

YD

**INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

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**Mobile handset chargers and interface requirements and test
methods**

(English Translation)

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Foreword

This Standard is prepared referring to the following standards.

2 YD 1268.2-2003 Security Requirement and Test Method of Lithium Battery Charger

for the Mobile Communication Terminal

3 GB 9254 Wireless Interference Limit and Measure Method of Information Technical

Equipment

6 GB 17625.2 Magnetic Compatibility Limit Limit for the Voltage Fluctuation

Generated by the Equipment with the Rated Current Less than 16A in the Low-Voltage Supply System.

When the charger simultaneously works with the mobile communication terminal, its magnetic compatibility feature shall respectively meet the magnetic compatibility requirement of the mobile communication terminal in different modes. Meanwhile, during the preparing process of this Standard, it also refers to the electric feature and mechanical structure of

"universal serial bus specification (version 2.0)" interface.

With the development of the technology, the related standards will be continually prepared. After this Standard is issued, we will conduct researches on the technical requirement and test methods of the equipment such as on-board DC charger and plan to supplement the corresponding parts as the supplementary documents of this Standard if necessary.

This Standard is proposed and managed by China Communication Standardization association.

This Standard is Drafted by. Telecom Research Institute of Ministry of Information and Industry, and Konka Group Co., Ltd.

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Introduction

This Standard is prepared to guarantee the security of the product and availability, meanwhile, it enables the mobile communication terminals with different types to use the charger having the same specification to reduce the electronic waste, protect the environment,

save resource and reduce the use cost of the mobile communication terminal through the uniform interface mode and technical requirement.

Considering the requirement for the data exchange between the mobile communication terminal and peripheral equipment and sharing possibility of the charging cable, this Standard

refers to the A series interface specification of the Universal Serial Bus (USB) to improve the

application efficiency and convenience of the related components.

Considering the individual development of the mobile communication terminal, this Standard regulates the uniform connection interface and sets it on the charger side, and the connection interface on the mobile communication terminal side is identified by the design and manufacturer of the products.

Technical Requirement and Test Method of Charger and Interface for Mobile Telecommunication Terminal Equipment

1 Scope

This Standard regulates the technical requirements and test methods of charger and interface of the mobile communication terminal (hereafter called as the "terminal"), including

the physical feature, electric feature, security feature, magnetic compatibility and environment

adaptability of the AC charger and interface.

This Standard is applicable to the interface of the terminal charger, AC charger and connection cable.

2 Reference documents

The articles in the following documents become the articles of this Standard through the reference of this reference. For any reference document with the date, its subsequent modified

contents (not including corrected content) or revisal versions are not applicable to this Standard, however, it is encouraged that all parties reaching this agreement on this Standard

study whether the latest versions of these documents can be used. For any reference files without the date, its latest version is not applicable to this Standard.

GB 2099.1-1996 Housing and Similar Plug and Socket Part I. Universal Requirement

GB 4943-2001 Security of Information Technical Equipment

GB 5023.5-1997 Insulation Cable Polythene below the Rated Voltage 450/750V Part V.

Software Cable (chord)

GB9254 Wireless Interference Limit and Measure Method of the Information
Technology Equipment

GB 17465.1-1998 Housing and Similar Appliance Coupler Part I Universal Requirement

GB 17625.1 Magnetic compatibility Limit Emission Limit for Harmonic Wave
Current

exceed 35N and the required force for pulling the plug from the socket can not be less than 10N.

4.2.2.2 Plug lifetime

Plug in/plug out for 15000 periods at the maximum speed during the 200 periods of one hour, after the plugging ends, the mechanical structure shall not be damaged. The required minimum force for pulling the connection plug out from the socket is not less than 8N, the electric performance shall meet the requirement in the 4.2.3.

4.2.3.1 Electric performance requirement of the connection interface on the terminal

side

(1) The DC input voltage of the terminal charging interface is 5V(1±5%). maximum absorption current is 1800mA. Regardless of the input power of the charger, the charging control circuit on the terminal side shall be securely charged according to self requirement and the phenomena such as the over heating, combustion, explosion and other circuit damage

shall not occur.

(2) The charging control circuit on the terminal side shall include the voltage limit protection set. when the charging interface of the terminal is imported by over 6V voltage, if the secure charging can not be guaranteed, the charging control circuit on the terminal side shall securely charge according to self requirement, the phenomena such as the over heating,

combustion, explosion and other circuit damage shall not occur.

(3) When the connecting power supply set is not standard regulated charger (such as the built-in USB A series interface of the computer or portable computer).

(4) Considering that absorption current's security to the power supply set when the terminal is charging which has been produced and sold before this Standard is implemented,

the designer shall carefully consider whether the sold terminals meet the secure charging measure regulated in this Standard, when this Standard is adopted, the physical design of