

Australian Standard™

**Clinical thermometers**

**Part 4: Performance of electrical  
thermometers for continuous  
measurement**

This Australian Standard was prepared by Committee CH-030, Temperature Measurement. It was approved on behalf of the Council of Standards Australia on 7 April 2004 and published on 25 May 2004.

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The following are represented on Committee CH-030:

Australian Chamber of Commerce and Industry  
Australian Electrical and Electronic Manufacturers Association  
Australian Institute of Physics  
CSIRO Manufacturing & Infrastructure Technology  
CSIRO National Measurement Laboratory  
Electricity Supply Association of Australia  
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Australian Standard™

## **Clinical thermometers**

### **Part 4: Performance of electrical thermometers for continuous measurement**

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## PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee CH-030, Temperature Measurement. After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian, rather than an Australian/New Zealand Standard.

This Standard is identical with and has been reproduced from EN 12470-4:2000, *Clinical thermometers—Part 4: Performance of electrical thermometers for continuous measurement*.

The objective of this Standard is to specify the metrological and technical requirements for electrical thermometers for continuous measurements.

The term ‘informative’ has been used in this Standard to define the application of the annex to which it applies. An ‘informative’ annex is only for information and guidance.

As this Standard is reproduced from a European Standard, the following applies:

- (a) Its number does not appear on each page of text and its identity is shown only on the cover and title page.
- (b) In the source text ‘this European Standard’ and ‘this part of EN 12470’ should read ‘this Australian Standard’.
- (c) A full point substitutes for a comma when referring to a decimal marker.

References to International Standards and European Standards should be replaced by references to Australian or Australian/New Zealand Standards as follows:

| <i>Reference to International Standard</i> |   | <i>Australian or Australian/New Zealand Standard</i> |   |
|--|---|--|---|
| ISO  |   | AS   |   |
| 2859                                       | Sampling procedures for inspection by attributes  | 1199   | Sampling procedures for inspection by attributes  |
| 2859-2                                     | Part 2: Sampling plans indexed by limiting quality (LQ) for isolated lot inspection                                 | 1199.2   | Part 2: Sampling plans indexed by limiting quality (LQ) for isolated lot inspection                                 |
| IEC  |   | AS   |   |
| 60068                                      | Environmental testing   | 60068  | Environmental testing   |
| 60068-2-14                                 | Part 2: Tests—Test N: Change of temperature   | 60068.2.14   | Part 2.14: Tests—Test N: Change of temperature  |
| EN   |   | AS/NZS   |   |
| 60601                                      | Medical electrical equipment  | 3200   | Medical electrical equipment  |
| 60601-1                                    | Part 1: General requirements for safety   | 3200.1.0   | Part 1.0: General requirements for safety—Parent Standard   |
| 60601-1-2                                  | Part 1-2: General requirements for safety—Collateral standard: Electromagnetic compatibility—Requirements and tests | 3200.1.2   | Part 1.2: General requirements for safety—Collateral Standard: Electromagnetic compatibility—Requirements and tests |

Only international or European references that have been adopted as Australian Standards have been listed.

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NOTES

# AUSTRALIAN STANDARD

## Clinical thermometers

### Part 4: Performance of electrical thermometers for continuous measurement

#### 1 Scope

This part of EN 12470 specifies the metrological and technical requirements for electrical thermometers for continuous measurements.

This European Standard applies to devices that are operated by an electrical power supply either by mains or internal power sources.

The devices can be equipped to accommodate secondary indicators, printing devices, and other auxiliary devices. The metrological requirements for such accessories are not covered by this European Standard.

Thermometers intended to measure skin temperatures are not covered by this European Standard.

This European Standard does not intend to exclude the use of any device based on other measuring principles that provides an equivalent performance in continuously measuring body temperature.

**NOTE:** Devices can have functions which are covered by different parts of EN 12470. In this case, it is the responsibility of the manufacturer to indicate by which part of EN 12470 the function is covered, e.g. electrical thermometer with maximum device and exchangeable temperature probes.

#### 2 Normative References

This European Standard incorporates by dated or undated reference, provisions from other publication. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

|                    |  |
|--------------------|--|
| EN 980             | <i>Graphical symbols for use in the labelling of medical devices</i>   |
| EN 1041            | <i>Information supplied by the manufacturer with medical devices</i>   |
| EN 60068-2-14:1999 | <i>Environmental testing - Part 2: Tests - Test N: Change of temperature (IEC 60068-2-14:1984+A1:1986)</i>   |
| EN 60601-1:1990    | <i>Medical electrical equipment -Part 1: General requirements for safety (IEC 60601-1:1988)</i>  |
| EN 60601-1-2       | <i>Medical electrical equipment -Part 1: General requirements for safety - 2: Collateral Standard : Electromagnetic compatibility; Requirements and tests (IEC 60601-1-2:1993)</i> |
| ISO 2859-2: 1985   | <i>Sampling procedures for inspection by attributes - Part 2: Sampling plans indexed by limiting quality (LQ) for isolated lot inspection</i>                                      |