

Shimadzu Europa GmbH · Postfach 29 02 60 · D-47262 Duisburg F.R.G.

Duisburg, July 8th 2015

Dear Madam, Sir,

Here are supplementary information to the Shimadzu GC-MS/MS system GCMS-TQ8040 specification sheet.

Hereby, we confirm that system GCMS-TQ8040 and its optional components have the following features:

Gas chromatograph GC-2010Plus:

- Gas chromatography system GC-2010Plus could be controlled via PC with dedicated software and/or integrated panel with graphical display.
- An extensive self-diagnostics function with safety features helps prevent unexpected instrument malfunctions. It enables a detailed diagnosis of the septum and insert usage status, whether or not there is a temperature sensor error, gas supply pressures, control status of each gas, ignition function, DC voltage, AD converter, and other factors.
- Display of primary pressure must is available to indicate the remaining gas in carrier gas cylinder to avoid disruptions in analysis. Alarm if primary pressure is out of given pressure limits.
- Oven temperature set point resolution is 0.1°C.
- Retention Time repeatability: <0.004%

Mass spectrometer TQ-8040:

- Switch CID gas ON/OFF automatically. Enables single non-stop batch with with and without fragmentation function for separate runs.
- It have a SIM (MRM) capability to acquire up to 32768 channels
- Automatic calculation of Retention Index for target compounds based on n-alkane is available and is able to carry out mass spectrum Similarity Search function with the Retention Index.
- The software can create a method for MRM, SIM, Scan, synchronous Scan/MRM, and Scan/SIM from a compound database automatically.
- It is possible to perform filament replacement or ion source cleaning by costumer. Quadrupole system is not exposed during this procedure.

Optional Optic-4 universal injection system:

- Injection modes supported: large volume injection (up to 100 µl and more), thermal desorption, thermal extraction, etc.
- Injector Optic-4 supports fast chromatography columns with an inner diameter ≤ 0,2 mm.
- Optic-4 injector is integrated with GC-2010Plus system. Carrier gas flow and pressure is controlled by chromatography software using AFC-2010 gas controller.

Optional AOC-6000 sampler:

- Syringe cleaning. Possible before and/or after injection. In standard configuration two cleaning solutions available.
- Thermostated tray is with orbital shaking function with up to 750 rpm.

Sincerely,



St. MOREAU
Product Manager MS & Life Sciences
Marketing Europe - Analytical Business Unit
Shimadzu Europa GmbH