

Space engineering - Gyros terminology and performance specification

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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English version

Space engineering - Gyros terminology and performance specification

Ingénierie spatiale - Spécification des performances et terminologie des gyros

Raumfahrttechnik - Kreiselinstrumente - Terminologie und Leistungsspezifikation

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European Foreword

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This standard (EN 16603-60-21:2018) originates from ECSS-E-ST-60-21C.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by March 2019, and conflicting national standards shall be withdrawn at the latest by March 2019.

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Introduction

This Standard is intended to support the variety of space borne gyros either available or under development, with the exception of the gyros used for the launch vehicles.

This standard defines the terminology and specifications for the functions and performance of gyros used on spacecraft. It focuses on the specific topics to be found in the gyros procurement specification documents and is intended to be used as a structured set of systematic provisions.

This standard is split in three main clauses:

- Terminology (clause 3)
- Functional requirements (clause 4)
- Performance requirements (clause 5)

NOTE This standard does not contain textbook material on gyro technology. The readers and the users are assumed to possess general knowledge of gyro technology and its applications to space missions.

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Scope

This Standard specifies gyros functions and performances as part of a space project. This Standard covers aspects of functional and performance requirements, including nomenclature, definitions, functions and performance metrics for the performance specification of spaceborne gyros.

The Standard focuses on functional and performance specifications with the exclusion of mass and power, TM/TC interface and data structures.

When viewed from the perspective of a specific project context, the requirements defined in this Standard can be tailored to match the genuine requirements of a particular profile and circumstances of a project.

The requirements verification by test can be performed at qualification level only or also at acceptance level. It is up to the Supplier, in agreement with the customer, to define the relevant verification approach in the frame of a specific procurement, in accordance with clause 5.2 of ECSS-E-ST-10-02.

The present standard does not cover gyro use for launch vehicles.

This standard can be tailored for the specific characteristics and constraints of a space project in conformance with ECSS-S-ST-00.

2**Normative references**

The following normative documents contain provisions which, through reference in this text, constitute provisions of this ECSS Standard. For dated references, subsequent amendments to, or revision of any of these publications, do not apply. However, parties to agreements based on this ECSS Standard are encouraged to investigate the possibility of applying the more recent editions of the normative documents indicated below. For undated references, the latest edition of the publication referred to applies.

EN reference	Reference in text	Title
EN 16601-00-01	ECSS-S-ST-00-01	ECSS system - Glossary of terms