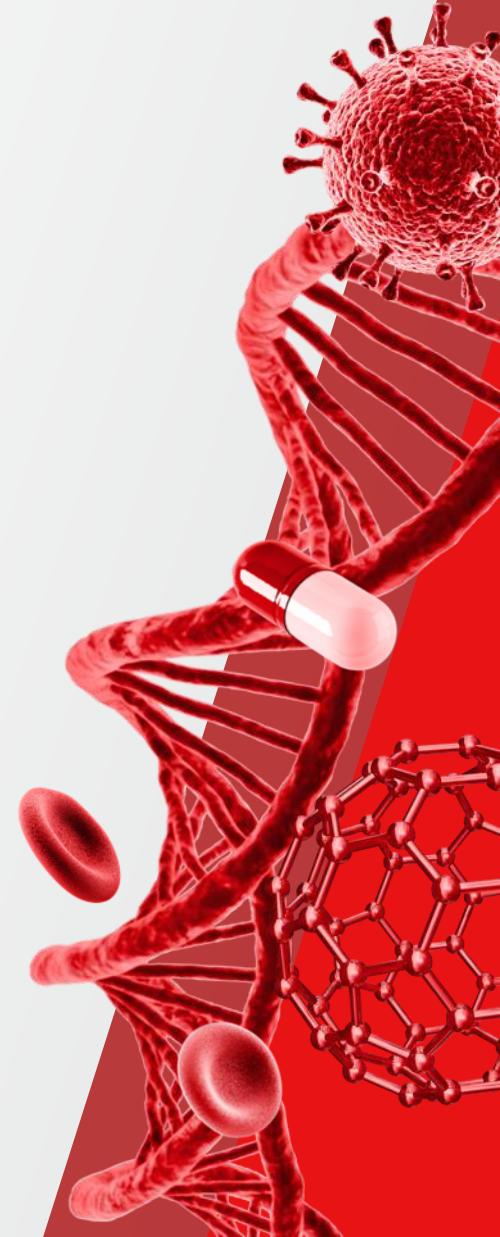


Thermo Scientific Orbitrap Astral 2.0 Instrument Control Software (AST 2.0 ICSW) –

Overview

June 2025

 The world leader in serving science



Orbitrap Astral Series

Orbitrap Astral MS



Orbitrap Astral Zoom MS



Software Release

Flexera Orbitrap Astral Series ICSW 2.0 is available to customers using Flexera software distribution site.

Customers new to the Flexera site should use the following link:

<https://thermo.flexnetoperations.com/control/thmo/RegisterMemberToAccount>

After setting up an account, customers can access the site using the following link:

<https://thermo.flexnetoperations.com/control/thmo/login>

In the 'Product List' page, find 'Instrument – Orbitrap Astral Series' and identify Orbitrap Astral Series 2.0 in the subfolder.

The screenshot shows the 'Software Download and Licensing Portal' for 'Life Sciences Mass Spectrometry'. The page features a navigation menu on the left with categories like 'Software & Services', 'Licensing', 'Administration', 'Information', and 'Sessions'. The main content area is titled 'Product Information' and 'Instrument - Orbitrap Astral Series'. It includes a 'Select a version.' section with two tabs: 'New Versions' (selected) and 'Release Archive'. Below this is a table listing various software versions with their descriptions and availability dates.

Version	Description	Date Available
	Orbitrap Astral Series 2.0	Jun 18, 2025
	Orbitrap Astral Series 1.1	Sep 13, 2024
	Orbitrap Astral Series 1.0 SP3	Mar 28, 2024
	Orbitrap Astral Series 1.0 SP2	Jan 23, 2024
	Orbitrap Astral Series 1.0 SP1	Aug 22, 2023
	Orbitrap Astral Series 1.0	Jul 26, 2023

Software Release

Thermofisher.com

The screenshot shows the ThermoFisher Scientific website interface. At the top, there is a navigation bar with the ThermoFisher logo, a search bar, and links for 'Statut des commandes' and 'Commande rapide'. Below the navigation bar, there is a search bar with the text 'Rechercher' and a search icon. The main content area features a section titled 'Learn more about LC-MS Data Acquisition Software' with a yellow 'In' icon. Below this, there are tabs for different instrument series: 'Orbitrap Astral MS', 'Orbitrap Tribrid MS', 'Orbitrap Exploris MS', 'Exactive MS', and 'Stellar MS'. The 'Orbitrap Astral MS' tab is selected, and it shows 'Test Test 1' and 'Test Test 2' buttons. The main heading for this section is 'Orbitrap Astral MS series instrument control software version 1.1'. Below the heading is a table with the following data:

Release date	Build number	Instruments	Software requirements
September 18, 2024	1.1.477.46	Orbitrap Astral MS	Microsoft™ Windows™ 10 Enterprise 2021 LTSC Thermo Scientific Xcalibur 4.7

Below the table, there are three links: 'Follow the upgrade instructions provided: Orbitrap Astral MS series ICSW v.1.1 [Release notes](#)', 'Orbitrap Astral MS Series ICSW v.1.1: [Download the software](#)', and 'Orbitrap Astral MS Series ICSW v.1.1 Overview: [Download the overview](#)'. Below these links is a section titled 'New features' with the text: 'The Orbitrap Astral MS series instrument control software version 1.1 incorporate the following new and improved features:'. The features listed are: 'Stepped Collision Energy: The user needs the ability to perform the acquisition of single MS2 scan with multiple Collision Energy values when using Astral detector Type', 'Full Profile: The user needs the ability to perform Orbitrap MS1 and MS2 acquisition with Full Profile in Intact Protein Mode', 'NSI: The user needs an updated default value of Positive Spray Voltage for NSI in ME and Tune', and 'Orbitrap Astral shall automatically correct the ion foil voltage using the ICS'.

- Information: [Thermofisher.com](https://www.thermofisher.com)
 - Software information
 - Links for download
 - New Features
 - Known Issues
 - Discovered issues
 - Fixed Defects

Manuals and Help files

Manuals and Help files will be stored in the document portal as well as installed on the local instrument PC -

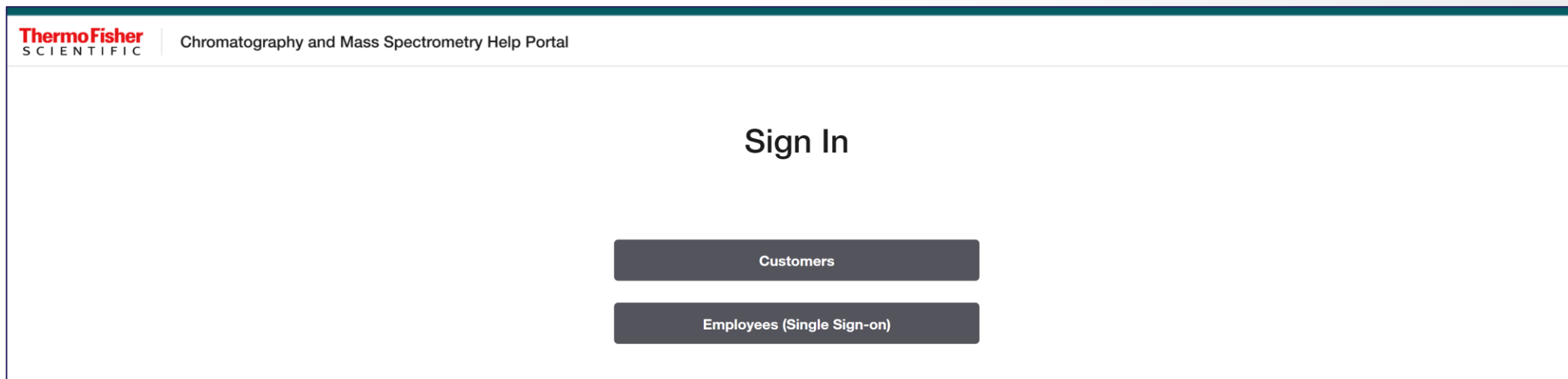
<https://docs.thermofisher.com/>

The screenshot shows the ThermoFisher Scientific website for the Chromatography and Mass Spectrometry Help Portal. The page features a dark teal header with a molecular structure pattern. The main content area is white and contains a search bar with a language dropdown set to 'English' and a search button. Below the search bar are four category tiles: 'Chromatography' (with an image of a chromatography system), 'Spectrometry' (with an image of a mass spectrometer), 'Desktop Software' (with an image of a server rack), and 'Ardia Platform' (with a red logo). A 'Show all documentation' button is located at the bottom center of the page.

