ISDT®

BattGO™

Cells Voltage

🔋 33.80V	
🗐 21mV	
📊 00:00:36	

Cells Voltage

1 4.172V
2 4.172V
3 4.172V
4 4.172V
5 4.172V
6 4.193V
7 4.172V
8 4.193V

ISDT Battery**GO** BG-8S

BG-8S BatteryGO

User manual Ver 1.1.178

Disclaimer and Warning

Thank you for using the product from SHENZHEN ISD TECHNOLOGY CO.,LTD

This product is specifically designed for RC, not appliance in other areas. We strongly recommend you read our user's guide before using BG-8S. ISDT accepts no liability for damage, injury or any legal responsibility incurred directly or indirectly from the use of this product.

ISDT reserves the right to update the design, appearance, function and usage requirement without notifying.

August 2, 2017
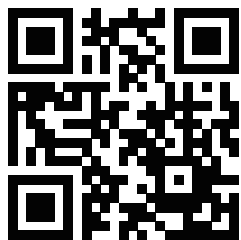
Revolution Starts Here

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Specifications

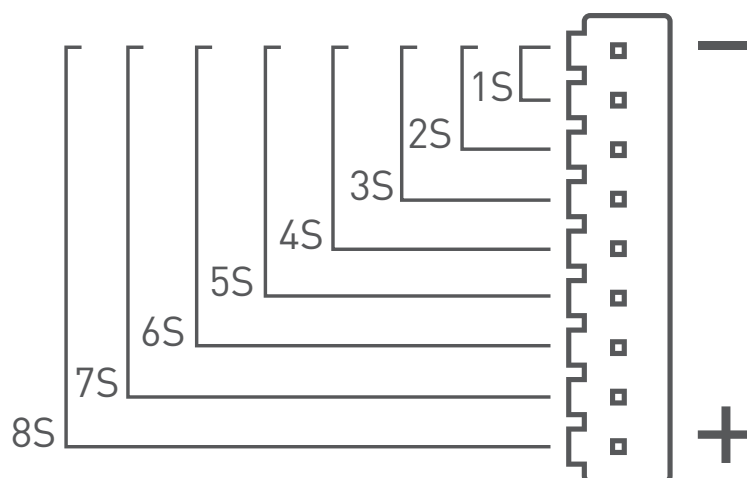|	
Working voltage :	5.0V - 36V
Input voltage 1s :	0.8V - 15V
Input voltage 2-8S :	0.8V - 4.8V
Battery cells :	1-8s
Voltage measurement accuracy :	±0.005V @ 4.2V
Balancing cells accuracy :	< 0.005V
Support USB charging :	QC3.0, BC1.2, Maximum output 12V/2A
Support smart battery :	Charging and discharging setting, read battery info and usage history.
Dimension :	80 X 55 X 19 mm
Weight :	59 g

Port diagram

This product is suitable for the lithium battery which has the XH 2.54 balance port, connect the balance port align from BAT- as showed in the figure. When connecting 1S battery, input Voltage from XT60i must be more than 5V.
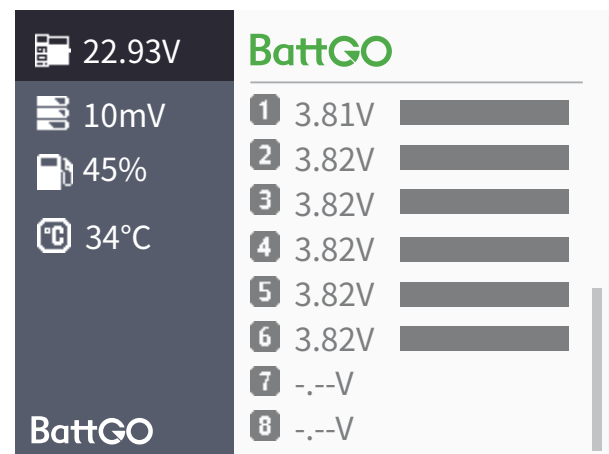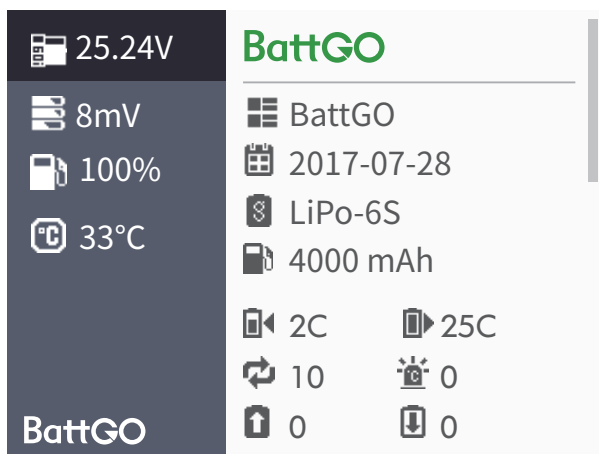
Function button

