PRODUCT SPECIFICATIONS

# Thermo Scientific Dionex 6011RS ultra Analytical Cell

Coulometric electrochemical cell for UHPLC/HPLC

The Thermo Scientific<sup>™</sup> Dionex<sup>™</sup> 6011RS ultra analytical cell uses a flow-through coulometric, dual electrode design optimized for conventional and ultra-fast liquid chromatography using the Thermo Scientific<sup>™</sup> Dionex<sup>™</sup> UltiMate<sup>™</sup> 3000 Electrochemical Detector. This combination brings the speed and resolution of UHPLC to the proven sensitivity and selectivity of coulometric electrochemical detection.

### The 6011RS ultra Analytical Cell

The compact 6011RS ultra analytical cell incorporates dual flow-through porous graphite working electrodes, in series. The high electrode surface area and reduced diffusion distance of these electrodes produces near 100% (coulometric) conversion efficiency, resulting in high sensitivity. The potential applied to both electrodes can be independently controlled for use in quantitation, compound modification, or selective screening.

The new design, with an optimized internal fluidic pathway, minimizes dispersion to improve resolution with ultra-fast UHPLC separations.

- Dual, independent, electrode design for selective analysis
- Identifies and resolves co-eluting analytes
- Ultra-low internal volume optimized for HPLC and UHPLC
- Maintenance-free, solid state palladium reference electrodes for stability and reliability

When combined with the Thermo Scientific Dionex UltiMate 3000 ECD-3000RS electrochemical detector, these characteristics produce the most reliable and simplestto use electrochemical detection system available today. Analytical cell controlled by an installed DC potentiostat module in the Thermo Scientific<sup>™</sup> Dionex<sup>™</sup> UltiMate<sup>™</sup> 3000 Electrochemical detector. This is the ideal safeguard to ensure your success in using electrochemical detection for your challenging analysis.





#### Introducing SmartChip Technology

This sensor design incorporates SmartChip<sup>™</sup> technology for automatic recognition by the Thermo Scientific<sup>™</sup> Chromeleon<sup>™</sup> Chromatography Data System (CDS) Software which configures the detector with safe, established detection parameters. The SmartChip aids in electronic tracking for method validation and to prevent unintended sensor damage.



#### **Specifications**

Product

**Ordering Information** 

6011RS ultra Coulometric Analytical

Cell for ECD-3000RS detector

Design	Flow-through, micro-volume, dual serial electrodes
Working Electrodes	Micro-porous graphitic carbon (independently controlled)
Potential Range	-300 to +1100 mV (vs Pd) (when appropriate this range may be extended by the operator)
Usable Flow Rate	Greater than 0.3 mL/min (optimum flow rate
Operating Pressure	40 bar (580 psi, 4.0 MPa) maximum (at the inlet)
Internal Volume	4.3 μL
Wetted Materials	PEEK™, Porous graphite, Palladium, PTFE
Fluid Connections	Inlet/Outlet: 10-32 female port (nanoViper <sup>™</sup> fingertight fitting inert fused-silica compatible)
Parametric Control	Automatic parameter configuration through Chromeleon <sup>™</sup> software via SmartChip recognition. The SmartChip identifies and records sensor type and defines data collection.
Operating Temperature	10-45 °C (50-113 °F), 18% to 80% RH, non-condensing
Solvent Compatibility	Compatible with typical reverse- and normal-phase solutions
Size	39(H) × 45(W) × 73 (D) mm (1.5 × 1.8 × 2.9 in.)
Weight	224 g (7.9 oz)
Warranty	90 days when used as per operating instructions

## Find out more at thermofisher.com/ECdetection



©2016 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific Inc. and its subsidiaries unless otherwise specified. This information is presented as an example of the capabilities of Thermo Fisher Scientific Inc. products. It is not intended to encourage use of these products in any manners that might infringe the intellectual property rights of others. Specifications, terms and pricing are subject to change. Not all products are available in all countries. Please consult your local sales representative for details. **PS70255-EN 1016S**