Manuals and Help files

Thermo Employees – Use Single Sign on

Customers – Use your Thermo Fisher log in information or create a log in



The screenshot shows a web page with a dark green header bar. On the left side of the header is the ThermoFisher Scientific logo. To the right of the logo, the text "Chromatography and Mass Spectrometry Help Portal" is displayed. The main content area is white and features the text "Sign In" centered. Below "Sign In" are two dark grey buttons stacked vertically. The top button is labeled "Customers" and the bottom button is labeled "Employees (Single Sign-on)".

Manuals and Help files

Navigate to the Orbitrap Astral Series Product

The screenshot displays the ThermoFisher Scientific website interface. At the top, the 'Mass Spectrometry' category is expanded to show 'LC-MS (Orbitrap Astral, Orbitrap Hybrid Series, Orbitrap Tribrid, Exactive, Stellar, ISQ, TSQ, LTQ, Accessories)'. Below this, a grid of product categories is visible, including Stellar MS, Orbitrap Astral Series, Orbitrap Tribrid, Orbitrap Hybrid, ISQ Series, TSQ Series, Exactive Series, and Accessories. A search overlay is active, showing a search for 'Orbitrap Astral Series' with 411 results. The search results list several documents, including 'Orbitrap Astral Series 1.1 Instrument Control Software Installation Instructions', 'Orbitrap Astral Series ICSW 1.1 Release Notes', 'Orbitrap Astral Series Performance Maintenance', 'Orbitrap Astral Software Manual', 'Orbitrap Astral Zoom Mass Spectrometer Operating Manual', and 'Orbitrap Astral Zoom Mass Spectrometer Preinstallation Requirements Guide'. A sidebar on the left shows a 'Product Tree' with 'LC-MS Mass Spectrometers' expanded to 'Orbitrap Astral Series'.

Mass Spectrometry

^ LC-MS (Orbitrap Astral, Orbitrap Hybrid Series, Orbitrap Tribrid, Exactive, Stellar, ISQ, TSQ, LTQ, Accessories)

LC-MS | [Show all documents](#)

Stellar MS

Orbitrap Astral Series

Orbitrap Tribrid

Orbitrap Hybrid

ISQ Series

TSQ Series

Exactive Series

Accessories

Refine your search:

Orbitrap Astral Series x

Clear all

Search type

Document titles only

Product Tree

- Ardia Platform
- Chromatography
- Desktop Software
- Elemental Spectrometry
- Mass Spectrometry
 - GC-MS Mass Spectrometers
 - IC-MS Mass Spectrometers
 - IRMS Instruments
 - LC-MS Mass Spectrometers
 - Accessories
 - Exactive Series
 - ISQ Series
 - LTQ Series
 - Orbitrap Astral Series
 - Orbitrap Hybrid Series
 - Orbitrap LTQ FT Series

English Search

411 results | Sort by: Relevance

[Copy link](#) [Save search](#)

Orbitrap Astral MS Preinstallation Guide

Orbitrap Astral Series 1.1 Instrument Control Software Installation Instructions

Orbitrap Astral MS Installation Guide

Orbitrap Astral Series ICSW 1.1 Release Notes

Orbitrap Astral MS Release Notes

Orbitrap Astral Series Performance Maintenance

Orbitrap Astral MS Installation Guide

Orbitrap Astral Software Manual

Orbitrap Astral MS User Guide

Orbitrap Astral Zoom Mass Spectrometer Operating Manual [Download PDF](#)

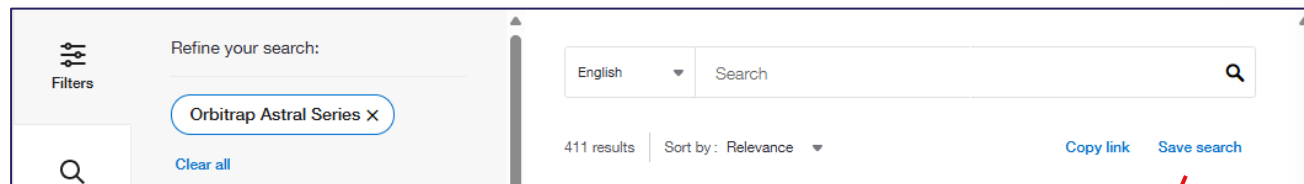
Orbitrap Astral MS Operating Manual

Orbitrap Astral Zoom Operating Manual Orbitrap Astral Zoom Mass Spectrometer Operating Manual BRE0066008 Revision A • June 2025 T Table of Contents Chapter 1 Technical data 8 Chapter 2 About this manual...

Orbitrap Astral Zoom Mass Spectrometer Preinstallation Requirements Guide [Download PDF](#)

Orbitrap Astral MS Preinstallation Guide

Orbitrap Astral Zoom Preinstallation Requirements Guide Orbitrap Astral Zoom Mass Spectrometer Preinstallation Requirements Guide BRE0066007 Revision A • April 2025 Orbitrap Astral Zoom installation request form Refer to the Orbitrap Astral Zoom Preinstallation Requirements Guide (P/N BRE0066007)...



Saving Search and Activating Alerts

- Requires being logged in
- Will send email alert when new manuals are uploaded – New manuals are tied to new build release

Save search result

Save as

a search

a collection

Summary

Product Tree : Mass Spectrometry|LC-MS M... Language : en-US Sort : Relevance

Enter a name

Product Tree: "Mass Spectrometry|LC-MS Mass Spectrometers|Orbitrap Astral Series"

Add a description

Choose a color

Activate alert

Receive emails if content matching search criteria is added or updated

Cancel Save

Thermo Scientific Orbitrap Astral Series 2.0 Instrument Control Software Release Notes

This document lists installation notes, new features and improvements regarding the Thermo Scientific™ Orbitrap Astral™ Series 2.0 Instrument Control Software release. For information regarding the installation, features, functionality, and use of this product, refer to the following sources of information:

- *Orbitrap Astral Operating Manual*
- *Orbitrap Astral Zoom Operating Manual*

Supported instruments

The instruments listed in the table below are supplied and supported in this release.

Table 1 Supported instruments

Instrument Control Software Version	Version No.	Instrument	
		Orbitrap Astral	Orbitrap Astral Zoom
1.0	1.0.100.11	✓	–
1.0 SP1	1.0.100.14	✓	–
1.0 SP2	1.0.100.28	✓	–
1.0 SP3	1.0.100.40	✓	–
1.1	1.1.477.46	✓	–
2.0	2.0.690.11	✓	✓



Thermo Scientific Orbitrap Astral Series 2.0 Instrument Control Software Release Notes

Installation notes

This section describes the supported target systems and the system requirements.

Supported target systems

- Thermo Scientific Orbitrap Astral mass spectrometer
- Thermo Scientific Orbitrap Astral Zoom mass spectrometer

System requirements

The minimum hardware and software configurations required for Orbitrap Astral Series 2.0 Instrument Control Software operation are as follows:

System	Requirements
PC	3.0 GHz Quad Core Intel™ Processor 32 GB RAM 512 GB SSD Hard Drive DVD-ROM Drive Display Monitor Resolution of 1920 × 1080 Two Network Interface Cards (NIC), 1000 MBit/s
Software	Microsoft™ Windows™ 10 Enterprise 2021 LTSC Thermo Scientific™ Xcalibur™ 4.7 SP1

TIP: The Orbitrap Astral Series 2.0 Instrument Control Software was only tested within the delivered composition.

