

# TEIS-XL

## Thermal Extraction Ion Source

### DIRECT ANALYSIS

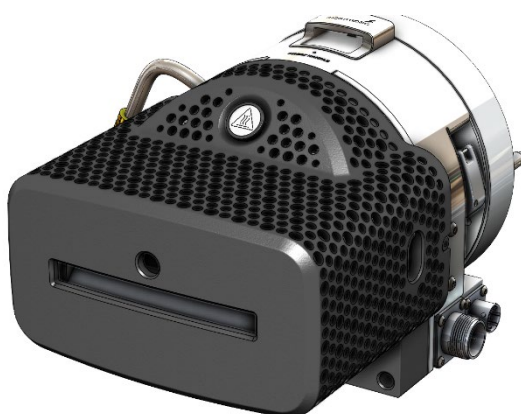
Analyse directly from any thermally stable sample material. Swipe a surface, and sample in the desorber, it's that easy!

### NO SAMPLE PREP

The TEIS-XL is a standalone technique - it provides a rapid ionisation technique without LC for quick identification of compounds. The key benefit of the approach is the lack of sample preparation needed – meaning that a wide variety of methods can be accommodated.

### SPECIFICITY WITH SPEED

The Thermal Ionisation Source carries over all the same specificity and sensitivity advantages that come with a high-performance triple-quad instrument, but without the long sample preparation or analysis



- Direct analysis of swabs and thermally stable sample materials up to 120mm wide
- Compatible with SCIEX™ V-Line Mass Spectrometer instruments
- Delivers results in real-time with little or no sample prep
- High Specificity and Sensitivity
- Compatible with liquids, solids, and gases

**MSA TEIS-XL:** the ultimate high-speed Thermal Extraction Ionisation Source for volume applications; test hundreds of samples per hour with no loss of selectivity.

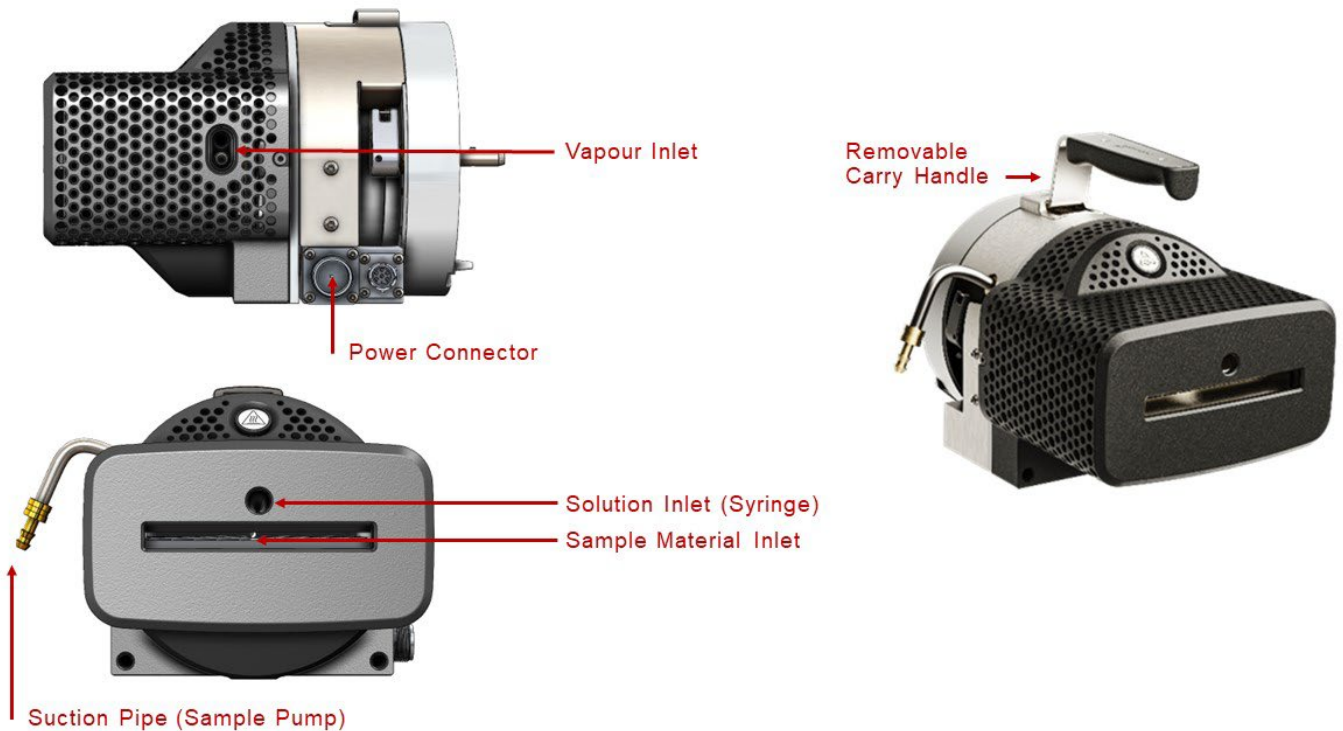
It's the ideal source where the method requires large quantities of sample measurements in a relatively short period of time, or where automation is required. The key benefit of the approach is the lack of sample preparation needed – meaning that a wide variety of methods can be accommodated. The TEIS-XL source enables rapid identification of compounds within a solid, liquid or vapour within seconds.

TEIS-XL simply interfaces with Sciex mass spectrometers in the exact same way as an Electrospray Ionization (ESI) or Atmospheric Pressure Chemical Ionization (APCI) probe does.

The main difference between the TEIS-XL source and a chromatographic injection, is the time it takes for the ions to be detected in the mass spectrometer. Using TEIS-XL, the injection is detected within about 1-2 seconds (real-time), via a direct injection without any separation. Chromatography would require separation and sample clean-up, extending the method time to at best, a few minutes.

Mass Spec Analytical has shown that compounds amenable to thermal desorption, such as many pesticides, drugs, and explosives, can be rapidly analysed in this way without the need for any sample pre-treatment, solvents, or glassware. Other applications such as drugs in sweat, oral fluids, and bio-chemical compounds and more have

# Features



## TEIS-XL Specifications

Type:	Thermal Extraction Ion Source
Measurement Technique:	Mass Spectrometry
Mass Range:	1-500 amu
Ion Source:	APCI
Software:	SCIEX Analyst or SCIEX OS
Sample material width:	120 mm max.
Bake Out Temperature:	250°C
Operating Temperature:	Ambient → 300°C
Temperature Stability:	±1%
Maximum Operating Conditions:	10 - 40°C, 80% RH (non-condensing)
Source Weight on Flange:	10kg
Power:	240 VAC, 13A Supply
Heat Output:	1365 BTU @ 300°C

## Application Notes



Ultra-Fast  
Detection of  
Drugs of Abuse



High Resolution,  
High Throughput  
Screening of  
Explosives



Direct Sample  
Analysis Using a  
Thermal Ion  
Source (TEIS)



Mass Spec Analytical Ltd  
Future Space  
UWE North Gate, Filton Road  
Bristol, BS34 8RB  
United Kingdom  
[www.msaltld.co.uk](http://www.msaltld.co.uk)  
[Service@msaltld.co.uk](mailto:Service@msaltld.co.uk)  
Tel: +44 (0)117 428 5787