Breathe light

Up
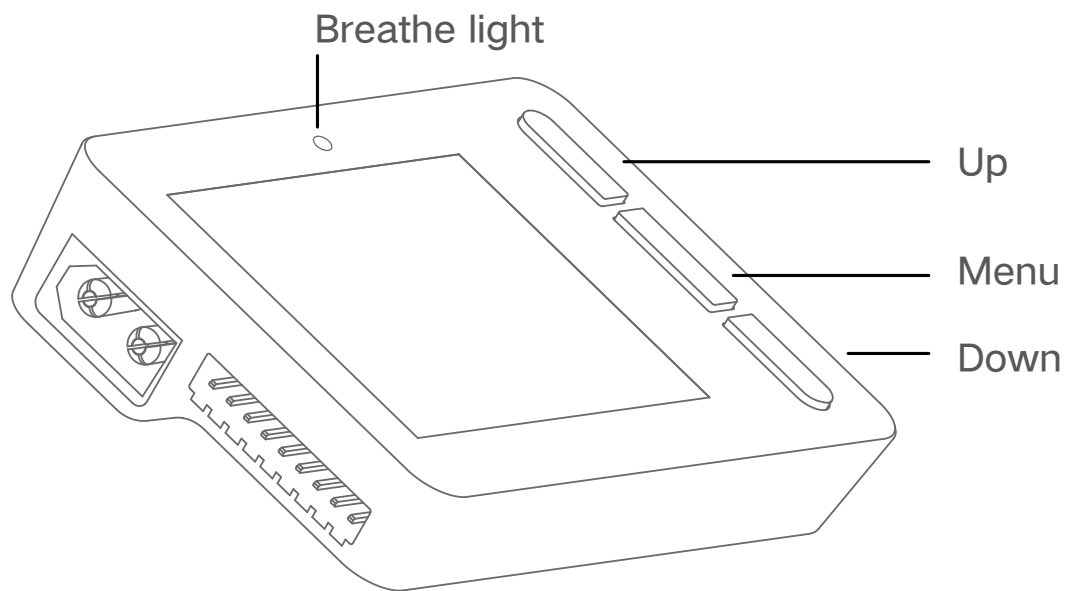
Menu

Down

Menu button Short press to enter setting menu.
Long Press to enter smart battery menu

Up/Down Button Go up down, choose different setting options.

Measurement display

	BattGO
25.24V	
8mV	BattGO
100%	2017-07-28
33℃	LiPo-6S
	4000 mAh
	2C 25C
	10 0
BattGO	0 0

01

	BattGO
22.93V	
10mV	1 3.81V
45%	2 3.82V
34℃	3 3.82V
	4 3.82V
	5 3.82V
	6 3.82V
	7 -.--V
BattGO	8 -.--V

02

When XT60i connecting to smart battery

In this mode, BG-8S can read smart battery info. After plug in XT60i, default display is 01, press down button go to 02 to read battery cells voltage