Note:
Xcalibur 4.7 SP1 software applies
Foundation 3.1 SP10.

Source: Release Notes for AST 2.0 ICSW

- **New Features Orbitrap Astral Zoom**

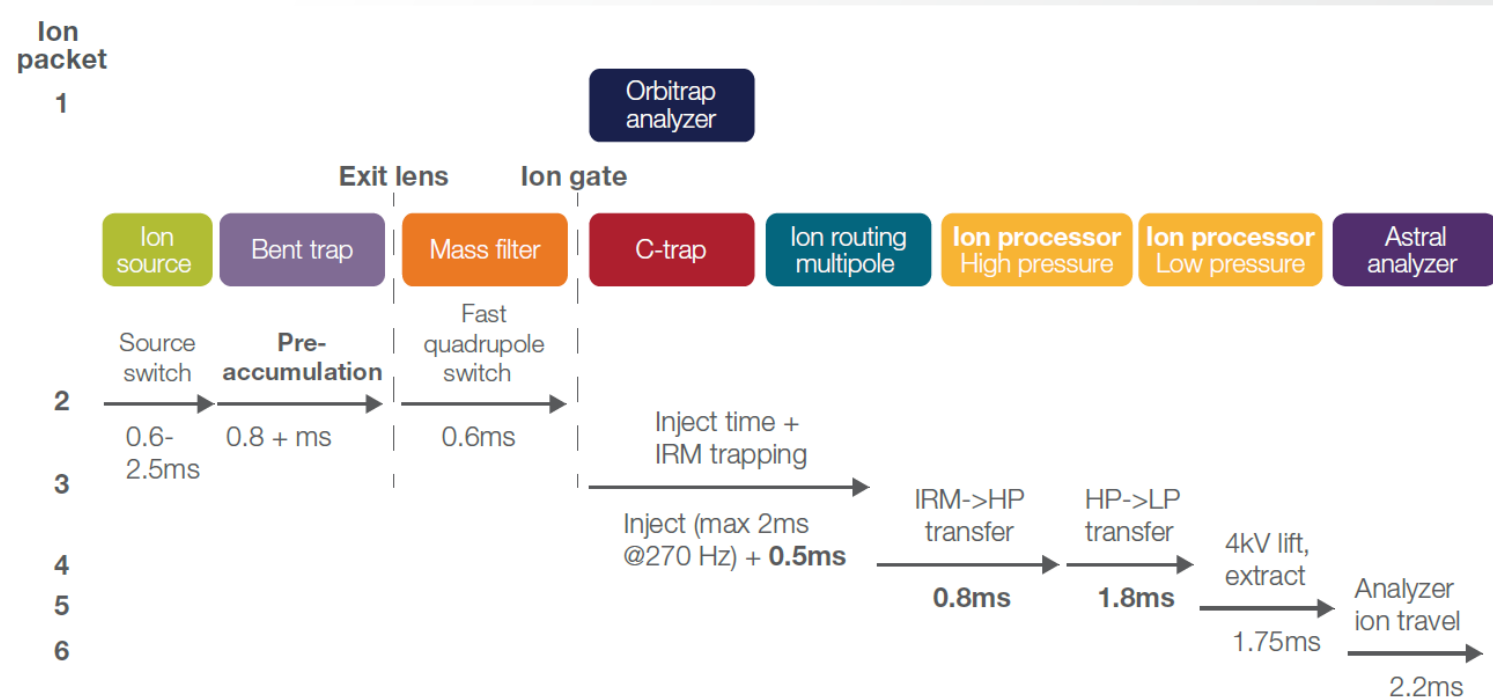
- Support for the new Orbitrap Astral Zoom mass spectrometer (Tune and Method Editor).
- Orbitrap Astral Zoom: Faster Ion Optics Switching: Higher acquisition rate with improved ion optics switching times.
- Orbitrap Astral Zoom: Faster Ion Processor Timings: Higher acquisition rate due to faster ion transfer in the Ion Processor.
- Orbitrap Astral Zoom: Pre-Accumulation: The user needs bent trap pre-accumulation.
- Orbitrap Astral Zoom: Application Mode: The user needs a "Low Input" Application Mode.
- Orbitrap Astral Zoom: TMT 32-Plex: The user needs a TMT HR mode to resolve the signal of all reporter ions.
- Orbitrap Astral Zoom: Enhanced spectral processing: The user needs Full Astral MS2 spectral deconvolution.
- Orbitrap Astral Zoom: SureQuant Hybrid DIA: The user needs to perform SureQuant type and derived Hybrid DIA acquisition using Astral analyzer.
- Orbitrap Astral Zoom: Faster Stepped NCE in IRM: The user needs faster Astral MS2 acquisition when using stepped Collision Energy.
- Orbitrap Astral Zoom: The user needs Top-Down Acquisition with Astral MS2 scans.
- Orbitrap Astral Zoom: eDR: The user needs to perform eDR Full Scan-type ion detection.
- Orbitrap Astral Zoom: tSIM msx: The user needs the ability to execute methods with multiplex tSIM with Orbitrap analyzer.

- **Improvements Orbitrap Astral & Orbitrap Astral Zoom**
 - Astral MS2 Scan Range: The user needs expanded functionalities of Astral MS2 Scan Range.
 - System Calibrations must provide improved user experience (TMT HR calibration & ICS calibration in positive mode)
 - Add "Exclude isotopic cluster" option to Targeted Mass Exclusion filter.
 - The user needs individual maxIT settings in DDA w/ inclusion list (directed-ddA).
 - RAW File Scan Header: The user needs the ability to differentiate tMS2 and DIA scans via the scan header.

Orbitrap Astral Zoom : Faster Astral MS2 acquisition

Improved Ion Optics settling times, faster Ion Transfer in Ion Processor

- Transparent implementation (no UI)
- Typical DIA acquisition > 270 Hz (35 % increase in scan rate) via higher scan speed in Ion processor
- ≈ +10% in DDA scan rate via optimized timings for front ion optics



Orbitrap Astral Zoom : Bent Trap Pre-Accumulation

Higher sensitivity for fast Astral MS2 acquisition

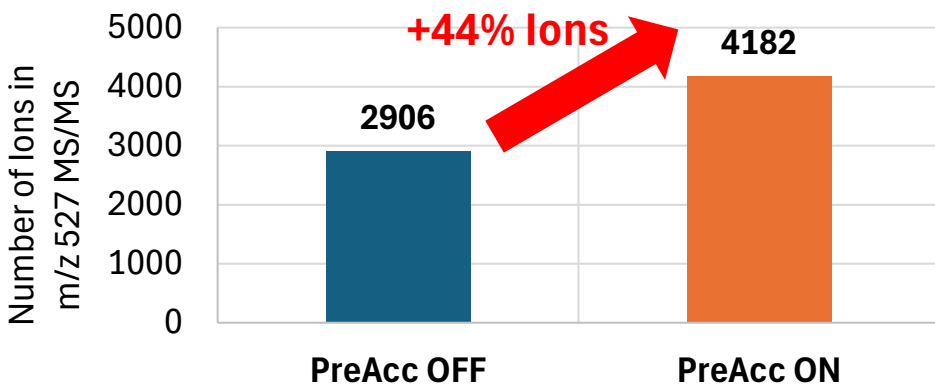
- Total injection time increased by accumulating ions for Astral MS2 scans in the bent trap while quadrupole /IRM occupied (up to 0.8-1.5 ms added to the pre-set Maximum Injection Time).
- UI: Turned on via checkbox (Astral MS2 scans); Two usages
 - Extend total IT without modifying the defined Max IT, increasing the sensitivity without compromising the scan rate.
 - Maintain total IT despite reducing the defined Max IT, increasing the scan rate without compromising the sensitivity

