proteomics thermoscientific



# Improve selectivity, every day

#### **Benefits**

- Redesigned FAIMS technology for nanoflow proteomics applications
- Improved Compensation Voltage (CV) switching time
- Increased ion transmission
- Enhanced ease-of-use with tool-free and one-way assembly
- Seamless integration with application-specific software ensures maximum productivity
- Automated CV optimization

# **Keywords**

FAIMS Pro interface, Orbitrap Eclipse, Orbitrap Exploris 480, TSQ Altis, Orbitrap Fusion Lumos, Orbitrap Fusion The Thermo Scientific™ FAIMS Pro™ interface provides the selectivity and ease-of-use to meet the most demanding analytical challenges in proteomics. The FAIMS Pro interface, when coupled to next generation mass spectrometers, delivers the ultimate performance for improved peptide and protein identification and quantitation in complex matrices and for lower abundance proteins. This superb analytical performance combined with streamlined software and hardware designed to provide simple maintenance creates a platform with maximum usability and selectivity for proteomics workflows. The FAIMS Pro interface provides users unmatched data quality and performance.



Ion path through the FAIMS Pro interface from emitter tip to MS capillary



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#### **Hardware features**

### Optimized analytical gap

A smaller analytical gap of 1.5 mm provides higher fields, maintaining separation capabilities without the need for helium gas.

#### Faster CV switching time

• CV switching time of 25 msec

# Nano to capillary flow compatibility

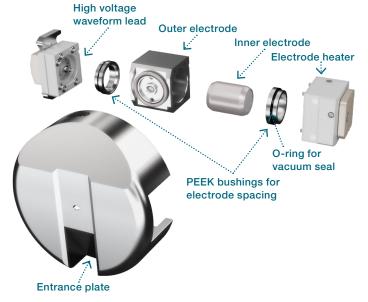
FAIMS Pro interface is compatible with flow rates ranging from 100 nL/min to 1 uL/min.

# Tool-free and one-way assembly

FAIMS Pro electrodes can be quickly removed and easily disassembled for cleaning, without tools. Reassembly and mounting to the instrument takes a few minutes.

# Mass spectrometer compatibility

- Thermo Scientific<sup>™</sup> Orbitrap Exploris<sup>™</sup> 480 MS
- Thermo Scientific<sup>™</sup> Orbitrap Eclipse<sup>™</sup> Tribrid<sup>™</sup> MS
- Thermo Scientific<sup>™</sup> Orbitrap Fusion<sup>™</sup> Lumos<sup>™</sup> Tribrid<sup>™</sup> MS
- Thermo Scientific<sup>™</sup> Orbitrap Fusion<sup>™</sup> Tribrid<sup>™</sup> MS
- Thermo Scientific<sup>™</sup> TSQ Altis<sup>™</sup> MS



#### **Software features**

### Method templates for proteomics workflows

Predefined DDA templates in the Method Editor contain optimized FAIMS Pro parameters to streamline proteomics experiments from data acquisition to processing.

# Compensation voltage optimization

- Automated CV optimization in Tune
- Optimized CVs for SIM or SRM scan recommended
- Raw file saved and .pdf report option

# Software support

- Compatible with Thermo Scientific<sup>™</sup> Proteome
   Discoverer<sup>™</sup> v2.2 and later software for automated
   qualitative and quantitative data processing
- Thermo Scientific<sup>™</sup> FreeStyle<sup>™</sup> v1.3 and later software offers CV plots for exploration of CV scan data
- Skyline (University of Washington) support of explicit CV values

#### Installation requirements

#### Power

- One 120 Vac +6-10%, 50/60 Hz at 20 A
- Free from voltage variations above or below the recommended operating range

#### Gas

• FAIMS gas: 98.5% pure Nitrogen, ≥20 L/min (100 psi)

#### **Environment**

- Functional temperature range: 15–32 °C (59–9 °F)
- Optimal temperature range: 18–27 °C (65–81 °F)

#### **Dimensions**

#### Size

- Main control box: 483 × 318 × 64 mm
   (h, w, d 19 × 12.5 × 2.5 in)
- RF coil box and adapter flange:  $254 \times 330 \times 483$  mm (h, w, d  $10 \times 13 \times 19$  in)

#### Weight

- Main control box: 3.7 kg (8.2 lb)
- RF coil box and adapter flange: 3.5 kg (7.7 lb)

# Find out more at thermofisher.com/FAIMSPro

