NTIMONY ALCIUM S ALCIUM P	Le Le Le Le Le	ad Acid 50 Ah ad Acid 50 Ah ad Acid 50 Ah ad Acid 50 Ah ad Acid 50 Ah ad Acid 50 Ah	VF1 24 Cell 3CC-3M 4 Cell 3CC-3M 6 Cell LA 6 Cell LC 6 Cell LC 6 Cell LC	2.200/ 2 2.000/ 2. 2.200/ 2 1.900/ 2. 2.200/ 2 1.900/ 2. 2.200/ 2 1.900/ 2. 2.200/ 2 1.900/ 2. 2.200/ 2 2.200/ 2 2.200/ 2	1.000/ 2.300 V 500/ 3.00mΩ 1.000/ 2.300 V 200/ 2.500mΩ 1.000/ 2.300 V 200/ 2.500mΩ 1.000/ 2.300 V 500/ 03.00mΩ 1.000/ 2.300 V 1.000/ 2.300 V
Select the desired sting.	Ω     Select string.       SMIT 1     SMIT 1       VA     STRING2       NO TERM M     B5A LEAD AI       B5A LEAD CI     B5A LEAD CI       B5A LEAD CI     B5A LEAD CI	ODE NTIMONY ALCIUM S ALCIUM P	Le Le Le Le	ad Acid 50 Ah ad Acid 50 Ah ad Acid 50 Ah ad Acid 50 Ah ad Acid 50 Ah ad Acid 50 Ah ad Acid 50 Ah Ni-Cd	VF1 24 Cell 3CC-3M 4 Cell 3CC-3M 6 Cell LA 6 Cell LC 6 Cell LC 6 Cell NICD	2.200/ 2 2.000/ 2 2.200/ 2 2.200/ 2 2.200/ 2 1.900/ 2 2.200/ 2 1.900/ 2 2.200/ 2 10.00/ 20 2.200/ 2 10.00/ 20 1.300/ 1	2000/ 2.200 V 500/ 03.00mΩ 2000/ 2.500 W 300/ 2.500 MΩ 2000/ 2.500 MΩ 200/ 2.500 MΩ 200/ 2.500 MΩ 200/ 03.00mΩ 200/ 030.0mΩ 200/ 030.0mΩ 2.00/ 030.0mΩ
Select the desired sting.	Ω     Select string,       SMIT 1     STRING2       VA     STRING2       NO TERM M       BSA LEAD AT       BSA LEAD CT       BSA LEAD CT       BSA LEAD CT       SEALEAD CT	ODE NTIMONY ALCIUM S ALCIUM P	Le Le Le Le Le	ad Acid 50 Ah ad Acid 50 Ah ad Acid 50 Ah ad Acid 50 Ah ad Acid 50 Ah ad Acid 50 Ah ad Acid 50 Ah NI-Cd	VF1 24 Cell 3CC-3M 4 Cell CC-3M 6 Cell LA 6 Cell LC 6 Cell LC 6 Cell NICD Edft	2.200/ 2 2.200/ 2 2.200/ 2 2.200/ 2 2.200/ 2 1.900/ 2 2.200/ 2 1.900/ 2 2.200/ 2 10.00/ 20 2.200/ 2 10.00/ 20 1.300/ 1	000/ 2.300 V 500/ 03.00mΩ 0.00/ 2.300 V 200/ 2.500mΩ 0.00/ 2.300 V 200/ 2.500mΩ 0.00/ 2.300 V 0.00/ 2.30
Select the desired sting.	Ω     Select string.       SMIT 1     STRING2       NO TERM M     B5A LEAD AI       B5A LEAD C/     B5A LEAD C/       B5A LEAD C/     Select	ODE NTIMONY ALCIUM S ALCIUM P Add	Le Le Le Le Le	ad Acid 50 Ah ad Acid 50 Ah ad Acid 50 Ah ad Acid 50 Ah ad Acid 50 Ah ad Acid 50 Ah Ni-Cd py	VF1 24 Cell 3CC-3M 6 Cell LA 6 Cell LC 6 Cell LC 6 Cell NICD Edit	2.200/ 2 2.000/ 2. 2.200/ 2 1.900/ 2. 2.200/ 2 1.900/ 2. 2.200/ 2 1.900/ 2. 2.200/ 2 1.900/ 2. 2.200/ 2 1.0.00/ 20 1.300/ 1	2000/ 2.300 V 500/ 03.00mΩ 2000/ 2.300 V 200/ 2.500mΩ 2000/ 2.300 V 200/ 2.300 V 200/ 2.300 V 500/ 03.00mΩ 2000/ 2.300 V 0.00/ 03.00mΩ 2.000/ 2.300 V 2.000/ 2.000 V 2.0000/ 2.000 V 2.000/ 2.000
Select the desired sting.	Ω     Select string.       SMIT 1     STRING2       NO TERM M     B5A LEAD A/       B5A LEAD C/     B5A LEAD C/       B5A LEAD C/     B5A LEAD C/       Select     Select	ODE VTIMONY ALCIUM S ALCIUM P Add	Le Le Le Le Le	ad Acid S0 Ah ad Acid S0 Ah ad Acid S0 Ah ad Acid S0 Ah ad Acid S0 Ah ad Acid S0 Ah Ni-Cd py	VF1 24 Cell 3CC-3M 4 Cell 3CC-3M 6 Cell LC 6 Cell LC 6 Cell LC 6 Cell LC 6 Cell NICD EdIt	2.200/ 2 2.000/ 2 2.200/ 2 1.900/ 2 2.200/ 2 1.900/ 2 2.200/ 2 1.900/ 2 2.200/ 2 2.200/ 2 10.00/ 20 1.300/ 1	1000/ 2.300 V 500/ 3.00mΩ 1000/ 2.300 V 200/ 2.500mΩ 1000/ 2.300 V 200/ 2.500mΩ 1000/ 2.300 V 500/ 03.00mΩ 1000/ 2.300 V 1.000/ 2.300 V 1.000/ 2.300 V 1.000/ 2.300 V Delete String 18 <sup>(1)</sup> × ↓) (1)