Available for Astral tMS2, ddMS2 and DIA

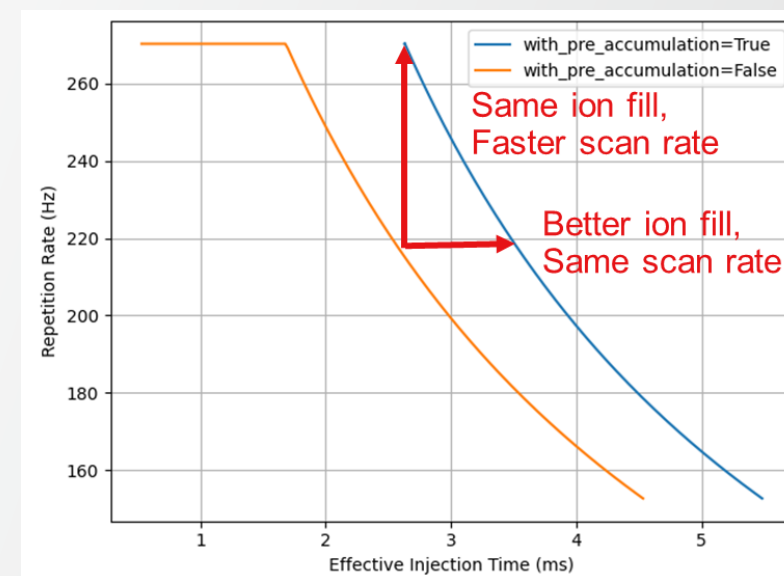
AGC Target	Standard	★
Pre-Accumulation	<input checked="" type="checkbox"/>	★
Maximum Injection Time (ms)	10	★

Not compatible with stepped CE / multi μ scans

- Example Max speed DIA experiment (270 Hz)



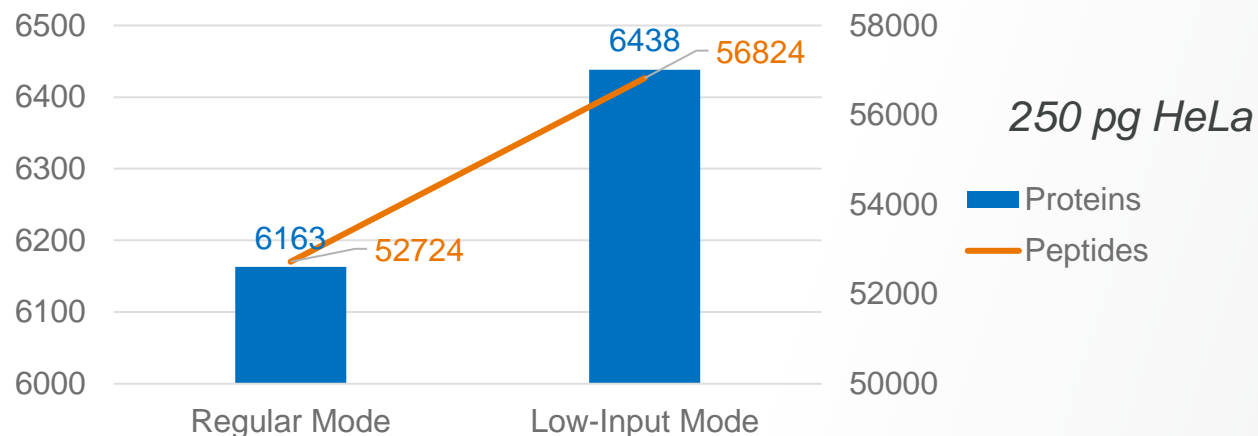
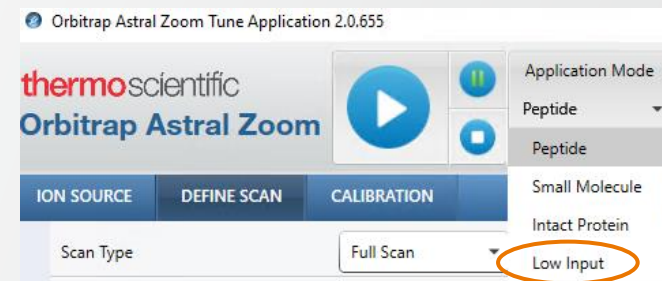
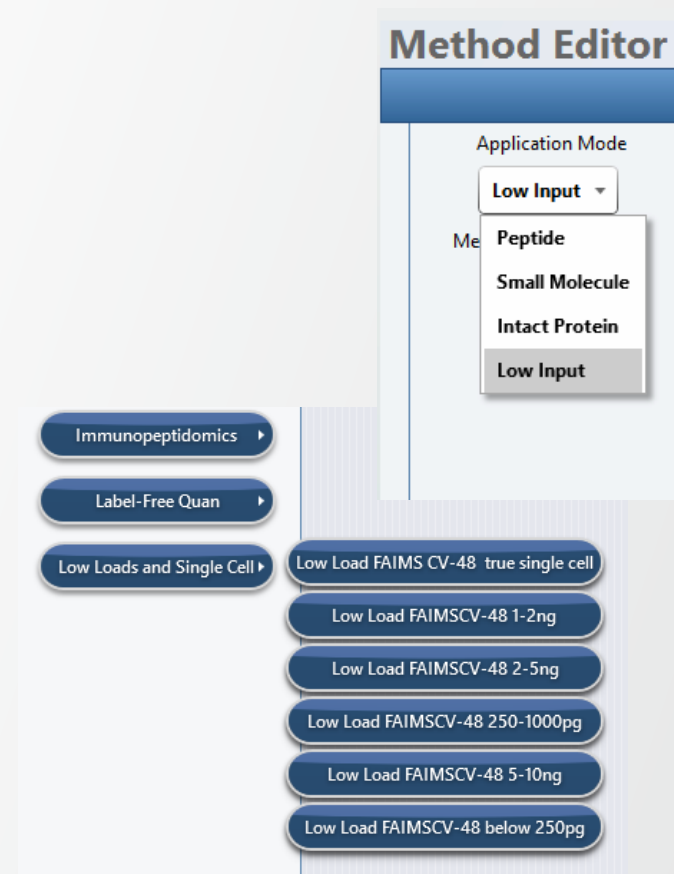
- 2ms max inject time shows ~2.8 ms with pre-accumulation.
- +35-46% signal gains in 380-980 m/z range with FlexMix.



