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**Technical specification of modular uninterruptible power
systems for telecommunications**
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Foreword

This Standard pays attention to the harmonization with the following standard during the development.

- YD/T 1095-2008 Uninterruptible power systems for communications

This Standard was proposed by and shall be under the jurisdiction of the China Communications Standards Association.

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Technical specification of modular uninterruptible
power systems for telecommunications

1 Scope

This Standard specifies the terms and definitions, requirements, test methods, inspection rules, marks, packaging, transportation, and storage of modular uninterruptible power systems for telecommunications.

This Standard applies to the modular uninterruptible power systems for telecommunications (hereinafter referred to as "UPS systems for telecommunications").

2 Normative references

The provisions in the following documents become the provisions of this Standard through reference in this Standard. For dated references, the subsequent amendments (excluding corrections) or revisions do not apply to this Standard. However, parties who reach an agreement based on this Standard are encouraged to study if the latest versions of these documents are applicable. For undated references, the latest versions apply to this Standard.

GB/T 191 Packaging - Pictorial marking for handling of goods

GB/T 2423.1-2008 Environmental testing for electric and electronic products

- Part 2. Test methods - Tests A. Cold

GB/T 2423.2-2008 Environmental testing for electric and electronic products

- Part 2. Test methods - Tests B. Dry heat

GB/T 2423.3-2006 Environmental testing for electric and electronic products

- Part 2. Testing method - Test Cab. Damp heat, steady state

GB/T 2423.10-2008 Environmental testing for electric and electronic

products - Part 2. Test methods - Test Fc. Vibration (sinusoidal)

GB/T 2828.1-2003 Sampling procedures for inspection by attributes - Part

1 Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot

inspection

GB/T 3873-1983 General specifications for products packaging of communication equipment

GB/T 4980-2003 Determination of sound level for noise emitted by displacement compressors

YD/T 282-2000 General reliability test methods for communication equipment

YD/T 944-2007 Technical specification and testing methods for surge protection of power supply for communications

YD/T 983-1998 Limits and methods of measurement of electromagnetic compatibility for telecommunication power supply equipment

YD/T 1363.1 Specification of supervision system for power, air conditioner and environment - Part 1. Generic specification

YD/T 1363.3 Specification of supervision system for power, air conditioner and environment - Part 3. Intelligent equipment communication protocol

3 Terms and definitions

The following terms and definitions apply to this Standard.

3.1 Modular uninterruptible power system

It is composed of input distribution, output distribution, power module, and control module. The modules are possessed of the following properties.

- Have independent mechanical framework;
- Have complete and independent function;
- The modules shall work cooperatively.

3.2 Power module

It includes rectification, inversion, charging (optional), power factor correction, and relevant control circuits. As the main module of the UPS system, the power module has hot swapped function and parallel redundancy operation function under the normal operating mode of the UPS system.

3.3 Control module

It shall be responsible for the real-time monitoring of the operating mode of the UPS system as well as the collection and storage of the operating parameters,

5.5.3 Output overload protection of power modules

When the power module's output exceeds the rated load, the UPS system shall give an audible and visual alarm; when the power module's output exceeds its overload capacity, EXIT the UPS system; when all the power modules in the UPS system exceed the overload capacity, SWITCH to bypass for power supply.

5.5.4 Over-temperature protection

When the internal temperature of the power module comes up to the protection settings, the power module shall be able to automatically give an alarm, exit the system for protection, and return back to the operating mode after troubleshooting.

5.5.5 Low battery voltage protection

When the UPS system is in battery inverter mode, and the battery voltage reduces to the protection point, the UPS system shall give an audible and visual alarm, and the battery shall stop providing power supply.

Note: When the mains power supply recovers after the shutdown caused by battery discharge termination,

users can set whether the system can automatically restart.