FZ35 5A 35W Electronic Load Tester

1.Description:

The industrial-grade long-life electronic load tester adopts long-life ball fan which has fast rotating speed and strong wind.It supports continuous discharging for non-stop work and suitable for long-period discharge or the factory do aging test for products.It is suitable for testing the charger's output current capability, charger batch aging test, measuring battery load capacity, etc.

2.Features:

1>.With outer casing
2>.LCD high definition display
3>.Support UART
4>.High precision 0.01A
5>.Support over-voltage protection
6>.Support over-current protection
7>.Support under-voltage protection
8>.Support over temperature protection
9>.Multiple parameters are displayed simultaneously
10>.Automatically count working hours

3.Parameters:

1>.Product name: FZ35 5A 35W Electronic Load Tester
2>.Model: FZ35
3>.Work voltage:DC 5.0V-30V
4>.Rated load voltage:DC 1.5V-25V
5>.Rated load current:5A
6>.Power:35W
7>.Current accuracy:1%
8>.Voltage accuracy:0.5%
9>.Over voltage protection:Default 25.2V(Adjustable)
10>.Over current protection:Default 5.10A(Adjustable)
11>.Over power protection:Default 35.5W(Adjustable)
12>.Under voltage protection:Default 1.5V(Adjustable)
13>.Over temperature protection:About 80℃(Unadjustable)
14>.Fan speed:8000RPM+/-10%
15>.Work Temperature:-40℃~85℃
16>.Work Humidity:0%~95%RH
17>.Size:79*43*56mm

4.Function:

1>.Display current A,voltage V,power W,capacity Ah and Discharge time
2>.Perfect protection mechanism

3>.Automatically count discharge capacity and discharge time

4>.Supports setting maximum discharge capacity (OAH) and maximum discharge time (OHP).(Achieve unattended for power aging test)

5>.Intelligent temperature control fan.The fan automatically starts when the power is greater than 10W or the temperature is greater than 40℃

6>.Rotary coded potentiometer for precise current adjustment to 0.01A

7>.The current can be locked to prevent misoperation

8>.Data group function:user can choose whether to accumulate the capacity value and running time of the previous phase

9>.Support UART data communication

5.Protection mechanism:

1>.FZ35 supports reverse protection for input terminal.

2>.FZ35 supports reverse protection for output terminal.

3>.OVP over voltage protection.The default protection value is 25.2V.But user can modify the values as required.Screen will display OVP and flashing after start over voltage protection.

4>.OCP over current protection.The default protection value is 5.10A.But user can modify the values as required.Screen will display OCP and flashing after start over current protection.

5>.OPP over power protection.The default protection value is 35.5W.But user can modify the values as required.Screen will display OPP and flashing after start over power protection.

6>.OTP over temperature protection.The default protection value is 80℃.It can not be modified!Screen will display OTP and flashing after start over temperature protection.

7>.LVP under voltage protection.The default protection value is 1.5V.But user can modify the values as required.Screen will display LVP and flashing after start under voltage protection.In the battery discharge test, setting the appropriate LVP can effectively prevent the battery from being over-discharged, so as not to damage the battery.

6.Initialization state:

Automatically display the last parameter value.

7.Discharge capacity and discharge time statistics:

1>.Discharge capacity statistics:FZ35 start to statistics when load current is not zero.After the next load current is zero, it is considered that a discharge process is completed and the statistics are over.

2>.Discharge time statistics:FZ35 start to statistics when load current is not zero.After the next load current is zero, it is considered that a discharge process is completed and the statistics are over.

8.Set OAH and OHP:

1>.Set maximum capacity OAH:FZ35 automatically stops working and flashes "OAH" on screen when the load discharge capacity is higher than the set maximum capacity after enable OAH function.The capacity statistics are automatically cleared after the OAH alarm is released.

2>.Set maximum discharge time OHP:FZ35 automatically stops working and flashes "OHP" on screen when the load discharge time is more than the set maximum discharge time after enable OHP function.The discharge time statistics are cleared automatically after the OHP alarm is released.

3>.The OAH and OHP can be perfectly implemented unattended for power aging test.

4>.FZ35 will record discharge capacity and discharge time even if OAH and OHP are not enable.But FZ35 stops working after reaching the set value if OAH and OHP are enable.The running time of the FZ35 is the countdown mode when enable OHP.