Orbitrap Astral Zoom : Low Input Application Mode

Higher sensitivity (Single Cell, “Low-Load” application)

- Perform acquisition with increased detector sensitivity
 - Low risk to compromise the dynamic range at low sample loads
 - Single ion detection probability increases by 10%
- New “Low Input” application mode (Method Editor & Tune)
 - Increased detector sensitivity is used
 - Dedicated adjusted default settings and method templates
 - Full sections “Immunopeptidomics” and “Low Loads and Single Cell” transferred from Peptide application mode
 - Relevant templates in “Label-Free Quant” section transferred from Peptide Application mode

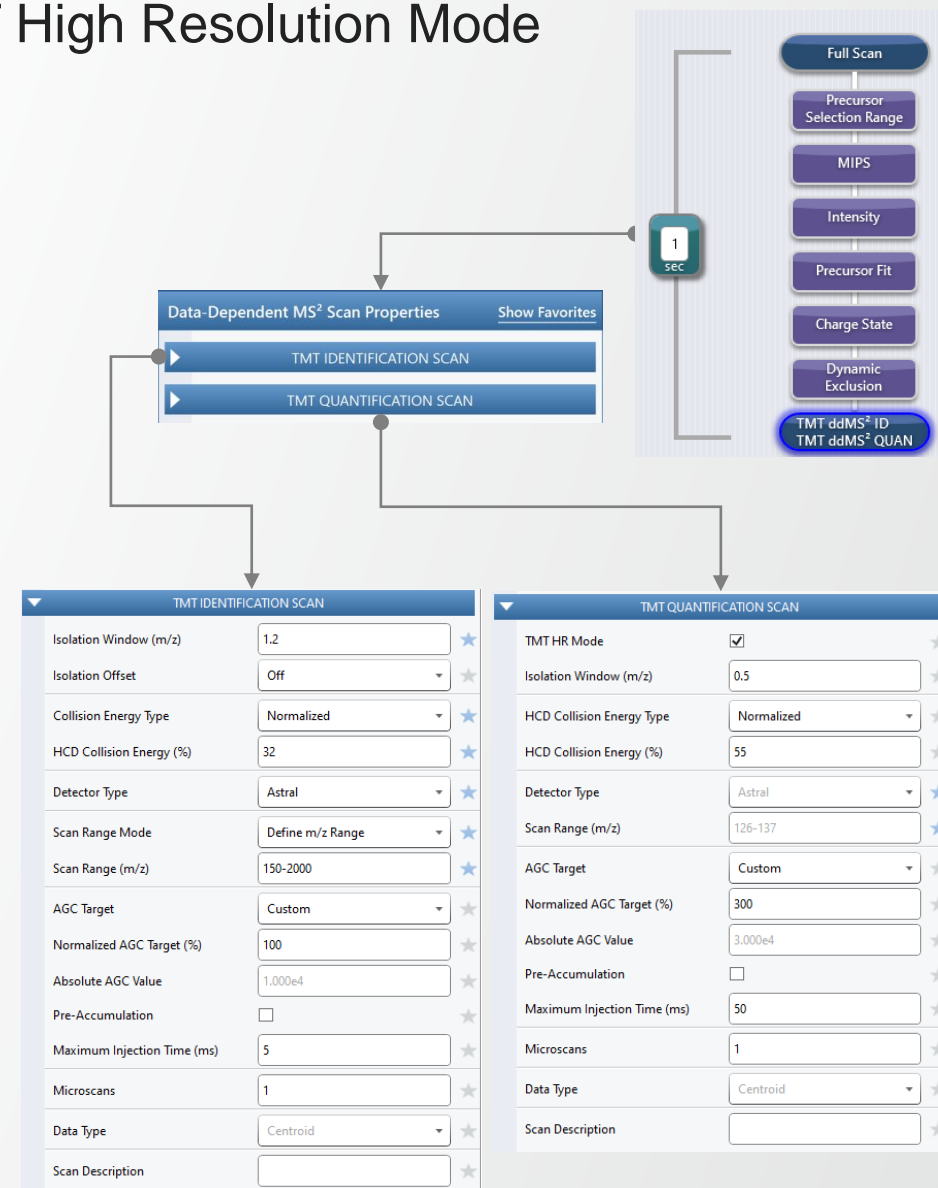
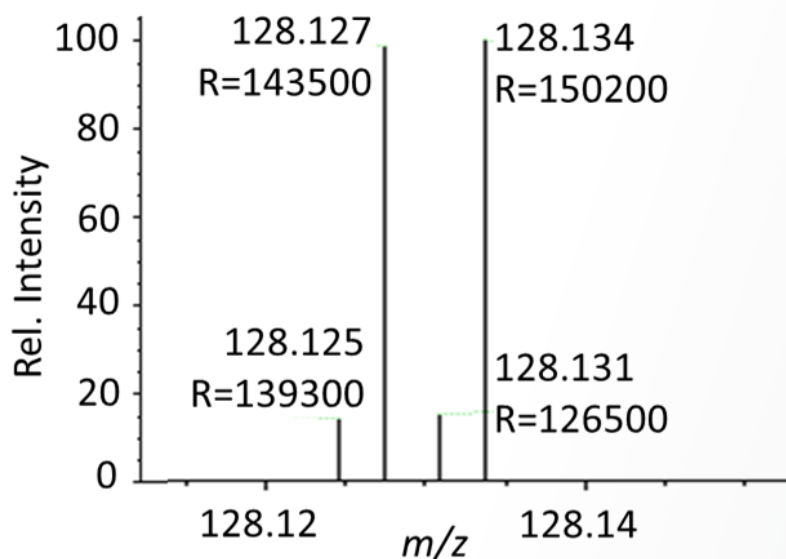


Orbitrap Astral Zoom : TMT HR Mode

Higher Resolution for TMT-32/35 plex acquisition via Astral TMT High Resolution Mode

- TMT High Resolution Mode
- UI: Turned on via checkbox (Astral MS2 scans) triggering the display of settings for TMT ID and QUAN scans
- Multiple passes of ions through analyzer in QUAN scan (90 m vs 30 m flight path)
- Resulting increased resolution: $R \geq 100\text{ k}$ at m/z 130

To prevent a substantial decrease in acquisition rate, the functionality is restricted to TMT-32 plex acquisition, requiring higher resolution measurement over a limited low m/z range (m/z 126-137)



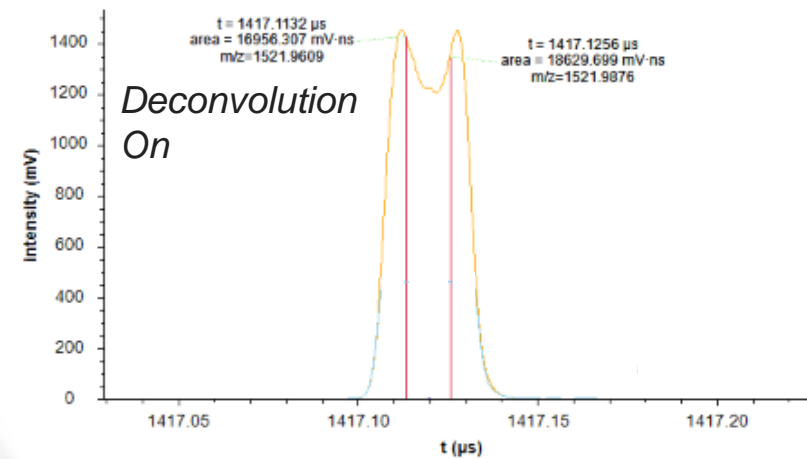
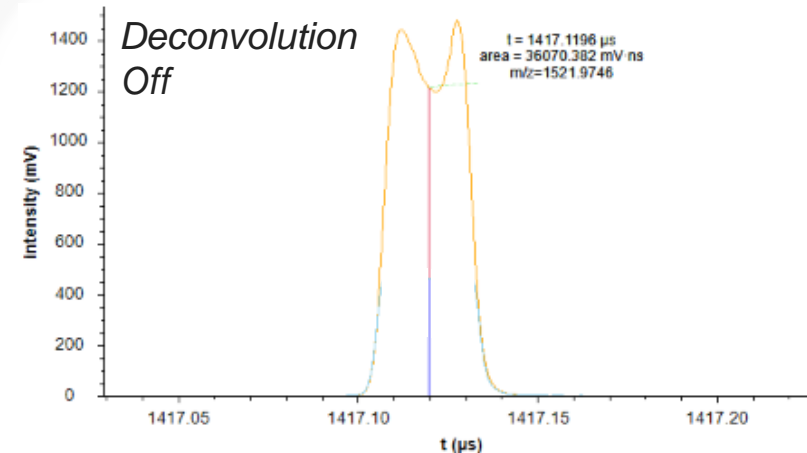
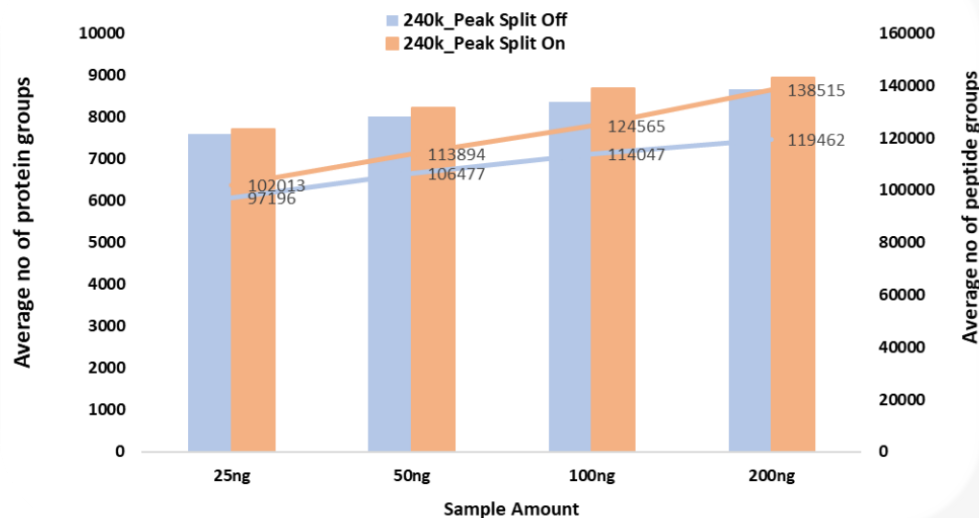
Orbitrap Astral Zoom : Enhanced spectral processing