Select the desired sting.	Ω     Select string.       SMIT 1     STRING2       NO TERM M     B5A LEAD AI       B5A LEAD C/     B5A LEAD C/	ODE VTIMONY ALCIUM S ALCIUM P Add String Q	Le Le Le Le Le D Ω String	ad Acid S0 Ah ad Acid S0 Ah ad Acid S0 Ah ad Acid S0 Ah ad Acid S0 Ah ad Acid S0 Ah ad Acid S0 Ah Ni-Cd Py	VF1 24 Cell 3CC-3M 4 Cell 3CC-3M 6 Cell LA 6 Cell LC 6 Cell LC 6 Cell LC 6 Cell LC 6 Cell LC 8 Cell LC C 8 Cell LC 8 CEL C 8 CEL C 2 CEL C 2 CEL C 2 CEL C 2 CEL C 2 CEL C C C C	2.200/ 2 2.000/ 2. 2.200/ 2 1.900/ 2. 2.200/ 2 1.900/ 2. 2.200/ 2 1.900/ 2. 2.200/ 2 10.00/ 20 10.00/ 20 1.300/ 1 1.300/ 1	1.000/ 2.300 V 500/ 3.00mΩ 1.000/ 2.300 V 200/ 2.500mΩ 1.000/ 2.300 V 200/ 2.500mΩ 1.000/ 2.300 V 500/ 03.00mΩ 1.000/ 2.300 V 1.000/ 1.500 V 1.000/ 1.500 V 1.000/ 1.500 V 1.000/ 1.500 V 1.000/ 2.300 V 1.000/ 1.500 V 1.000/ 1.000 V 1.000
Select the desired sting.	Ω     Select string.       SMIT 1     STRING2       NO TERM M     B5A LEAD AI       B5A LEAD AI     B5A LEAD CI       B5A LEAD CI     B5A LEAD CI       SE SA NICD     Select       C     Record Meter Ω       Ω     Select string.	ODE VTIMONY ALCIUM S ALCIUM P Add String Ω	Le Le Le Le D Ω String	ad Acid S0 Ah ad Acid S0 Ah ad Acid S0 Ah ad Acid S0 Ah ad Acid S0 Ah ad Acid S0 Ah Ni-Cd Ni-Cd Meter VA	VF1 24 Cell 3CC-3M 4 Cell 3CC-3M 6 Cell LA 6 Cell LC 6 Cell LC 6 Cell NICD Edit 24 String VA	2.200/ 2 2.000/ 2 2.200/ 2 2.200/ 2 1.900/ 2 2.200/ 2 1.900/ 2 2.200/ 2 1.900/ 2 2.200/ 2 10.00/ 20 1.000/ 20 1.300/ 1 1.300/ 1	1.000/ 2.300 V 500/ 3.00mΩ 1.000/ 2.300 V 200/ 2.500mΩ 1.000/ 2.300 V 200/ 2.500mΩ 1.000/ 2.300 V 500/ 03.00mΩ 1.000/ 2.300 V 1.000/ 2.300 V Delete String 18 (1) \$ ◀ N) (1) Current
Select the desired sting.	Ω     Select string,       SMIT 1     SMIT 1       VA     STRING2       NO TERM M     B5A LEAD AT       B5A LEAD AT     B5A LEAD AT       B5A LEAD C     B5A LEAD C       B5A LEAD C     B5A LEAD C       SA LEAD C     B5A LEAD C       B5A LEAD C     B5A LEAD C<	ODE VITIMONY ALCIUM S ALCIUM P Add String Ω	Le Le Le Le Le Le Le Le Le Le	ad Acid S0 Ah ad Acid 50 Ah ad Acid 50 Ah ad Acid 50 Ah ad Acid 50 Ah NI-Cd Ply Meter VA ad Acid 50 Ah	VF1 24 Cell 3CC-3M 4 Cell LA 6 Cell LC 6 Cell LC 6 Cell NICD Edlt 24 String VA VF1 24 Cell	2.200/ 2 2.000/ 2 2.200/ 2 2.200/ 2 1.900/ 2 2.200/ 2 1.900/ 2 2.200/ 2 10.00/ 2 2.200/ 2 1.300/ 1 1.300/ 1 03/ 22 02:27: D VA String 2.200/ 2 2.200/ 2	1.000/ 2.300 V 500/ 3.00mΩ 1.000/ 2.300 V 200/ 2.500mΩ 1.000/ 2.300 V 200/ 2.500mΩ 1.000/ 2.300 V 1.000/ 2.300 V 1.000/ 2.300 V 1.000/ 2.300 V Delete String 118 (1) \$ ↓ (1) (1) Current 1.000/ 2.300 V 500/ 0.300mΩ
Select the desired sting.	Ω     Select string.       SMIT 1     SMIT 1       VA     STRING2       NO TERM M     B5A LEAD AT       B5A LEAD AT     B5A LEAD AT       B5A LEAD C     B5A LEAD C       B5A LEAD C     B5A LEAD C	ODE NTIMONY ALCIUM S ALCIUM P Add String Q	Le Le Le Le Le Le Le Le Le Le	ad Acid S0 Ah ad Acid S0 Ah ad Acid S0 Ah ad Acid S0 Ah ad Acid S0 Ah NI-Cd Py Meter VA ad Acid S0 Ah ad Acid S0 Ah	VF1 24 Cell 3CC-3M 4 Cell LA 6 Cell LC 6 Cell LC 6 Cell NICD EdIt., 24 String VA VF1 24 Cell 3CC-3M 4 Cell	2.200/ 2 2.000/ 2. 2.200/ 2 2.200/ 2 2.200/ 2 2.200/ 2 1.900/ 2. 2.200/ 2 2.200/ 2 2.200/ 2 10.00/ 20 1.300/ 1 (03/22 02:27: D VA String 2.200/ 2 2.200/ 2 2.200/ 2 2.200/ 2 1.900/ 2.	2.000/ 2.300 V 500/ 03.00mΩ 1.000/ 2.300 V 2.000/ 2.300 V 2.000/ 2.300 V 2.000/ 2.300 V 2.000/ 2.300 V 0.00/ 2.300 V 0.00/ 030.0mΩ 1.000/ 2.300 V Delete String 18 (1) × ◀ )) (1) Current 2.000/ 2.300 V 500/ 03.00mΩ 2.000/ 2.300 V 500/ 03.00mΩ 2.000/ 2.300 V 3.000/ 2.300 V 3.000/ 2.300 V 3.000/ 2.300 V
