
**Hydrometry — Measuring river velocity
and discharge with acoustic Doppler
profilers**

*Hydrométrie — Mesure de la vitesse et du débit des rivières au moyen
de profileurs à effet Doppler*

www.iso.org/iso/iso_catalogue



Reference number
ISO/TS 24154:2005(E)

© ISO 2005

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

© ISO 2005

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 0111
Fax + 41 22 749 0947
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

Page

Foreword.....	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions.....	1
4 Background.....	2
5 Principles of operation.....	2
6 Application of acoustic Doppler profilers to measurement of river discharge.....	3
6.1 Instrumentation and equipment requirements	3
6.2 Making the measurement.....	4
6.3 Computing the measurement	4
7 Factors affecting operation and accuracy	6
7.1 Characteristics of the acoustic Doppler profiler	7
7.1.1 Transducers or beams	7
7.1.2 Size and frequency	7
7.2 River and channel characteristics	7
7.3 Operator training and experience	8
8 Verification	8
9 Construction.....	8
10 Maintenance	9
Bibliography	10