Improved Astral MS2 spectra interpretation (no UI)

Enhanced spectral processing to distinguish overlapping peaks in Astral spectra

- Initially developed for TMT over limited relevant m/z range of Astral MS2
- Now expanded to full Astral MS2 spectra, as allowed by more powerful internal computer
- Automatically applied for all application modes, depending on peak intensity and m/z (possible peak splitting artifact with higher intensity and m/z)
- Improvement example:

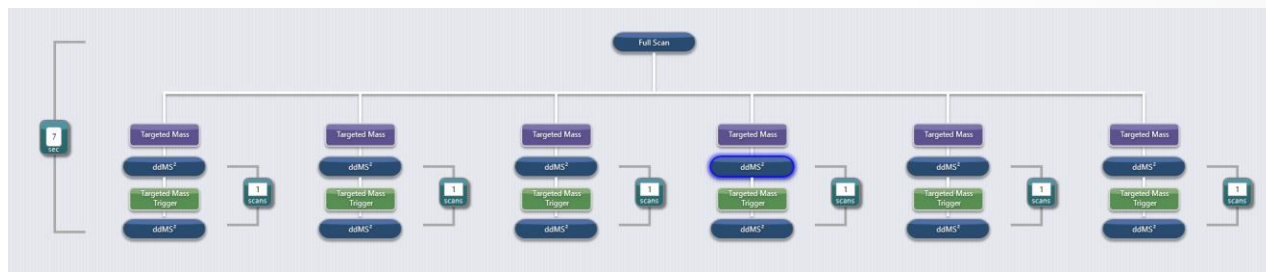
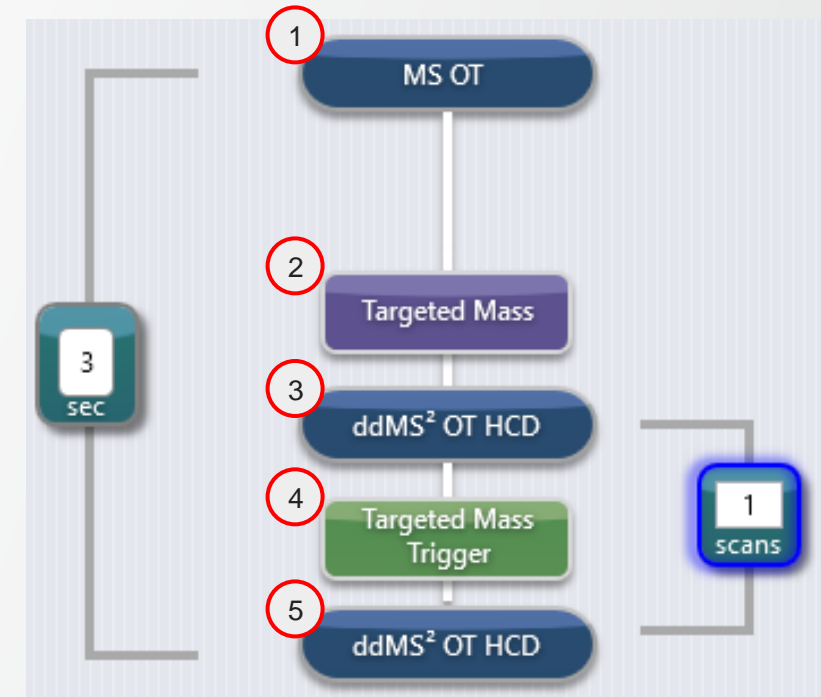
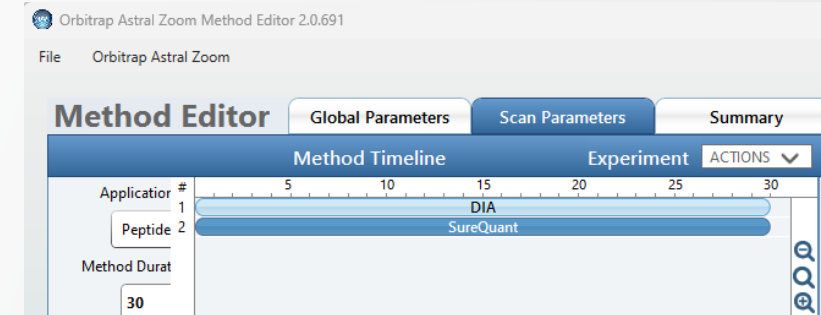
>+15% pep. id.
(200 ng HeLa digest)



Orbitrap Astral Zoom : Hybrid-DIA based on SureQuant Method

ddMS2 scans extended to Astral detector

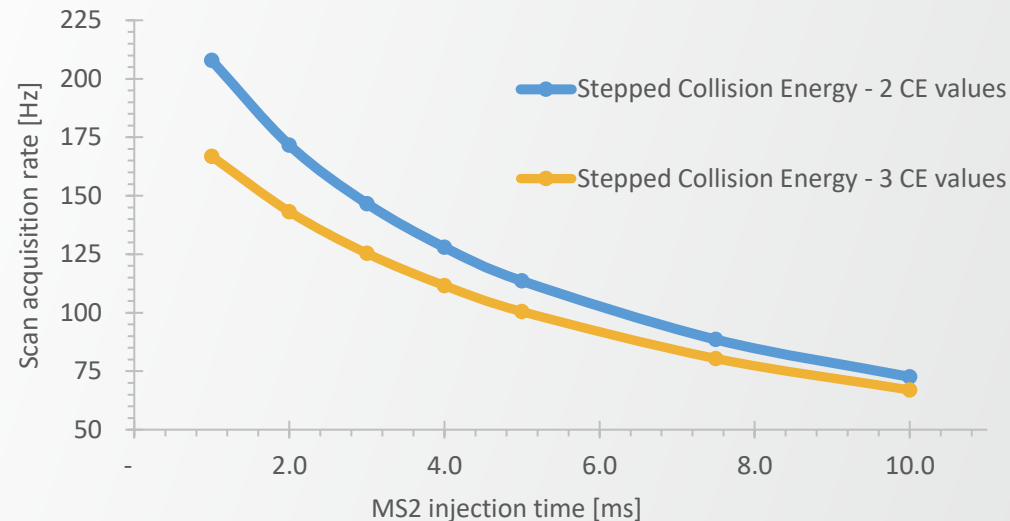
- **SureQuant** is a method relying on internal standards spiked into the samples (synthetic stable isotopically labeled peptides corresponding to pre-defined endogenous peptides of interest) to drive the measurement of targeted endogenous peptides at their actual elution time.
 - **Hybrid DIA** is a method combining DIA acquisition with Internal Standard (IS) triggered endogenous peptide measurement.
- ⇒ Accurate and sensitive quantification of targeted compounds combined with deep and unbiased profiling