Select the desired sting.	Ω     Select string, SMIT 1       VA     STRING2       NO TERM M     B5A LEAD A/ B5A LEAD C/ B5A LEAD C/       Δ     B5A LEAD C/ B5A LEAD C/ B5A LEAD C/       Δ     Record Meter Ω       Ω     Select string, SMIT 1       VA     STRING2 NO TERM M	ODE VTIMONY ALCIUM S ALCIUM P Add String Ω ODE	Le Le Le Le Le Le Le Le Le Le Le	ad Acid S0 Ah ad Acid S0 Ah ad Acid S0 Ah ad Acid S0 Ah ad Acid S0 Ah ad Acid S0 Ah Ni-Cd Py Meter VA ad Acid S0 Ah ad Acid S0 Ah ad Acid S0 Ah	VF1 24 Cell 3CC-3M 6 Cell LA 6 Cell LC 6 Cell NICD Edit 24 String VA VF1 24 Cell 3CC-3M 4 Cell 3CC-3M 4 Cell 3CC-3M	2.200/ 2 2.000/ 2 2.200/ 2 2.200/ 2 2.200/ 2 2.200/ 2 1.900/ 2 2.200/ 2 1.900/ 2 2.200/ 2 1.000/ 2 1.300/ 1 1.300/ 1 0.00/ 22 0.220/ 2 2.200/ 2 2.200/ 2 2.200/ 2 2.200/ 2 2.200/ 2 2.200/ 2 1.900/ 2 2.200/ 2 2.200/ 2	2.000/ 2.300 V 500/ 3.00mΩ .000/ 2.300 V 200/ 2.500mΩ 200/ 2.500mΩ .000/ 2.300 V 200/ 2.300 V 500/ 03.00mΩ .000/ 2.300 V 0.00/ 03.00mΩ .000/ 1.500 V Delete String 18 (1) (2,300 V Current 2.000/ 2.300 V 500/ 03.00mΩ .000/ 2.300 V 300/ 2.500 M 2.000 V 300/ 2.500 M
Select "Edit"	Ω     Select string.       SMIT 1     STRING2       NO TERM M     B5A LEAD A/       B5A LEAD C/     B5A LEAD C/       B5A LEAD C/     B5A LEAD C/       B5A LEAD C/     B5A LEAD C/       Select string.     Select string.       Ω     Select string.       SNIT 1     STRING2       NO TERM M     B5A LEAD A/	ODE VITIMONY ALCIUM P Add String Ω ODE VITIMONY	Le Le Le Le Le Le Le Le Le Le	ad Acid S0 Ah ad Acid	VF1 24 Cell 3CC-3M 6 Cell LA 6 Cell LC 6 Cell LC 6 Cell NICD Edit 24 String VA VF1 24 Cell 3CC-3M 4 Cell 3CC-3M 4 Cell 3CC-3M 4 Cell 24 Cell LA	2.200/ 2 2.200/ 2 2.200/ 2 2.200/ 2 2.200/ 2 2.200/ 2 1.900/ 2 2.200/ 2 2.200/ 2 2.200/ 2 1.300/ 1 1.300/ 1 0.00/ 20 1.300/ 1 2.200/ 2 2.200/ 2	1000/ 2.300 V     500/ 03.00mΩ     1000/ 2.300 V     200/ 2.300 V     200/ 2.300 V     200/ 2.300 V     200/ 2.300 V     1000/ 2.300 V     1000/ 2.300 V     000/ 3.300 V     1000/ 3.300 V     1000/ 3.300 V     1000/ 3.300 V     1000/ 2.300 V     2000/ 2.300 V     200/ 2.500mΩ
Select "Edit"	Ω     Select string.       SMIT 1     SMIT 1       VA     STRING2       NO TERM M     B5A LEAD AI       B5A LEAD C/     B5A LEAD C/       Select string.     SHIT 1       VA     STRING2       NO TERM M     B5A LEAD AI	ODE VTIMONY ALCIUM S ALCIUM P Add String Ω ODE VTIMONY	Le Le Le Le Le Le Le Le Le Le Le	ad Acid S0 Ah ad Acid	VF1 24 Cell 3CC-3M 6 Cell LA 6 Cell LC 6 Cell LC 6 Cell LC 6 Cell NICD EdIt 24 String VA VF1 24 Cell 3CC-3M 4 Cell 3CC-3M 6 Cell LA 6 Cell LA 6 Cell LA 8 Cell NICD	2.200/ 2 2.200/ 2	1000/ 2.300 V     500/ 03.00mΩ     1000/ 2.300 V     200/ 2.500mΩ     1000/ 2.300 V     200/ 2.500mΩ     1000/ 2.300 V     2000/ 2.300 V
Select "Edit"	Ω     Select string.       SMIT 1     STRING2       NO TERM M     B5A LEAD AI       B5A LEAD CI     B5A LEAD CI       B5A LEAD CI     B5A LEAD CI       Select string.     Shitt 1       VA     String.       Shitt 1     Select string.       NO TERM M     Shitt 1       VA     String.       Shitt 1     Shitt 1       VA     String.       