

MAURITIAN
STANDARD

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9849:2017

First Edition
2019-04-27

**Optics and optical instruments —
Geodetic and surveying instruments
— Vocabulary**

ICS: 17.180.30; 01.040.17



**Mauritius Standards Bureau
Moka**

National foreword

This Mauritian Standard is identical with the International Standard ISO 9849:2017, *Optics and optical instruments — Geodetic and surveying instruments — Vocabulary*

It has been adopted as a national standard upon the recommendation of the **Metrology Standards Committee**.

It was approved by the Standards Council on 28 March 2019 and was notified in the Government Gazette on 27 April 2019.

For the purpose of this standard the following changes should be made:

- (i) the words 'International Standard' should be replaced by 'Mauritian Standard'
- (ii) the 'decimal comma' should be replaced by 'decimal point'.

General Notice No 881 of 2019



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Contents

Page

| | |
|--|-----------|
| Foreword | iv |
| Introduction | v |
| 1 Scope | 1 |
| 2 Normative references | 1 |
| 3 Terms and definitions | 1 |
| 3.1 Types of geodetic instruments and related terms..... | 1 |
| 3.2 Parts of geodetic instruments..... | 7 |
| Bibliography | 18 |
| Index | 19 |

PREVIEW

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 172, *Optics and photonics*, Subcommittee SC 6, *Geodetic and surveying instruments*.

This third edition cancels and replaces the second edition (ISO 9849:2000), which has been technically revised.

Introduction

This document forms one of a series concerning geodetic and surveying instruments. It gives definitions of terms which may be used in the drafting of other International Standards and national standards in this field.

Only terms relating to geodetic and surveying instruments for geodetic work and their essential parts are described in this document. It is intended for both the surveyor and the non-surveyor. Every reader is requested to use only these terms in the future so that, with time, a standard and acceptable terminology will come into common usage.

PREVIEW

PREVIEW

Optics and optical instruments — Geodetic and surveying instruments — Vocabulary

1 Scope

This document defines terms relating to geodetic field instruments only, e.g. distance meters, levels, theodolites and others, and their essential component parts which are normally used in terrestrial measuring operations of ordnance survey, topographic survey, plane survey and engineering survey. Therefore, terms concerning fields such as the following are not mentioned, for example, photogrammetry, astronomy, hydrographic survey and industrial metrology.

Accessories which are not necessary for the functioning of the instruments are not dealt with. The terms are arranged in English alphabetical order.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1 Types of geodetic instruments and related terms

3.1.1

alignment instrument

device used to aim at intermediate points and to a reference target at the end of an alignment

Note 1 to entry: The device is usually equipped with a powerful magnifying *telescope* (3.2.38).

3.1.1.1

alignment laser

line laser

pipe laser

alignment instrument (3.1.1) using a laser beam as reference line instead of an optical line of sight

3.1.2

barometer

instrument for measuring atmospheric pressure

Note 1 to entry: Barometers can be used for the atmospheric reduction of electronically measured distances or as *barometric altimeters* (3.1.2.2).

3.1.2.1

aneroid barometer

barometer (3.1.2) in which atmospheric pressure is balanced by some elastic elements as a method that does not involve liquid