Orbitrap Astral Zoom : Faster Stepped Collision Energy

Astral MS2 acquisition with stepped collision energy accelerated (faster IRM DC voltage)

- Accelerated acquisition with stepped CE due to
 - Modified C-Trap board with faster IRM DC voltages
 - Reduced settling times in Instrument Control Software
- UI: No change (vs. Orbitrap Astral and AST 1.1)
- Substantial gain (in comparison with Orbitrap Astral)
 - 143 Hz acquisition rate with 3 CE and 2 ms Max IT
 - 172 Hz acquisition rate with 2 CE and 2 ms Max IT
 - 100 Hz acquisition rate with 3 CE and 5 ms Max IT(50 Hz under same conditions with Orbitrap Astral)



Orbitrap Astral Zoom : enhanced Dynamic Range (eDR) Scan

Multiplexed Orbitrap tSIM acquisition with new supporting UI

- Higher dynamic range measurement delivered in MS1 acquisition
- UI: eDR mode turned on via dropdown in Full Scan properties
 - Two types of eDR window
 - Auto: mass range is divided into equally-sized m/z windows based on defined Scan Range, Number of Isolation Windows, and Windows Placement Optimization
 - User Defined: window m/z ranges defined by the user. The windows can vary in size (enabling for customization based on the ions of interest and signal intensity)
 - No gaps or overlap allowed in the multiplexed m/z ranges

Full Scan Properties Show Favorites

Orbitrap Resolution: 120000

Enhanced Dynamic Range (eDR) Mode: **On**

eDR Window Type: **User Defined**

eDR m/z window

	m/z Window
1	100-175
2	175-250
3	250-325
4	325-400
5	400-475
6	475-550
7	550-625
8	625-700
9	700-775
10	775-850
11	850-925
12	925-1000

Full Scan Properties Show Favorites

Orbitrap Resolution: 120000

Enhanced Dynamic Range (eDR) Mode: **On**

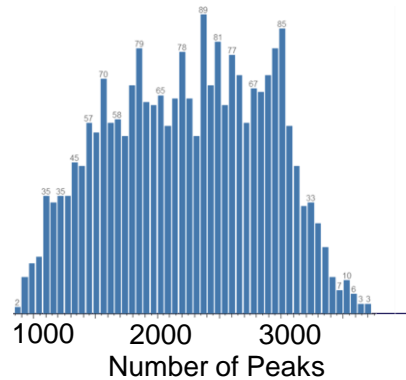
eDR Window Type: **Auto**

Number of Isolation Windows: 12

Window Placement Optimization: **Off**

eDR m/z window

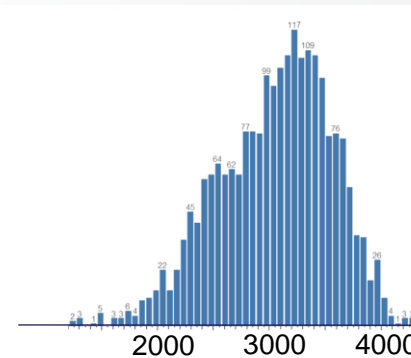
	m/z Window
1	100-175
2	175-250
3	250-325
4	325-400
5	400-475
6	475-550
7	550-625
8	625-700
9	700-775
10	775-850
11	850-925
12	925-1000



Standard Full Scan



More Peaks per Spectrum



eDR mode Full Scan

User Experience Harmonization

Alignment with other LSMS platforms

1. Scan Range Mode extended to Astral detector.

1. "Define First mass" is now available in all app. Modes
2. "Auto" and "Auto-Extended" are now available in small molecule mode

2. ME: Targeted Mass Filter – 'Set Max IT per Compound' as table value

3. ME: Targeted Mass Exclusion Filter – 'Exclude isotopic cluster' option

1
2
3

Data-Dependent MS² Scan Properties Show Favorites

Isolation Window (m/z) ★

Isolation Offset ★

Collision Energy Type ★

HCD Collision Energy (%) ★

Detector Type ★

Scan Range Mode ★

AGC Target ★

Normalized AGC Target (%) ★

Absolute AGC Value ★

Pre-Accumulation ★

Maximum Injection Time (ms) ★

Microscans ★

Data Type ★

Scan Description ★

TMT HR Mode ★

Targeted Mass Properties

MASS LIST

Mass List Type

Time Mode

Include Intensity Threshold

ADD | DELETE | IMPORT | EXPORT

Compound	m/z	HCD Collision Energies (%)
1	524.265	30

Mass Tolerance

Low

High

Set Collision Energy per Compound

Set Maximum Injection Time per Compound

Perform dependent scan on most intense ion if no targets are found

Targeted Mass Exclusion Properties

MASS LIST

Mass List Type

Time Mode

Include Intensity Threshold

ADD | DELETE | IMPORT | EXPORT

Compound	m/z
1	524.265

Exclusion mass width

Low

High

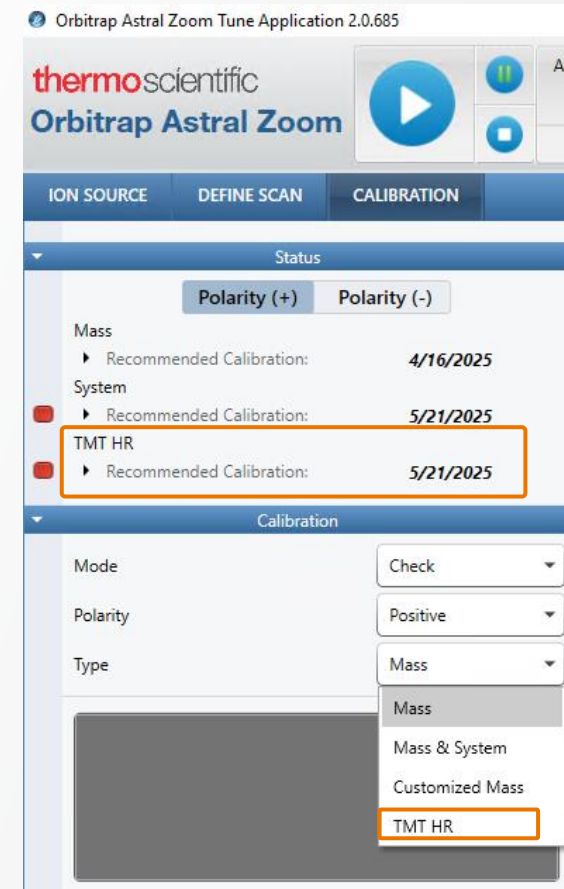
Exclude isotopic cluster

System Calibration Improvements

Alignment with other LSMS platforms

1. Orbitrap Astral Zoom: TMT HR calibration is included as another type of calibration in Tune Calibration Pane
2. Orbitrap Astral & Orbitrap Astral Zoom: ICS procedures become part of positive system calibration (was negative only before)