B5A LEAD AI     B5A LEAD AI	ODE UTIMONY ALCIUM S ALCIUM P Add String O ODE UTIMONY ALCIUM S	Le Le Le Le Le Le Le Le Le Le Le Le	ad Acid S0 Ah ad Acid S0 Ah ad Acid S0 Ah ad Acid S0 Ah ad Acid S0 Ah ad Acid S0 Ah Ni-Cd Ni-Cd Ni-Cd Ni-Cd Ni-Cd S0 Ah ad Acid S0 Ah	VF1 24 Cell 3CC-3M 6 Cell LA 6 Cell LC 6 Cell LC 6 Cell NICD EdIt 24 String VA VF1 24 Cell 3CC-3M 4 Cell 3CC-3M 4 Cell 3CC-3M 6 Cell LA 6 Cell LC 6 Cell LC 7 Cell 2 CC 7 Cell 2 CC 7 Cell 2 CC 7 Cell 2 CC 7 Cell LC 7 Cell CC 7 CE CC 7 CE CC CC 7 CE CC 7 CE CC 7 CE CC 7 CC 7	2.200/ 2 2.200/ 2 2.200/ 2 2.200/ 2 2.200/ 2 2.200/ 2 2.200/ 2 2.200/ 2 2.200/ 2 2.200/ 2 10.00/ 20 1.300/ 1 3.200/ 2 2.200/ 2 2.	1000/ 2.300 V     500/ 30.0mΩ     1000/ 2.300 V     200/ 2.500mΩ     1000/ 2.300 V     200/ 2.500mΩ     1000/ 2.300 V     500/ 03.00mΩ     1000/ 2.300 V     500/ 03.00mΩ     1000/ 2.300 V     200/ 2.500mΩ     1000/ 2.300 V
Select the desired sting.	Ω     Select string.       SMIT 1     STRING2       NO TERM M     B5A LEAD AI       B5A LEAD AI     B5A LEAD CI       B5A LEAD CI     B5A LEAD CI       STRING2     B5A LEAD AI       C     Record Meter Ω       SHIT 1     SHIT 1       VA     STRING2       NO TERM M     B5A LEAD AI       B5A LEAD AI     B5A LEAD AI       B5A LEAD AI     B5A LEAD AI	ODE VITIMONY ALCIUM S String Ω ODE ODE ODE ALCIUM S ALCIUM S	Le Le Le Le Le Le Le Le Le Le Le Le Le	ad Acid S0 Ah ad Acid S0 Ah	VF1 24 Cell 3CC-3M 4 Cell 3CC-3M 6 Cell LA 6 Cell LC 6 Cell LC 6 Cell LC 8 Cell NICD EdIt 24 String VA VF1 24 Cell 3CC-3M 4 Cell 3CC-3M 6 Cell 24 Cell VF1 24 Cell 3CC-3M 6 Cell LC 6 Cell LC 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	2.200/ 2 2.000/ 2 2.200/ 2 2.200/ 2 2.200/ 2 2.200/ 2 2.200/ 2 2.200/ 2 1.900/ 2 2.200/ 2 10.00/ 20 1.300/ 1 3.300/ 1 703/ 22 02: 27: D VA String 2.200/ 2 2.200/ 2 2.200/ 2 2.200/ 2 1.900/ 2 2.200/ 2	1.000/ 2.300 V 500/ 3.00mΩ 1.000/ 2.300 V 200/ 2.500mΩ 1.000/ 2.300 V 200/ 2.500mΩ 1.000/ 2.300 V 500/ 03.00mΩ 1.000/ 2.300 V 1.000/ 2.300 V 0.000/ 2.300 V 18 () × ∢)) () 18 () × ⟨) 18 () × ⟨) 18 () × ⟨) 100/ 2.300 V 500/ 03.00mΩ 1.000/ 2.300 V 500/ 2.300 V 500/ 2.300 V 200/ 2.500mΩ 1.000/ 2.300 V 200/ 2.500mΩ 1.000/ 2.300 V 200/ 2.500mΩ 1.000/ 2.300 V 200/ 2.300 V
Select "Edit"	Ω     Select string,       SMIT 1     SMIT 1       VA     STRING2       NO TERM M     B5A LEAD A       B5A LEAD A     B5A LEAD C       B5A LEAD C     B5A LEAD C       SE Select string,     B5A LEAD C       SMIT 1     SELEAD C       STRING2     Select string,       Meter Ω     SMIT 1       VA     STRING2       NO TERM M     B5A LEAD A       B5A LEAD A     B5A LEAD A       SMIT 1     STRING2       NO TERM M     B5A LEAD C       B5A LEAD C     B5A LEAD C	ODE VITIMONY ALCIUM P Add String Ω ODE ODE ALCIUM P ALCIUM P	Le Le Le Le Le Le Le Le Le Le Le Le Le	ad Acid S0 Ah ad Acid S0 Ah ad Acid S0 Ah ad Acid S0 Ah ad Acid S0 Ah ad Acid S0 Ah Ni-Cd Py Meter VA Ad Acid S0 Ah ad Acid S0 Ah	VF1 24 Cell 3CC-3M 6 Cell LA 6 Cell LC 6 Cell LC 6 Cell LC 6 Cell NICD EdIt 24 String VA VF1 24 Cell 3CC-3M 6 Cell 3CC-3M 6 Cell 1C 24 Cell LC 6 Cell LC 6 Cell LC 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	2.200/ 2 2.200/ 2 2.200/ 2 2.200/ 2 2.200/ 2 2.200/ 2 1.900/ 2 2.200/ 2 1.900/ 2 2.200/ 2 2.200/ 2 10.00/ 20 1.300/ 1 0 703/22 02:27: D VA String 2.200/ 2 2.200/ 2 2.200/ 2 2.200/ 2 2.200/ 2 1.900/ 2 2.200/ 2	1.000/ 2.300 V 500/ 3.00mΩ 1.000/ 2.300 V 200/ 2.500mΩ 1.000/ 2.300 V 200/ 2.500mΩ 1.000/ 2.300 V 500/ 03.00mΩ 1.000/ 2.300 V 1.000/ 2.300 V 0.000/ 1.500 V 500/ 03.00mΩ 1.000/ 2.300 V 500/ 03.00mΩ

