
**Determination of particle size
distribution — Electrical sensing zone
method —**

**Part 2:
Tunable resistive pulse sensing
method**

*Détermination de la distribution granulométrique — Méthode de
détection de zones électrosensibles —*

*Partie 2: Méthode par détection d'impulsions résistives accordable
(TRPS)*





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Foreword

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Introduction

Monitoring particle size distributions and particle concentrations are required in various fields, where particle dispersions in liquid play a role. The electrical sensing zone technique has, since its discovery by W. H. Coulter around 1950, been widely employed for size and count analysis of (blood) cells, bacteria and other fine particles. Over the last decades, the application range has expanded to nanoparticles, such as liposomes, exosomes, and nano- and micro-bubbles, as a result of improved electronics and aperture fabrication. The tunable electrical sensing zone technique is useful for the determination of the size distribution, concentration and zeta potential of micro- and nanoparticles suspended in a liquid. The purpose of this document is to provide the background and procedures for application of tunable electrical sensing zone equipment for particle size distribution and concentration measurements, so as to improve the reproducibility and the accuracy of the acquired results.