1



Manuals for Orbitrap Astral Series

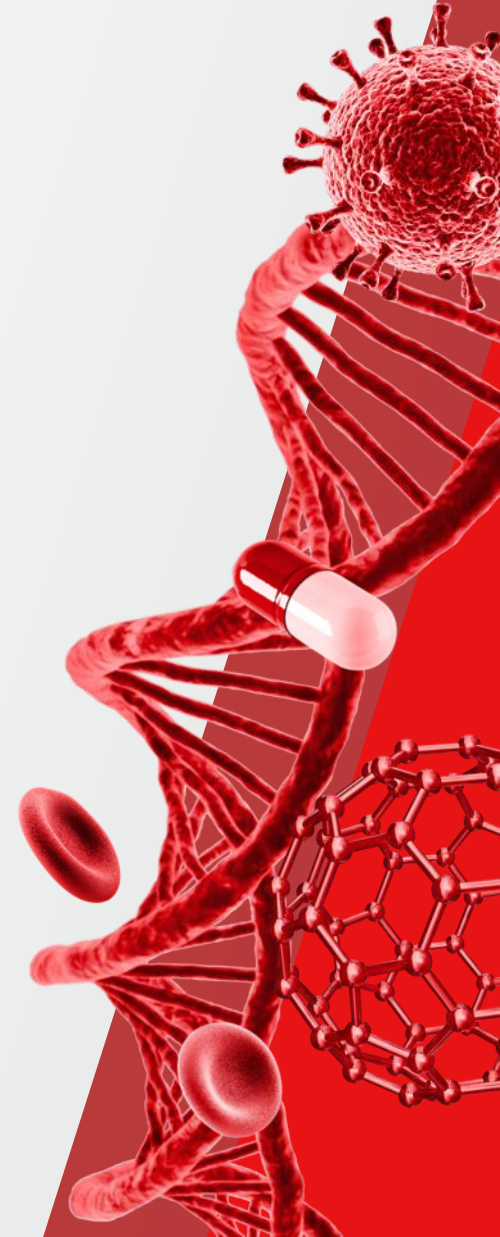
[Pre-Installation Requirements Guide](#)

[Operating Manual](#)

[Performance Maintenance Manual](#)

[Updated Software Manual and online help](#)

 The world leader in serving science

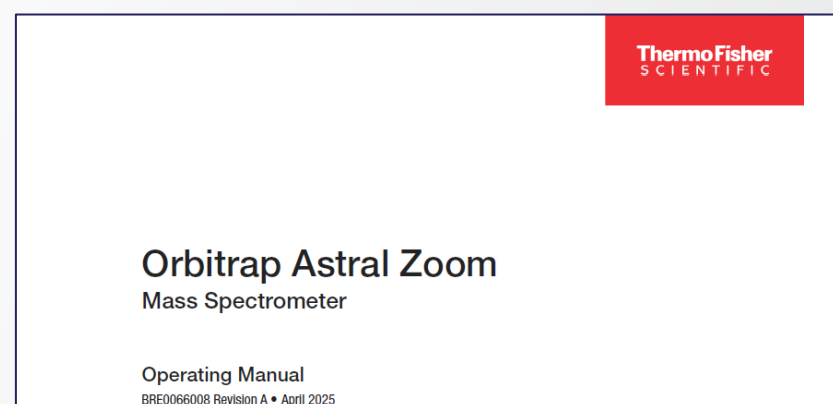
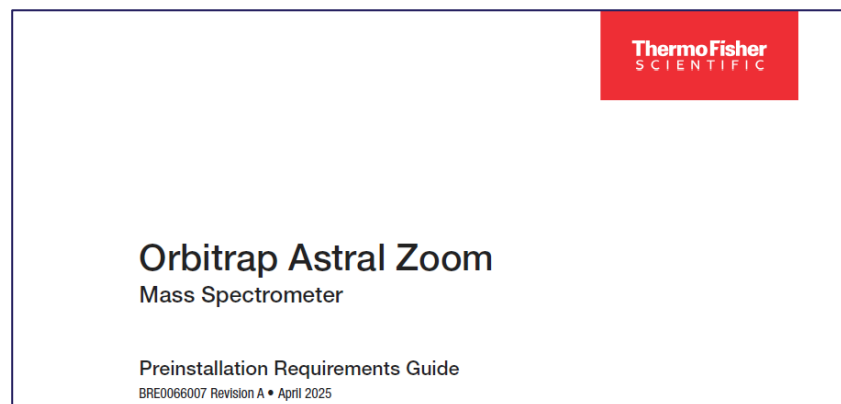


Pre-Installation Requirements Guide And Operating Manual

Updated/New with AST 2.0

Pre-Installation Requirements Guide

Operating Manual



Pre-Installation Requirements Guide And Operating Manual

Updated/New with AST 2.0

Software Manual



Display Online Help – of Tune – and – of Method Editor - via Fct F1 Key

Orbitrap Astral Tune Application

Contents | Index | Search | Favorites

- Welcome to the Orbitrap Astral Tune Help
- Tune Application
- Glossary
- Legal Notices

Welcome to the Orbitrap Astral Tune Help!

This Help describes how to use the Tune application to control, monitor, tune, and calibrate the Thermo Scientific™ Orbitrap™ Astral™ mass spectrometer (MS). You can also optimize the instrument for your specific compounds, perform method development, and run real-time mass spectrometry experiments one analysis at a time.

The Tune application organizes its functions in panes and on pages. To display the panes and pages, click the associated buttons and tabs. If information about setting the parameters for a specific view, page, or dialog box is available, click Help or press the F1 key.

For information about the operating procedures for the Orbitrap Astral mass spectrometer, we recommend that you read the *Orbitrap Astral Operating Manual* in its entirety.

Helpful Links

- [Tune Application](#)
- [Contacting Us](#)

Accessing other Documents

In addition to this Help, Thermo Fisher Scientific provides the following documents for the Orbitrap Astral mass spectrometer:

- [Orbitrap Astral Preinstallation Requirements Guide](#)
- [Orbitrap Astral Operating Manual](#)
- [Orbitrap Astral Performance Maintenance Manual](#)
- [Orbitrap Astral Software Manual](#)

You can access PDF files of the documents listed above from the data system computer.

To view product manuals

From the Microsoft™ Windows™ taskbar, choose **Start > All Apps > Thermo Instruments** (or *Thermo model*), and then open the applicable PDF file.

To open Help

- If available for a specific window or dialog box, click **Help** or press **F1** for information about setting parameters.

For more information, including upcoming application notes, visit www.thermofisher.com.

- Preferences
- Load Standard Diagnostics
- Load service diagnostics
- View Calibration Reports...
- View Other Reports...
- View Instrument
- Tune Help
- Instrument Manuals
- Instrument Web Page
- About Tune

Untitled - Thermo Xcalibur Instrument Setup

File Orbitrap Astral Help

Method Editor

Global Parameters Scan Parameters Summary

Method Timeline

Application Mode: Peptide

Method Duration (min): 60

Experiment #1 Time Range (min): 0-60

Settings

- Infusion Mode: Liquid Chromatography
- Expected LC Peak Width (s): 10
- Advanced Peak Determination:
- Default Charge State: 2

Orbitrap Astral Method Editor

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- Welcome to the Orbitrap Astral Method Editor Help
- Configuring the Instrument in Thermo Foundation
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Welcome to the Orbitrap Astral Method Editor Help!

This Help describes how to use the Method Editor application with the Thermo Scientific™ Orbitrap™ Astral™ mass spectrometer (MS). You create an MS instrument method (combined with the optional autosampler and liquid chromatograph instrument methods) by defining the experiment type and setting various parameters. These include settings for the MS, syringe pump, and divert valve; and the mass ranges and fragmentation transitions for the experiments.

For information about the operating procedures for the Orbitrap Astral mass spectrometer, we recommend that you read the *Orbitrap Astral Operating Manual* in its entirety.

Helpful Links

- [Configuring the Instrument in Thermo Foundation](#)
- [Method Editor Application](#)
- [Contacting Us](#)

Accessing other Documents

In addition to this Help, Thermo Fisher Scientific provides the following documents for the Orbitrap Astral mass spectrometer:

- [Orbitrap Astral Preinstallation Requirements Guide](#)