When complete scan the RFID tag by placing near the back on the BITE5 ADVANCED. An audible beep will be made when the tag is read.



The RFID tag number will now show up on the configuration screen. Now when this tag is scanned this battery string configuration will be called.

Select "OK" to save.

a	Record					24	/03/22 02:	27:55	🔲 🖇 ┥ w) 🎟 🗈
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VA	Туре	Lead Aclor	Model	3CC-3M					
	Cell	006	Capacity	0050	Ah 🔻		RFID	022	18333
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∂ Ω ∨A !!! %	Record Meter Ω New/Edit S Idx Type Cell Ref Ω Warning Alarm	String Ω      tring      003 ▼      Lead Actor      006      1.900      2.200      2.500	D Ω Strin Name Model Capacity mΩτ mΩτ	g Meter NO TERM N 3CC-3M 0050 Ref V Lower Upper	VA String NODE Ah ¥ 2.200 2.000 2.300	24 VA V	V03/22 02: D VA Strift RFID Strap	022 0000	Cancer
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# 24. Saving a screen snapshot

The BITE5 ADVANCED allows you to save screen images as bitmaps.

To do this, momentarily press and release the Power ON/OFF button.



The displayed screen shall be saved to the SD card as a bitmap file. The bitmap will be located at the following path. MEGGER / SCREENS **Noisy Strings.** 

# 25. Noisy Strings.

Excessive electrical noise on strings can cause interference to the battery ohmic measurements. This is can be typical on UPS systems.

Noise can cause extended measurement times due to elongated settling times. In extreme cases high signal to noise ratios may not allow a measurement.

To address this situation a noise avoidance feature can be enabled on the BITE5 ADVANCED.



