

ENVF ICS-6000 Ion Chromatography System



Thermo Scientific Dionex ICS-6000® High-Pressure Ion Chromatography (HPIC) system delivers high performance and flexibility for diverse ion analysis.

Configuration and Specifications

Max Pressure: Up to 5000 psi (≈ 35 MPa), compatible with 4 μ m columns for high-resolution separations.

Design: Dual-channel configuration for simultaneous anion and cation analysis; one channel includes a quaternary gradient pump for gradient runs.

Detectors: Two Conductivity Detectors (CD); Optional Electrochemical Detector (ED)

Eluent Generation: KOH and MSA electrolytic generators (EGC) for automated, high-purity eluents.

Columns: IonPac AS11-HC, 4 \times 250 mm (anion); IonPac CS12A, 4 \times 250 mm (cation).

Software: Thermo Chromeleon CDS for integrated control and data management.

Applications and Typical Analyses:

Used in environmental, water quality, food safety, and pharmaceutical analysis. Examples include:

Anions: F^- , Cl^- , NO_2^- , NO_3^- , SO_4^{2-} , PO_4^{3-}

Cations: Na^+ , K^+ , NH_4^+ , Ca^{2+} , Mg^{2+}

Organic acids: Acetate, citrate, oxalate

Special compounds: Cyanide, amines, alcohols (enhanced with ED)

If other eluents or columns are required, please bring them and contact the technician before booking. Normally installs CDs; for ED detector, contact ENVF staff (envflab@ust.hk) for installation in advance.