### Testing Equipment for iPhone battery series

# **PRODUCT SPECIFICATION**

**HS-T1000 Battery Test Equipment** 

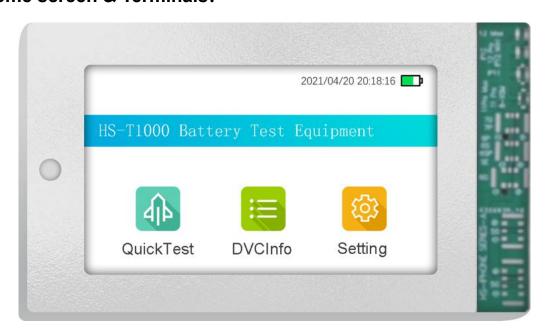
HS-T1000 Function:

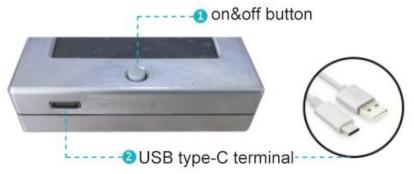
HS-T1000 carries testing on battery series from iPhone 4 to 12 Pro Max. Quick detect battery parameters such as battery health.

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	File	HS-T1000 specification	Version	Universal V1.00	Date	2021/4/20

# • Equipment outline:

#### 1-1: Home screen & Terminals:





### 1-2: Product application:

HS-T1000 is applicable for iPhone batteries R&D personnel, sales, repair crews, repair shop, small and medium sized factories in iPhone batteries industry.

1-3: Function outline: series of iPhone batteries from 4 to 12 Pro Max

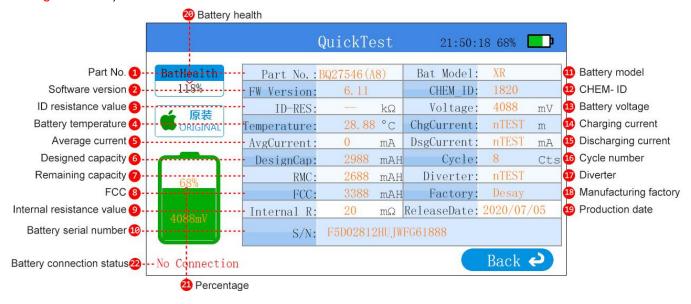
### • Quick Test :

### 2-1: Quick test operation:

Quickly detect battery performance and parameters;

- 1. Enter into main screen after starting up;
- 2. Entrance: Main screen=>Quick Test;
- 3. Connect battery via wiring board per model, battery parameter and performance will be displayed.

4. Defaulted to not test charging & discharging current( turn on charging & discharging testing function in setting if needed)



### 2-2: Quick Test Parameter List:

Item	Parameter	Description	Item	Parameter	Description
1	Part No.	DSP model	11	Bat Model	Battery model identifier
2	FW Version	Firmware version	12	CHEM_ID	Battery system chem identifier
3	ID Resistance	Control resistance of charging & discharging current(4G/4S)	13	Voltage	Battery rated voltage
4	Temperature	Battery temperature	14	ChgCurrent	Current during charging(set in system settings)
5	AvgCurrent	Battery output average current	15	DsgCurrent	Current during discharging(set in system settings)
6	DesignCap	Factory set rated capacity	16	Cycle	Time of one full charging and discharging cycle
7	RMC	Battery remaining capacity	17	Diverter	Battery diverter identifier(X,XS-Max)
8	FCC	Full charge capacity	18	Factory	Battery manufacturing factory
9	Internal R	Internal resistance value	19	Release Date	Battery production date
10	S/N	Battery serial number	20	Bat Health	Ratio of FCC to design capacity
21 Percentage Ratio of RMC to FCC		22	Battery connection status		

### DVCInfo:

#### Equipment info display

	Equipment into display					
Item	Property	Content	Item	Property	Content	
1	Equipment model	HS-T1000	5	Voltage	4054mV (voltage of built-in battery)	
2	IAP_Version	V2.000	6	LCD-ID	NT35510(LCD screen serial number )	
3	FW_Version	V1.100(firmware version)	7	Equipment SN	Equipment unique serial number	
4	HD_Version	V1.000(hard ware version)				

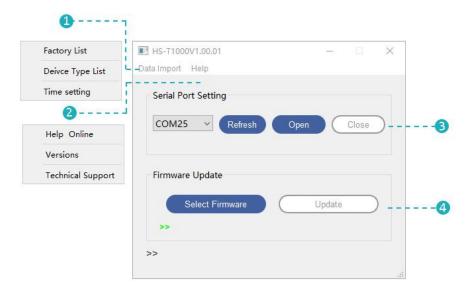


## Setting:

Setup equipment basic info & user usages

item	property	use instruction
1	Brightness	Standard/low-light/high-light options
2	Auto Sleep	10/20/30Minute Sleep / No Sleep option
3	Buzzer Setting	Open / Close option
4	Time Setting	Set system time
5	Date Setting	Set system date
		(charging/discharging current testing) turn on/off option
6	Chg / Dsg Test	turn off:skip testing on charging current and discharging current, shows "nTEST"
		turn on: quick test on charging current and discharging current(require around 4 sec)
7	Language	Freely switch between Chinese and English option,

# • Host computer introduction:



- **1) Data import menu:** factorylist loading, dtypelist loading;
- **②Help menu:** online help document checking, equipemnt version info query, technical support
- 3 Serial port Setting: connect COM port with computer via USB Type-C cable
- **4) Firmware Update:** can update firmware

#### match host computer software function:

- 1. update factorylist, dtypelist( to detect OEM factory and battery P/N when testing)
- 2. Firmware upgrade

### **Data import function:**

- ①database file saved at paralist folder under the directory of host computer;
- 2 dtypelist: dtypelist.txt, factorylist: factorylist.txt;
- 3 download latest dtypelist, factorylist from official website and replace that in paralist folder.
- 4) Time setting: loading time and date form host computer

### Firmware upgrade manual:

- ①click "Refresh" button at serial sport setting area, choose access port and turn on
- 2 click "Select Firmware" button at the firmware update area, select target firmware in the file select dialog box
- ③"Update" button will light up after file been selected, click it and start update, shows update process below
- ④equipment restart when prompting that update completed.

**Remark:** need to restart and enter boot, then connect serial port automatically during upgrade process, if fail to connect, manually connect it and continue to update.

## • Equipment spec:

**size:** L1340mm\*W790mm\*H15mm

weight: 280g

**screen size:** 4.3in 104.5mm\*61.5mm resolution: 800\*480 **battery capacity:** 1000mAh( with stand-by time of around 8 hours)

### Package list:

- 1、HS-T1000 \*1; 2、Battery wiring board\*1;
- 3、USB Type-C cable\*1; 4、HS-T1000 user manual\*1.