# 26. Specifications

Specification	Detail
Input power	
AC/Adapter	
Input	100 – 240 V AC (50/60 Hz)
Output	12 V DC at 2.5 A
Battery	
Li-ion rechargeable pack > 5.2Ah	
Voltage rating	7.2 V
Charge time	4 hrs
Battery life	> 8 hrs
	300 charge/discharge cycles

#### Internal impedance

Range	Resolution	Accuracy
3 mΩ	1 μΩ	+/- 1 % of reading +/- 10 digits
30 mΩ	10 μΩ	+/- 0.8 % of reading +/- 10 digits
300 mΩ	100 μΩ	+/- 0.8 % of reading +/- 10 digits
3Ω	1 mΩ	+/- 0.8 % of reading +/- 10 digits
30 Ω	10 mΩ	+/- 0.8 % of reading +/- 10 digits
300 Ω	100 mΩ	+/- 0.8 % of reading +/- 10 digits

#### Voltage DC/AC

Range	Resolution	Accuracy
5 V DC	0.001 V	
50 V DC	0.01 V	
500 V DC	0.1 V	+/- 0.5 % of reading +/- 5 digits
1000 V DC	1 V	
5 V AC	0.001 V	
50 V AC	0.01 V	+/- 0.75 % of reading +/- 10 digit
500 V AC	0.1V	(40 Hz – 100 Hz)
600 V AC	1 V	

#### Current DC/AC

Range	Resolution	Accuracy
4 A DC	0.001 A	+/- 0.5 % of reading +/- 1 digit
40 A DC	0.01 A	+ (CT Tolerance)
400 A DC	0.1 A	+/- 0.5 % of reading +/- 5 digits
1000 A DC	1 A	+ (CT Tolerance)
4 A AC	0.001 A	+/- 0.75 % of reading +/- 1 digit
40 A AC	0.01 A	+ (CT Tolerance)
400 A AC	0.1 A	+/- 0.75 % of reading +/- 10 digits
1000 A AC	1 A	+ (CT Tolerance)

#### Temperature

-			
<b>Range</b> 10 °C ~ 100 °C	<b>Resolution</b> 0.1 °C	<b>Accuracy</b> +/-1 °C +/- 2 digits	
Ripple volta	ige		
Range	Resolution	Accuracy	
0–5 V	0.001 V	+/- 0.5 % of reading $(40 \text{ Hz} - 10 \text{ KHz})$	g +/- 10 digits

#### Specifications

Test Current	1 KHz @ 100 mA
Repeatability	0.1 %, 2 σ
Record Capacity	
Memory	8 GB up to 16 GB flash storage Impedance record: Max 1000 records VA record: Max 512 records
Environmental	
Operating	0 ~50 °C (32~122 °F)
Storage	-20 ~50 °C (-4~122 °F)
Charging temperature:	10 ~40 °C (50~104 °F)
Relative humidity	10 ~ 85 % NC non-condensing
Altitude Operational	0 ~ 2000 m
Ingress protection	IP54
Display (transmitter and receiver)	160 x 90 mm touch screen
Safety/EMC/Vibration/Compliance	
Meets the requirements of IEC61010-1, CE, UKCA	
CAT Rating:	600 V CAT III, Pollution Degree 2
Shock and vibration	EN61010-1 EN60529
IEC61010-1:2010 (3rd Ed)	
EN61010-1:2010 (3rd Ed)	
IEN61326-1:2013	
EN55011/A1:2010 (Class A)	
EN61000-3-2:2014	
EN61000-3-3:2013	
Weight/Dimensions	
Dimensions	240 x 160 x 65 mm (9.45″ x 6.30″ x 2.56″)
Weight	0.9 kg (1.98 lbs)

# 27. Accessories and Equipment

OPTIONAL ACCESSORIES		
	Concentric Probe – The concentric probe allows for battery testing on batteries with safety caps or safety lugs. Users can easily access the terminals through the access hole. The concentric probe	90043-242 (11.75mm tip)
	comes in two styles. One probe comes with a 11.75 mm (1/2") tip the other has a 25.4 mm (1") tip. This allows access to terminals even on batteries with the deepest safety lugs.	90043-243 (25.4mm tip)
	0 to 100 A AC CT. Used for measuring and recording AC ripple current. Jaw opening 0.96" ID (24.5mm)	MCV-100B5B
	1 to 1000 A AC/DC CT. Used for measuring and recording DC float current and discharge current. Jaw opening 2 inches (52.0 mm)	MCCV-1KDC-B5B
	BITE5 extension kit for probes. Allow operator to take measurements while being able to stand safely back from the voltages being measured. Available with straight and 90 degree probes.	See ordering information for options
	3 meter right angle probe. For use with BITE5 extension kit.	90043-244
	3 meter straight probe. For use with BITE5 extension probes.	90043-245

#### Accessories and Equipment



# 27.1 Included accessories

Item	Order No.
Duplex probes (with temperature probe)	90043-241
Voltage test leads	90037-576
Charger	90039-077
Neck strap	90037-529
Zero bar	90037-575
16 GB microSD card	90037-572
microSD card USB reader	90037-571
USB cable	90037-569
Stylus	90037-570
Carry bag	90037-573
Pouch bag	90037-574

# 27.2 Optional accessories

Item	Order No.
Concentric probe (1/2" tip)	90043-242
Concentric probe (1" tip)	90043-243
100 A AC current clamp	MCV-100B5B
1000 A AC/DC current clamp	MCCV-1KDC-
	B5B
3 meter right angle probe	90043-244
3 meter straight probe	90043-245
3 meter clip on probe	90043-246
Extension kit with straight probe	1016-066
Extension kit with 90 degree probe	1016-064
Extension kit with straight and 90 degree probes	1016-067