XT60i Input voltage — 🔋 25.24V

Cells voltage difference — 🔋 8mV

Remaining capacity — 🔋 100%

Battery temperature — 🔋 33°C

Max Charging C — 🔋 2C 🔋 25C — Max discharging C

Battery circulation — 🔄 10 🔋 0 — Over temperature

Battery over charging — ⬆ 0 ⬇ 0 — Battery over discharging

BattGO

BattGO — Battery brand

📅 2017-07-28 — Production date

🔋 LiPo-6S — Battery type

🔋 4000 mAh — Battery capacity

🔋 22.93V

🔋 10mV

🔋 45%

🔋 34°C

BattGO

BattGO

1 3.81V

2 3.82V

3 3.82V

4 3.82V

5 3.82V

6 3.82V

7 -.--V

8 -.--V

The histogram shows the voltage differences

Cells voltage

When XT60i connecting to normal battery

🔋 25.24V

🔋 0mV

Cells Voltage

1 -.---V

2 -.---V

3 -.---V

4 -.---V

5 -.---V

6 -.---V

7 -.---V

8 -.---V

When XT60i connecting to normal battery, BG-8S would only show total voltage, balance port need to be connected to check each cell voltage.

PS:Only XT60i was connected, short press menu button twice to start USB charging

23.19V	Cells Voltage
14mV	1 3.855V
	2 3.869V
	3 3.868V
	4 3.865V
	5 3.861V
	6 3.868V
	7 -.---V
	8 -.---V

When battery connecting to balance port, BG-8S will show total battery voltage, max voltage difference between each cell and each cell voltage

PS: When only balance port is connected, short press menu twice, BattGo can initiate cell balancing task.
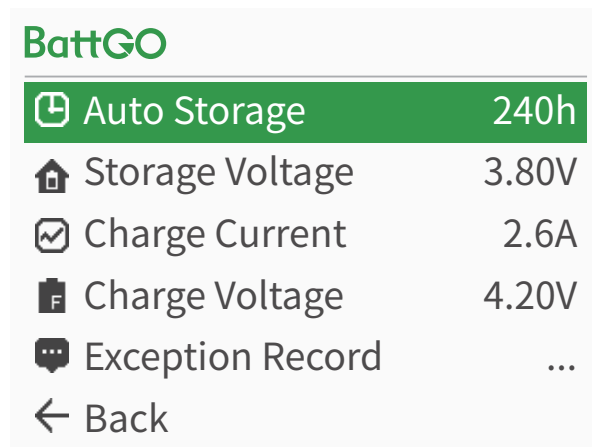
Function Setting

Short press menu button to see system function menu below:

| 🆔 Function	
🅰 Language	English
☀ Backlinght	Middle
🔊 Volume	High
💬 System Information	...
🎛 Receiver Tester	...
🔔 Alarm Tone	Repeat
🔋 Low Voltage Alarm	18.0V
USB Charge	Start
Cells Balance	Start
← Back	

Language	Support up to 7 languages
Backlinght	Back light adjustment, back light will automatically turn off in 2 minutes if no operation(In balancing 20 seconds)
Volume	Support high, middle, low and 0 volume. Alarm sound can not be turned off.
System Information	Show firmware version
Receiver Tester	Support multiple prototype testing, PWM\ S.Bus
Alarm Tone	Low voltage alarm can be set to beep once or beep per minute
Low Voltage Alarm	Connecting XT60i port, User can select voltage 5-30v as low voltage alarm threshold. Connecting balance port, user can select single cell voltage 2.5-3.9v as low voltage alarm threshold. Connecting BattGo smart battery, BG-8S will automatically select battery's lowest discharging voltage as alarm voltage
USB Charge	When XT60i is connecting to battery, BG-8S can support USB charging
Cells Balance	When balance port is connecting to battery, BG-8S can support cells balancing.
Back	Exit function menu

When connecting to smart battery,
in standby press and hold menu button you can go into system setting.

BattGO

🕒 Auto Storage	240h
🏠 Storage Voltage	3.80V
☑ Charge Current	2.6A
🔋 Charge Voltage	4.20V
💬 Exception Record	...
← Back	

Auto Storage	Select after how many hours , Battgo smart battery would initiate auto storage function.
Storage Voltage	Set storage voltage
Charge Current	Set charge current
Charge Voltage	Set full voltage
Exception Record	Check exception records of over charging/discharging/temperature
Back	Exit function menu