9.Data group function DAT:

1>.DAT0:Only flashing and display the capacity value and running time of the previous stage, and not adding to the next stage.

2>.DAT1:Flashing and display the capacity value and running time of the previous stage, and automatically added to the next stage.

10.Run interface description:

1>.Press 'ON/OFF' button to turn ON FZ35 after power on.

2>.Set current value by rotary potentiometer.

3>.Press potentiometer to switch display parameter on the second line.The first line display voltage and the second line display current/power/capacity/time.

4>.Screen will display current when rotary potentiometer at any display interface.

5>.Keep press 'ON/OFF' for more than 3 seconds to lock parameter at current display interface.Screen will display lock symbol if enable data lock function.At this time, the load current cannot be adjusted in real time by the rotary potentiometer to prevent misoperation.

6>.Keep press 'ON/OFF' for more than 3 seconds to clear the corresponding capacity/time data at capacity/time display interface.

11.Setting interface description:

1>.Keep press potentiometer for more than 3 seconds to enter set parameter interface.

2>.Set load current by rotary potentiometer.Increase the current value clockwise.

3>.Switch set parameter by press potentiometer.

4>.Press 'ON/OFF' button to enabled or disabled OAH(OHP) function at OAH(OHP) display interface.Screen will display '----' if disabled OAH(OHP) function.

5>.Rotary potentiometer to set value at OUP/OCP/OPP/LUP/OAH/DAT parameter.

6>.Keep 'ON/OFF' button to set capacity range at OAH interface.Each time press button, the decimal point moves by one, and then rotates the potentiometer to modify the value.The capacity range is 9.999Ah/99.99Ah /999.9Ah/9999Ah.

7>.At OHP set interface,the second line will display '--:--'.User need press 'ON/OFF' button to set hours and minutes parameters and then rotary potentiometer to set value.

8>.Keep press potentiometer for more than 3 seconds to save parameters after setting is complete.Then exit the settings interface.

12.Use steps:

1>.Connect to work voltage at 'V+' and 'V-'.
2>.Set right parameters as set manual.
3>.Remove work voltage and connect load.
4>.Re-power.Test and use.

13.Application:

1>.Load test
2>.Circuit test
3>.Battery test
4>.Factory equipment inspection

14.Note:

1>.It can not output voltage.User need connect load power supply for load.
2>.Please read use manual and description before use.

15.Package:

1>.1pcs FZ35 5A 35W Electronic Load Tester;

UART communication and parameter settings		
No.	Parameter	Value
1	Baud rate	9600bps
2	Data bits	8bit
3	Stop bit	1bit
4	Check bit	none
5	Flow control	none
No.	UART Command	Function
1	Start	Enabled UART communication
2	Stop	Disabled UART communication
3	ON	Enabled Load
4	OFF	Disabled Load
5	x.xxA	Set Load Current Value
6	LVP:xx.x	Set LVP Under Voltage Protection Value
7	OVP:xx.x	Set Over Voltage Protection Value
8	OCP:x.xx	Set Over Current Protection Value
9	OPP:xx.xx	Set Over Power Protection Value
10	OAH:x.xxx	Set maximum capacity Value
11	OHP:xx:xx	Set maximum discharge time
12	Read	Read Parameter
Data upload format		
Unalarmed status:		
Load supply voltage, Load current, Capacity value, Discharge time		
11.90V,0.11A,0.004Ah,00:02 -->Load voltage 11.90V;Load current 0.11A;Capacity 0.004Ah;Discharge time 2 minutes		
Note:'00:02' is the countdown time if enabled maximum discharge time.		
Alarm status:		
Upload alarm status code:OVP/OCP/OPP/LVP/OAH/OHP/OTP		
Return for Read command:		
OVP:25.2, OCP:5.10, OPP:35.5, LVP:1.50,OAH:0222,OHP:00:00		
Over voltage;Over current;Over power;under voltage;maximum capacity;maximum discharge time		