# 28. Maintenance

Do not leave the instrument connected to the system under test when not in use. Do not use the instrument or connect it to any external system if it shows any visible signs of damage, malfunction, or if it has been stored in unfavorable conditions. If this equipment is used in the manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

#### 28.1 Battery charging

The BITE5 ADVANCED uses rechargeable Li-ion batteries. Only recharge batteries using the supplied power adapter. Battery charging starts once the power adapter is connected and plugged into AC. The battery charge will take approx. 4 hours to complete. If the unit is operated off of the AC adapter, then the charging time will be longer. The BITE5 ADVANCED can be left connected to the charging adapter for extended periods. The batteries will not be damaged even after full charge.

#### 28.1.1 Battery charging status icon

lcon	Description
())))	Battery charging amount more than 85 %
	Battery charging amount more than 70 %
	Battery charging amount more than 50 %
	Battery charging amount more than 25 %
	Battery is fully discharged (after warning sounds, unit will shut off)
	Adapter connected, unit charging

#### 28.2 Cleaning and Storage

Do not leave the instrument connected to the system under test when storing or cleaning.

#### 28.2.1 Unit Cleaning

Clean with wet cloth and soft soap. Do not use organic solvents or alcohol as markings on the unit may be damaged.

#### 28.2.2 Storage

When storing for long periods of time, there is no need to remove the battery pack. However, all batteries experience self-discharge. This will lead to a gradually draining of the batteries. For best battery life, it is recommended that batteries are charged once a month. Batteries need to be charged a minimum of once every 6 months.

#### 28.2.3 Cleaning probes

Clean with wet cloth and soft soap. Do not use organic solvents or alcohol.

Calibration, Repair and Warranty

# 29. Calibration, Repair and Warranty

Megger operate fully traceable calibration and repair facilities to make sure your instrument continues to provide the high standard of performance and workmanship that is expected. These facilities are complemented by a worldwide network of approved repair and calibration companies, which offer excellent in-service care for your Megger products.

For service requirements for Megger instruments contact:

Megger Limited		Megger Valley Forge
Archcliffe Road		400 Opportunity Way
Dover		Phoenixville
Kent	OP	PA 19460
CT17 9EN	OK	U.S.A.
U.K.		Tel: +1 610 676 8579
Tel: +44 (0) 1304 502 243		Fax: +1 610 676 8625
Fax: +44 (0) 1304 207 342		

If the protection of an instrument has been impaired it should not be used, but sent for repair by suitably trained and qualified personnel. The protection is likely to be impaired if, for example, the instrument shows visible damage, fails to perform the intended measurements, has been subjected to prolonged storage under unfavourable conditions, or has been exposed to severe transport stresses.

New instruments are covered by a two year warranty from the date of purchase by the User, the second year being conditional on the free registration of the product on <u>www.megger.com</u>. You will need to log in, or first register and then login to register your product. The second year warranty covers faults, but not recalibration of the instrument which is only warranted for one year. Any unauthorised prior repair or adjustment will automatically invalidate the warranty.

These products contain no User repairable parts and if defective should be returned to your supplier in original packaging or packed so that it is protected from damage during transit. Damage in transit is not covered by this warranty and replacement / repair is chargeable.

Megger warrants this instrument to be free from defects in materials and workmanship, where the equipment is used for its proper purpose. The warranty is limited to making good this instrument (which shall be returned intact, carriage paid, and on examination shall disclose to their satisfaction to have been defective as claimed). Any unauthorised prior repair or adjustment will invalidate the warranty. Misuse of the instrument, from connection to excessive voltages, fitting incorrect fuses, or by other misuse is excluded from the warranty. The instrument calibration is warranted for one year.

This Warranty does not affect your statutory rights under any applicable law in force, or your contractual rights arising from a sale and purchase contract for the product. You may assert your rights at your sole discretion.

#### 29.1 Calibration, Service and Spare Parts

For service requirements for Megger Instruments contact **Megger** or your local distributor or authorised repair centre.

Megger operates fully traceable calibration and repair facilities, to make sure your instrument continues to provide the high standard of performance and workmanship you expect. These facilities are complemented by a worldwide network of approved repair and calibration companies to offer excellent in-service care for your Megger products.

See the **last page** of this User Guide for Megger contact details.

To find your local Authorised Service Centre email Megger on **ukrepairs@megger.com** and give details of your location.

#### 29.2 Approved Repair Companies

A number of independent instrument repair companies have been approved to do repair work on most Megger instruments, complete with genuine Megger spare parts.

Consult the Appointed Distributor / Agent about spare parts, repair facilities and advice.

#### 29.3 Return procedure

# WARNING : DO NOT Remove the battery cells before shipping this instrument. The battery pack <u>MUST</u> be inside the BITE5 when it is packed for shipping.

