
Preface

Surveying is one of the most ancient professions, and in recent years it has been boosted by technology advances. These advances come from developments in optical, mechanical, electronics, aerospace, sensor, and information technologies. To this end, instrumentation deployed by modern surveyors is associated with a significant body of knowledge. This book is about surveying instruments and covers all aspects of them, including historical references, physical and constructional principles of operation, and features of modern instruments. The idea of creating a book about surveying instruments occurred to us while speaking with our colleagues and customers. Existing books in the field of surveyor's instruments were published many years ago and do not include up-to-date surveying instruments information. We believe this book is long overdue as a complete description of the latest surveying instruments.

This book is suitable for undergraduate and graduate students who are taking surveying courses, and professional surveyors seeking a better understanding of surveying instruments. Field surveyors working on large construction projects, such as road networks and buildings, and other geodetic control networks may find useful details presented in this book. Surveying business owners may also benefit.

It is hoped that this book will help readers to become aware of technological solutions behind the development of surveying instruments.