Receiver signal testing

| | S.Bus | 17 ✕ | 18 ✕ | 💡 |

1	-2		9	128
2	0		10	128
3	97		11	0
4	0		12	0
5	-46		13	0
6	97		14	0
7	128		15	0
8	19		16	0
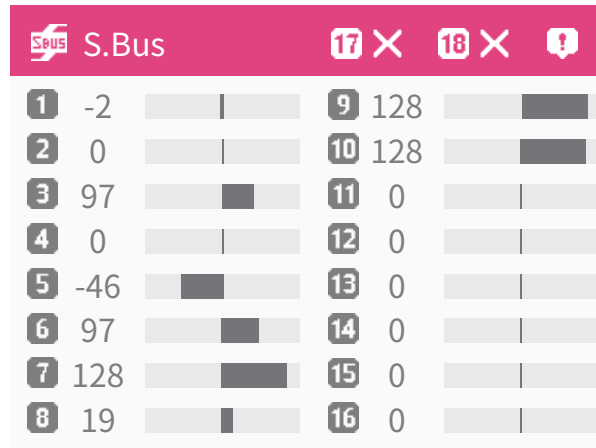
PWM testing

RC control signal PWM protocol analysis, connect to servo receiver signal output, BG-8S will detect PWM output period and pulse width

| PWM | 5.10V |

R 38%

F 66Hz
W 1683us
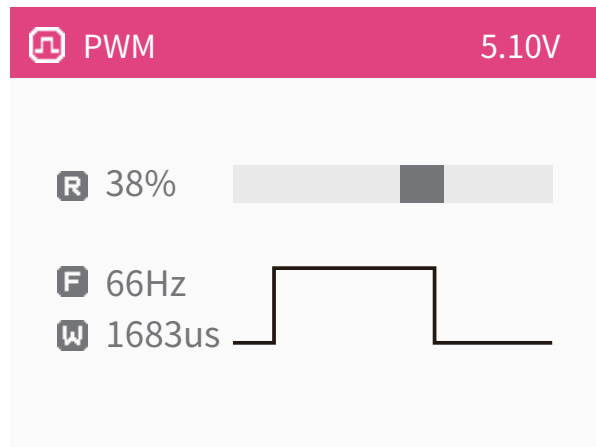
S. Bus testing

S.Bus protocol analysis, support up to 18 channels servo control data analysis, servo receiver failure protection testing.

When XT60i is connected to the battery, BG-8S could perform USB charging function. In USB charging, after 2 minutes without operation. display will turn off, and light up breath light to purple.
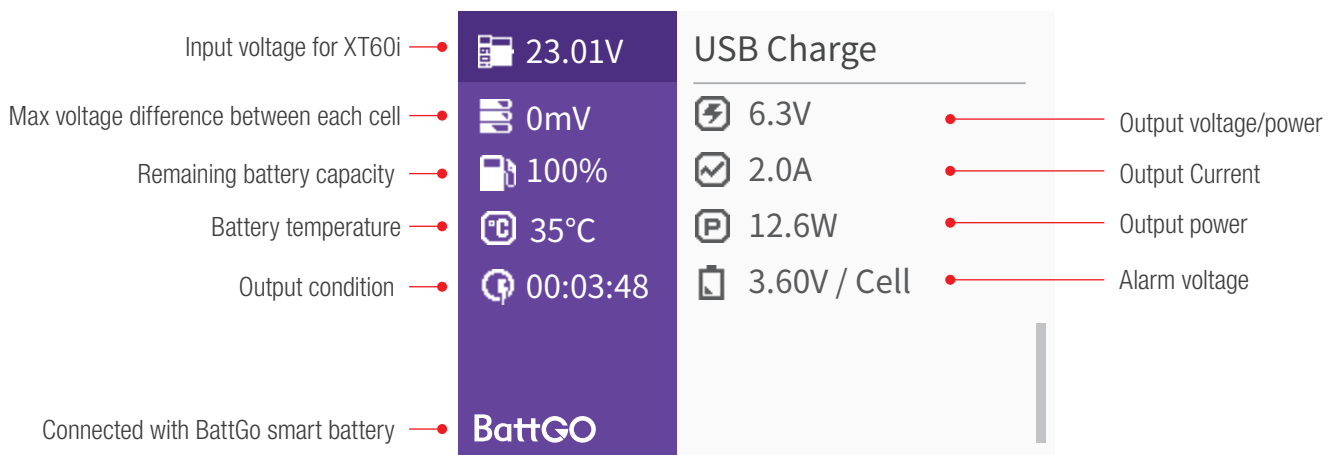
If current is more than 3A or power is more than 26W it will turn off USB charging.