UK and USA Service Centres

- When an instrument requires recalibration, or in the event of a repair being necessary, a Returns Authorisation (RA) number must first be obtained from one of the addresses shown above. The following information is to be provided to enable the Service Department to prepare in advance for receipt of your instrument and to provide the best possible service to you:
  - Model (for example, BITE5).
  - Serial number (found on the display under settings, device information, or on the rear cover and by the batteries or on the calibration certificate).
  - Reason for return (for example, calibration required, or repair).
  - Details of the fault if the instrument is to be repaired.
- 2. Make a note of the RA number. A returns label can be emailed or faxed to you if required.
- 3. Pack the instrument carefully to prevent damage in transit.
- 4. Before the instrument is sent to Megger, freight paid, make sure that the returns label is attached or that the RA number is clearly marked on the outside of the package and on any correspondence. Copies of the original purchase invoice and packing note should be sent simultaneously by airmail to expedite clearance through customs. In the case of instruments which require repair outside the warranty period, an immediate quotation can be provided when obtaining the RA number.
- 5. Track the progress online at **www.megger.com**.

# 30. Decommissioning

## **30.1 WEEE Directive**



The crossed out wheeled bin symbol placed on Megger products is a reminder not to dispose of the product at the end of its life with general waste.

Megger is registered in the UK as a Producer of Electrical and Electronic Equipment. The Registration No is WEE/ HE0146QT.

For further information about disposal of the product consult your local Megger company or distributor or visit your local Megger website.

#### 30.2 Battery disposal



The crossed out wheeled bin symbol placed on a battery is a reminder not to dispose of batteries with general waste when they reach the end of their usable life.

For disposal of batteries in other parts of the EU contact your local Megger branch or distributor.

Megger is registered in the UK as a producer of batteries (registration No.: BPRN00142).

For further information see www.megger.com

# **31. Worldwide Sales Offices**

Sales Office	Telephone	Email
UK	T. +44 (0)1 304 502101	E. UKsales@megger.com
USA – Dallas	T. +1 214 333 3201	E. USsales@megger.com
USA – Valley Forge	T. +1 214 333 3201	E. USsales@megger.com
USA – Dallas	T. +1 214 333 3201	E. USsales@megger.com
DEUTSCHLAND – Aachen	T. +49 (0) 241 91380 500	E. info@megger.de
SVERIGE	T. +46 08 510 195 00	E. seinfo@megger.com
AUSTRALIA	T. + 61 2 9397 5900	
中国	T. +86 512 6556 7262	E. meggerchina@megger.com
中国 - 香港	T. +852 26189964	E. meggerchina@megger.com
ČESKÁ REPUBLIKA	T. +420 222 520 508	E. info.cz@megger.com
AMÉRICA LATINA	T. +1 214 330 3293	E. csasales@megger.com
ESPAÑA	T. +34 916 16 54 96	E. info.es@megger.com
SUOMI	T. +358 08 510 195 00	E. seinfo@megger.com
LA FRANCE	T. +01 30 16 08 90	E. infos@megger.com
ΕΛΛΑΔΑ	<b>T</b> . +49 (0) 9544 68 0	E. sales@sebakmt.com
MAGYARORSZÁG	T. +36 1 214-2512	E. info@megger.hu
ITALIA	T. +49 (0) 9544 68 0	E. sales@sebakmt.com
日本	T. +44 (0)1 304 502101	E. UKsales@megger.com
한국	T. +1-800-723-2861	E. sales@megger.com
ضايرلا ةيبرعلا	T. +966 55 111 6836	E. MEsales@megger.com
نيرحبلا ةكلمم	T. +973 17440620	E. MEsales@megger.com
NEDERLAND	T. +46 08 510 195 00	E. seinfo@megger.com
NORGE	T. +46 08 510 195 00	E. seinfo@megger.com
POLSKA	T. +48 22 2809 808	E. info.pl@megger.com
PORTUGAL	T. +34 916 16 54 96	E. info.es@megger.com
ROMÂNIA	T. +40 21 2309138	E. info.ro@megger.com
РОССИЯ	T. +7 495 2 34 91 61	E. sebaso@sebaspectrum.ru
SLOVENSKO	T. +421 2 554 23 958	E. info.sk@megger.com
SOUTH AFRICA	T. + 27 (031) 576 0360	E. sales.rsa@megger.com
TÜRKIYE	T. +46 08 510 195 00	E. seinfo@megger.com



# **Local Sales office**

Megger Valley Forge 400 Opportunity Way, Phoenixville PA 90460 USA T. +1 610 676 8500 E. USsales@megger.com

# **Manufacturing sites**

Megger Limited Dover, ENGLAND T. +44 (0)1 304 502101 E. uksales@megger.com

Megger Valley Forge Phoenixville, PA USA T. +1 610 676 8500 E. USsales@megger.com

**Megger GmbH** Aachen, GERMANY T. +49 (0) 241 91380 500 E. info@megger.de Megger AB Danderyd, SWEDEN T. +46 08 510 195 00 E. seinfo@megger.com

Megger USA - Dallas Dallas, TX USA T. +1 214 333 3201 E. USsales@megger.com

Megger Germany GmbH Baunach, GERMANY T. +49 (0) 9544 68 - 0 E. baunach@megger.com Megger USA - Fort Collins Fort Collins, CO USA T. +1 970 282 1200

Megger Germany GmbH Radeburg, GERMANY T. +49 (0) 35208 84-0 E. radeburg@megger.com

This instrument is manufactured in the United States.

The company reserves the right to change the specification or design without prior notice.

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