## Thermo Scientific Dionex ACC-3000 Autosampler Column Compartment

Cost-Effective Solution for Routine Analysis

Product Specifications

Thermo Scientific<sup>™</sup> Dionex<sup>™</sup> UltiMate<sup>™</sup> 3000 products are UHPLC compatible by design, establishing the new standard in conventional LC. Integrating hardware, software, and separation chemistry, we offer the UHPLC to everyone—for all needs.

## **Cost-effective and Flexible**

With the integration of the autosampler and column oven into a single module, the Thermo Scientific<sup>™</sup> Dionex<sup>™</sup> UltiMate<sup>™</sup> 3000 Autosampler Column Compartment is a very cost-effective LC hardware solution. It is ideally suited for routine analyses in the pharmaceutical, food and beverage, and environmental industries.

A wide variety of different sample formats, combined with a large sample capacity, support a wide range of routine applications.

All fluidic components can be accessed from the front panel of the autosampler without moving other modules.

The performance and flexibility of the autosampler column compartment exceed the requirements of most analytical methods; even UHPLC applications up to 62 MPa (9000 psi) operating pressure are possible.

As a combined module and an integrated part, it is responsible for the reduced height and cost of the modular-based UltiMate 3000 Basic Automated LC system.







## **Precise and Reliable**

The rugged pulled-loop design ensures optimal performance across a wide range of sample volumes. The integrated wash port cleans both inner and outer needle surfaces to eliminate carryover.

A patented temperature control design protects thermally sensitive samples by eliminating destructive temperature gradients in the sample carousel compartment. A movable cover protects light sensitive analytes from UV radiation The accurate column temperature control and the built-in eluent preheating option guarantees reproducible chromatographic results even at high column temperatures and independent of ambient conditions.

The ACC-3000 Autosampler Column Compartment is fully supported in the Thermo Scientific<sup>™</sup> Dionex<sup>™</sup> Chromeleon<sup>™</sup> Chromatography Data System (CDS) software, thus qualification procedures can be automated.

ACC-3000 Autosampler Column Compartment Specifications	
Injection Principle	Pulled loop
Injection Modes	Full loop, partial loop
Full Loop Injection Volumes	20, 50, and 200 μL
Injection Volume Range	0-50% of installed sample loop in partial loop mode
Syringe Sizes	250 and 1000 μL
Linearity	Corr. coeff. > 0.9995, RSD < 1% in partial loop mode for 1–10 $\mu$ L (20 $\mu$ L loop) Corr. coeff. > 0.9995, RSD < 0.5% in partial loop mode for 10–100 $\mu$ L (200 $\mu$ L loop)
Sample Capacity	216 × 0.3 mL vials, 120 × 1.1 mL conical vials, 216 × 1.2 mL vials, 120 × 1.8 mL or 2.0 mL vials, 66 × 4 mL vials, $30 \times 10$ mL vials and/or 120 × 0.5 mL or 1.5 mL Eppendorf <sup>®</sup> tubes (open, uncapped) + 15 × 10 mL vials
Carryover	< 0.02% (caffeine)
Sample Temperature Range	8–45 °C, max. 15 °C below ambient
Column Temperature Range	5 °C above ambient to 50 °C
Dimensions ( $h \times w \times d$ )	$36 \times 42 \times 51$ cm (14.2 × 16.5 × 20 in.)
Maximum Operating Pressure	62 MPa/9000 psi/620 bar
Injection Volume Precision	$<$ 0.25% RSD in full loop mode (20 $\mu L$ loop) Typically $<$ 0.3% RSD in partial loop mode at 5 $\mu L$ (20 $\mu L$ Loop)
Safety and Maintenance	Leak sensor, automatic vial detection, internal monitoring of all mechanical operations, power-up diagnostics of all sensors, actors, and electronics. ACC-3000T: Monitoring of the function and cooling performance by three temperature sensors
Wetted Materials	Tefzel®, SST
Weight	ACC-3000 (T):18 kg (23.0 kg)
Software Control	Chromeleon Chromatography Data System
PC Connection/I/O Interfaces	USB 1.1, integrated USB hub with 3 free ports. 4 digital inputs, 4 program. relay outputs
Power Requirements	100–120 V, 60 Hz; 200–240 V, 50 Hz
User Input/Display	LCD-indicating system parameters, 4 magnetic keys to support installation, diagnostics and maintenance, standby button, 3 LEDs for status monitoring (Power, Connected, Status)
GLP	In Chromeleon: Full support of automatic equipment qualification (Thermo Scientific <sup>™</sup> Dionex <sup>™</sup> AutoQ <sup>™</sup> Instrument Qualification) and system functions for estimating the lifetime of consumables, predictive performance. All system parameters are recorded in the Chromeleon Audit Trail.



Figure 1. The pulled-loop injection principle of the ACC-3000 provides optimal performance across a wide range of injection volumes and requires minimal maintenance.

rt Number
30.0010 ACC-3000 Autosampler Column Compartmer
30.0020ACC-3000T Autosampler Column Compartment with Sample Thermostattin
Accessorie
00.0100
20.1427 Transparent Front Cov
20.4070Sample Tray for 40 Cylindrical 1.8/2 mL Via
20.4084Sample Tray for 22 Cylindrical 4 mL Via
20.4086Sample Tray for 10 Cylindrical 10 mL Via
20.4087Sample Tray for 40 Conical 1.1 mL Via
20.4090 Sample Tray for 72 Cylindrical 1.2 mL Via
20.4091
20.4094 Sample Tray for 1.5 mL Eppendorf® Tube
20.4096 Sample Tray for 0.5 mL Eppendorf Tube
20.4097 Sample Tray for 72 Microdialysis 0.3 mL Via
22.0003
22.0005
30.2414 20 μL Sample Loop, Thermo Scientific™ Dionex <sup>™</sup> Viper <sup>™</sup> Fittin
30.2416
30.2418 200 µL Sample Loop, Viper Fittin

## www.thermoscientific.com/dionex

©2013 Thermo Fisher Scientific Inc. All rights reserved. ISO is a trademark of the International Standards Organization. Tefzel is a registered trademark of E. I. Dupont de Nemours & Co. Eppendorf is a registered trademark of Eppendorf AG. All other trademarks are the property of Thermo Fisher Scientific Inc. and its subsidiaries. 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.

 Australia
 +61
 3
 9757
 4486

 Austria
 +43
 1
 333
 50
 34
 0

 Belgium
 +32
 53
 73
 42
 41

 Brazil
 +55
 11
 3731
 5140

 China
 +852
 2428
 3282

Denmark +45 70 23 62 60 France +33 1 60 92 48 00 Germany +49 6126 991 0 India +91 22 2764 2735 Italy +39 02 51 62 1267

Japan +81 6 6885 1213 Korea +82 2 3420 8600 Netherlands +31 76 579 55 55 Singapore +65 6289 1190 Sweden +46 8 473 3380



Switzerland +41 62 205 9966 Taiwan +886 2 8751 6655 UK/Ireland +44 1442 233555 USA and Canada +847 295 7500



Part of Thermo Fisher Scientific