

HES2000-IR Spectrometer

Technical Specifications

Contact Details

Correspondence Address: IS-Instruments Ltd.

Pipers Business Centre

220 Vale Road

Tonbridge

Kent

TN9 1SP

UK

Email: info@is-instruments.com

Phone: +44 (0)1732 373020 (09:00 – 17:00 UK)

Fax: +44 (0)1732 373001

Disclaimer

THE INFORMATION CONTAINED HEREIN IS PROVIDED "AS IS" WITHOUT WARRANTY, CONDITION OR REPRESENTATION OF ANY KIND, EITHER EXPRESS, IMPLIED, STATUTORY OR OTHERWISE, INCLUDING BUT NOT LIMITED TO, ANY WARRANTY OF MERCHANTABILITY, NON-INFRINGEMENT OR FITNESS FOR A PARTICULAR PURPOSE.

IN NO EVENT SHALL IS-INSTRUMENTS BE LIABLE FOR ANY LOSS OR DAMAGE, WHETHER DIRECT, INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL OR OTHERWISE HOWSOEVER CAUSED WHETHER ARISING IN CONTRACT TORT OR OTHERWISE, ARISING OUT OF OR IN CONNECTION WITH THE USE OF THE INFORMATION PROVIDED HEREIN.

COPYRIGHT AND PROTECTIVE NOTICES:

The copyright in this document and the associated drawings are the property of IS-Instruments Ltd. and all rights are reserved. This document and the associated drawings are issued on condition that they are not copied, reprinted or reproduced, nor their contents disclosed. Some information is reproduced with the permission of Andor Technology Plc. The publication of information in this documentation does not imply freedom from any patent or proprietary right of IS-Instruments or any third party.

TRADEMARKS & PATENT INFORMATION

IS-Instruments and the ISI logo are trademarks of IS-instruments Ltd. Andor, the Andor logo and iVac are trademarks of Andor Technology plc.

All other marks are property of their owners.

Changes are periodically made to the product and these will be incorporated into new additions of the manual.

1. Introduction

1.1. What's the product?

The HES2000 spectrometer is a Static Fourier Transform spectrometer providing high étendue measurements. Étendue is commonly referred to as throughput of a spectrometer. It is a measure of the ability of a spectrometer to capture and utilise individual photons from a particular area of a target or field of view. A more complete description of this can be found on our website – [It's all about throughput](#).



1.2. Specification table

The specifications given below are for the standard HES2000, but the unit is highly customizable. Please contact us at info@is-instruments.com for further details.

Model	HES2000-IR
Operating range	< 200 – 2000 cm^{-1}
Resolution*	~ 8 cm^{-1} over whole range per Fourier bin (To resolve two lines 3 bins are required)
Fibre coupled	SMA or FC/PC
Fibre aperture	≥ 1 mm as standard
Fibre NA	0.22
Detector	Andor iDus

*Unlike most other systems the HES spectrometers are linear in wavenumber space, meaning you won't lose resolution as you move away from the starting wavelength. Unlike conventional spectrometers there is no slit required so no blurring is observed.