Interface description

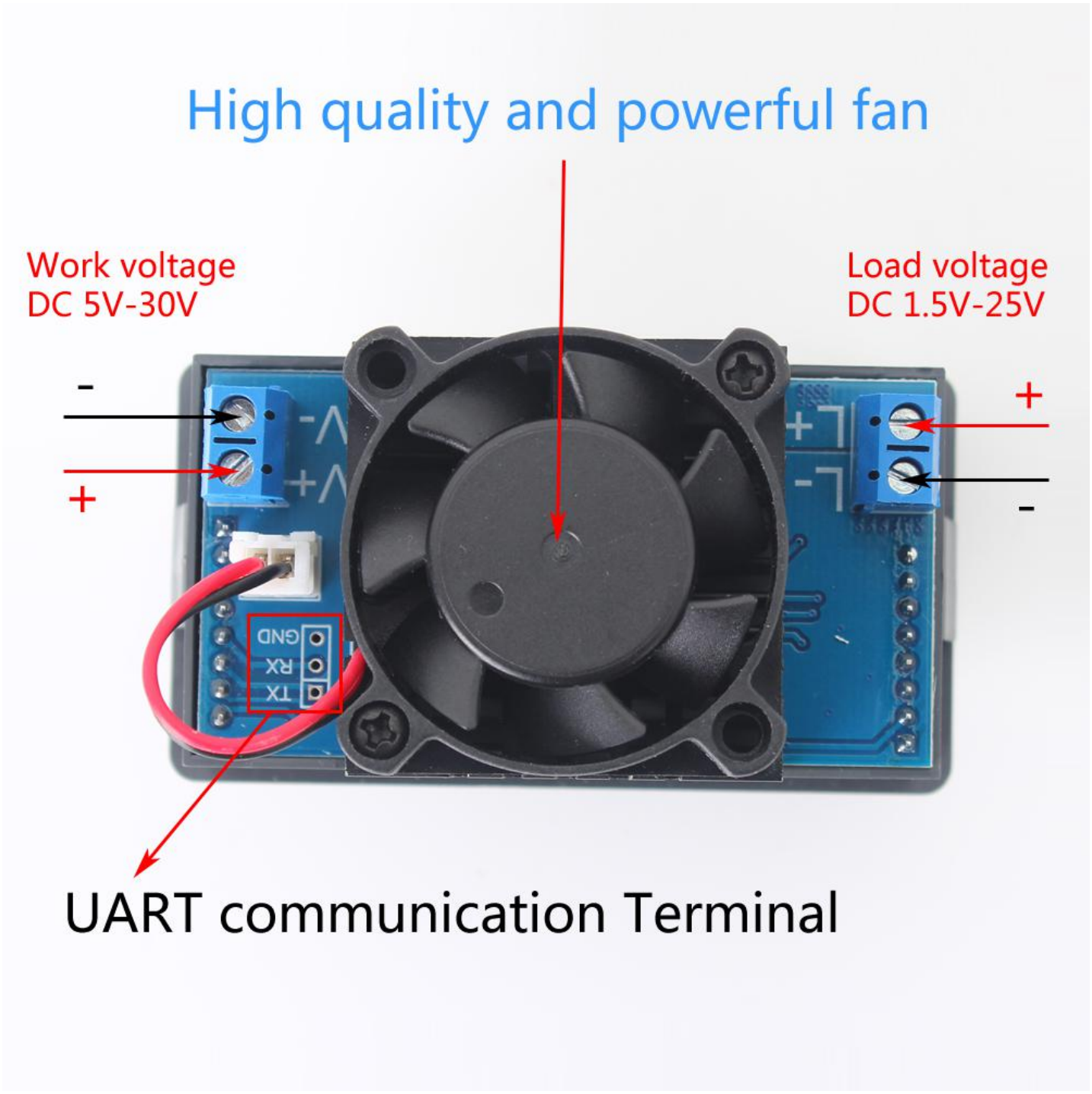
Potentiometer Button
Rotary potentiometer to set parameter value
Short press to switch dispaly parameter at second line
Long press to enter set parameter interface

Display 'IN' when input work voltage

Load voltage display at the first line

current/power/capacity/time display at the second line.

ON/OFF button to turn ON/OFF load.


High quality and powerful fan
Work voltage
DC 5V-30V
Load voltage
DC 1.5V-25V
-
+
+
-
GND
RX
TX
UART communication Terminal

Short press potentiometer switch display

Display Load Current

Display Load Power

Display Capacity

Display discharge time

Keep press ON/OFF button for more than 3 seconds to lock parameter at current display interface.Screen will display lock symbol if enable data lock function.At this time, the load current cannot be adjusted in real time by the rotary potentiometer to prevent misoperation.

