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PEOPLE'S REPUBLIC OF CHINA**

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**General technical requirements for meteorological
measurement standards - Air humidity**

气象计量标准器通用技术要求 空气湿度

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

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General technical requirements for meteorological measurement standards - Air humidity

1 Scope

This document gives the classification of air humidity measurement standards for meteorological purposes and specifies their technical requirements.

This document applies to the design, production, testing and type evaluation of meteorological air humidity measurement standards.

2 Normative references

GB/T 37467-2019

3 Terms and Definitions

The terms and definitions defined in GB/T 37467-2019 and the following apply to this document.

3.1 Chilled mirror dew point meter

An instrument that uses isobaric adiabatic cooling to measure the dew point (frost point) temperature by measuring the condensation (sublimation) temperature of water vapor on the mirror surface.

[Source. GB/T 37467-2019, 3.1.3.26, modified]

3.2 [Source. GB/T 37467-2019, 3.1.3.18, modified]

A psychrometer with a motorized ventilation unit to control the ventilation rate.

3.3

Under certain temperature conditions, the gas is pressurized and saturated in the saturation chamber (device), and then decompressed and expanded in the test chamber.

An instrument that tests the pressure ratio of a chamber and obtains a stable airflow with different humidity levels.

3.4

Under constant pressure conditions, the gas at a certain temperature is saturated in the saturator (chamber), and then the temperature is raised in the test chamber.

An instrument that adjusts the temperature of the saturator and test chamber to obtain a stable airflow with different humidity.

3.5

An instrument that mixes dry gas and saturated wet gas in different proportions under certain temperature conditions to obtain a stable airflow with different humidity.

3.6

An instrument that uses a saturated salt solution to reproduce the relative humidity of air.