If temperature is more than 60 °, it will stop charging until temperature is lower than warning level. It will recharge automatically.

Battery capacity and BattGo mark would appear only smart battery is connected.

Lowest input voltage: For normal battery, if balance port is connected single cell protection voltage would be displayed as lowest input voltage, without balance port connected battery total protection voltage would be displayed as lowest input voltage. For smart battery, single cell protection voltage would be always showed as lowest input voltage.
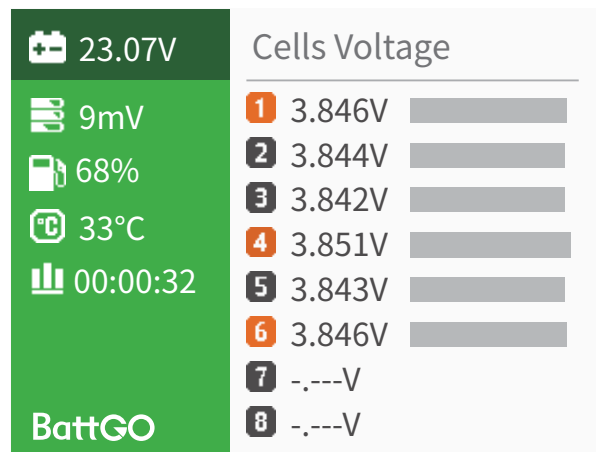
Devices with QC: Devices without QC:

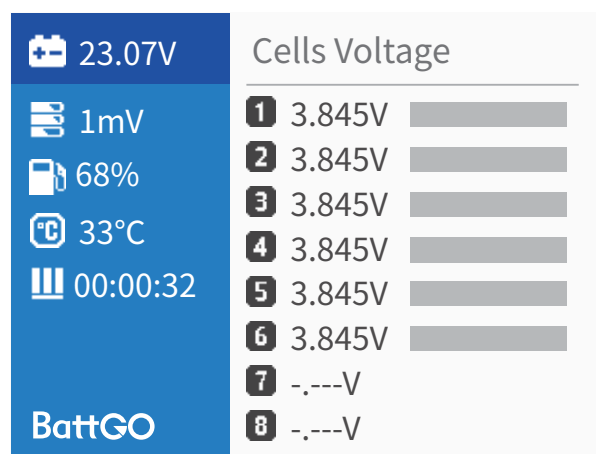|		
Input voltage for XT60i →	23.01V	USB Charge
Max voltage difference between each cell →	0mV	6.3V → Output voltage/power
Remaining battery capacity →	100%	2.0A → Output Current
Battery temperature →	35°C	12.6W → Output power
Output condition →	00:03:48	3.60V / Cell → Alarm voltage
Connected with BattGo smart battery →	BattGO	

Cells balancing

When balance port is connected, user can initiate cells balancing task. During task, display will turn off, breath light will turn on within 20s, if no operation is detected。
battery capacity percentage, temperature BattGo mark will only show when smart battery is connected,

23.07V	Cells Voltage
9mV	1 3.846V
68%	2 3.844V
33°C	3 3.842V
00:00:32	4 3.851V
	5 3.843V
	6 3.846V
BattGO	7 -.---V
	8 -.---V

In balancing cells would show as yellow, and breath light is green during operation.

23.07V	Cells Voltage
1mV	1 3.845V
68%	2 3.845V
33°C	3 3.845V
00:00:32	4 3.845V
	5 3.845V
	6 3.845V
BattGO	7 -.---V
	8 -.---V

After balancing completed, left side would turn to blue, breath light would turn to blue.

Warning

This battery checker is suitable for :LiHv (1-8S) / LiPo (1-8S) / LiFe(1-8S) / Lilon (1-8S) / NiMH/C-d(1-10S);

this battery checker is suitable for the connection with balance port of battery, While connect to the battery checker, negative electrode of the balance port must start from"BAT-" . Reverse protection circuit is inside the BG-8S, no damage will cause to BG-8S while connect

reversely.

BG-8S is designed for RC areas, please don't use this on other purpose.

No usage in long time, please disconnect BG-8S with your battery to avoid over discharging your battery.

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