Long press potentiometer to select set parameter

Set Over Voltage Protection

OVP:Default 25.2V

Set Over Current Protection

OCP:Default 5.10A

Set Over Power Pretection

OPP:Default:35.5W

Set UnderVoltage Protection

LVP:Default 1.5V

Set Maximum capacity

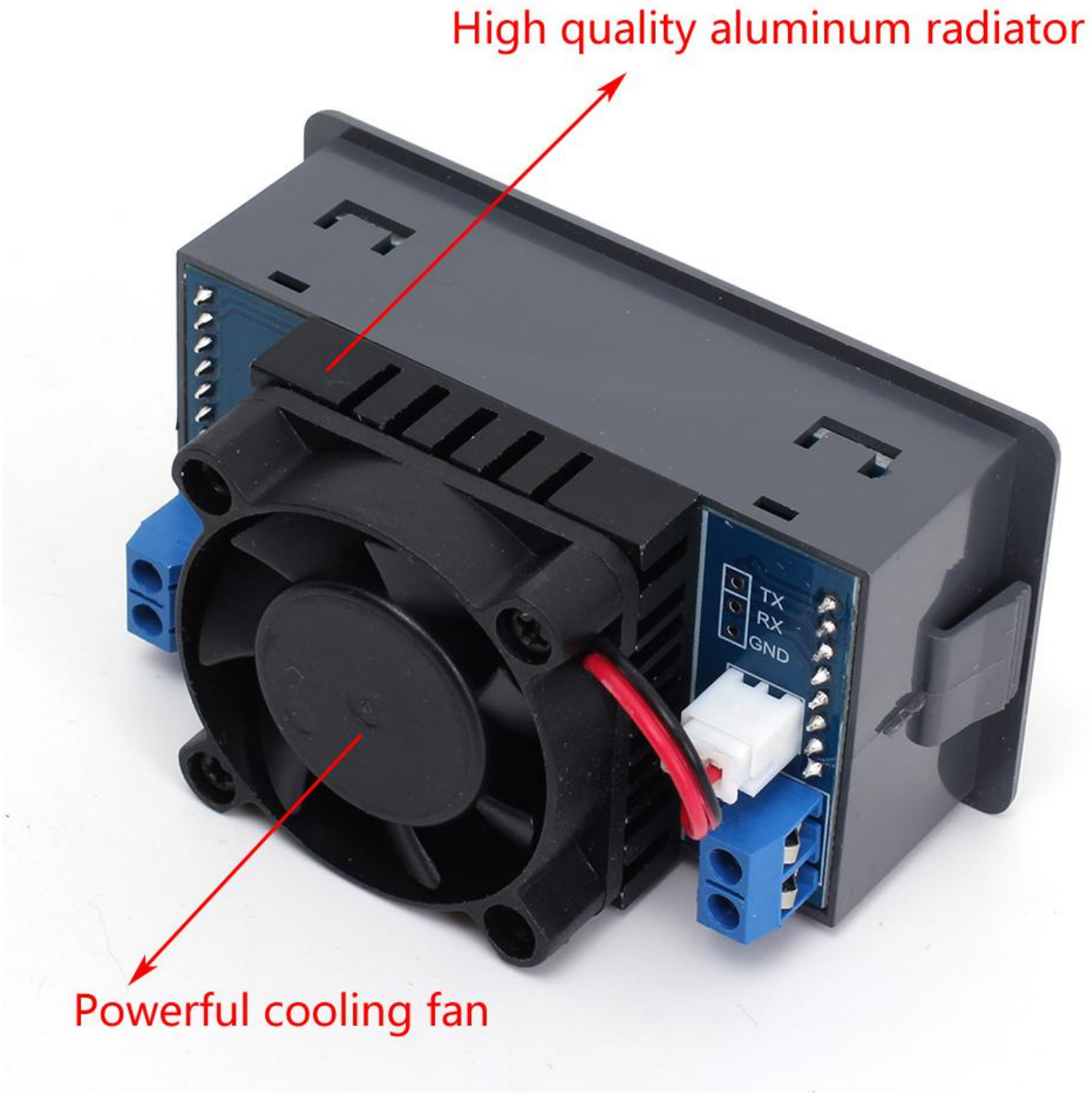
OAH

Set Maximum discharge time

OHP

Set Data Group Function

DAT:Default 0


High quality aluminum radiator
TX
RX
GND
Powerful cooling fan


23mm
46mm
10mm
39mm
13mm
ON/OFF
ELECTRONIC LOAD
XY-FZ35
43mm
79mm