

GCMS-QP2010 *Ultra*



GCMS-QP2010 Ultra is our most advanced gas chromatograph mass spectrometer, upgraded in performance and usability from the GCMS-QP2010 Plus. A newly designed electronic control protocol allows for best-in-class scanning speed. This improved data collection speed makes this the perfect instrument for Fast GC or comprehensive GC/MS (GCxGCMSq) analyses. Lab productivity and sample throughput are automatically increased. Ecology mode saves power and carrier gas consumption allowing for a lower cost of ownership and less environmental stress.

Instrument

GC

Model:	Shimadzu GC-2010 Plus
Oven temperature:	Up to 450°C
Injector port temp:	Up to 450°C
AFC pressure range:	0 to 970kPa
Column oven temp:	Up to 450°C
High power oven with fast heat-up rate compatible with fast GC-MS (230VAC)	

MS

[GCMS Interface]

Type:	Direct connection with capillary column
Temperature:	50 to 350°C

[Ion Source]

Model:	EI (Standard), PCI (Option) EI, PCI and NCI with NCI source (Option)
Ion source temperature:	140 to 300°C
Filament:	Dual (Automatic Switching)
Electron energy:	10 to 200eV
Emission current:	5 to 250µA
Front access structure for easy maintenance	

DI (Option)

Temp. setting:	Room Temp. to 500
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[Mass Analyzer and Detector]

Mass analyzer:	Metal quadrupole mass filter with pre-rod
Mass range:	<i>m/z</i> 1.5-1090
Mass resolution:	2M(FWHM)
High-speed scanning control:	Advanced Scanning Speed Protocol (ASSP)
High-speed scan rate:	20,000 u/sec
Minimum measurement interval:	0.01 s (Maximum 100 scan/sec)
Detector:	Secondary electron multiplier with the patented overdrive lens and conversion dynode
Main pump:	Differentially pumped vacuum system (179/185L/sec for He)
Fore-pump:	30L/min (60Hz) Rotary Pump
Column flow:	Up to 15mL/min (He)

Software

[GCMSsolution Ver.2.6]

Mode:	Scan, SIM, FASST (Fast Automated Scan/SIM Type)	Database:	Method Package (Residual Pesticide in Foods, EPA524, EPA525), Compound Composer Database Software for Simultaneous Analysis, EPA Optional Software, VOC Analysis Software, GC/MS Metabolomics Database
SIM:	64 channels x 128 groups	Quality control functions:	QA/QC function for accuracy control, System check for instrument management, Security function for user management
Energy saving:	Ecology mode	File format:	Compound Structure Format, best-suited for GLP
Insert replacement:	Easy sTop	Maintenance support:	MSNAVIGATOR
Method creation*:	COAST (Creation of Automatic SIM Table), AART (Automatic Adjustment of Retention Time)	Report:	Highly flexible report creation, Template
Library search:	Similarity search, Similarity search with retention index, Index search		
Instrument tuning:	Autotuning for all ionization modes (EI, PCI ad NCI)		
Mass spectrum library(OPTION):	NIST, Wiley, Pesticide Library, FFNSC Library (Flavor and Fragrance), Drug Library		

Installation Checkout Specifications

EI scan sensitivity:	1pg octafluoronaphthalene m/z 272 S/N > 500
PCI scan sensitivity:	100pg benzophenone m/z 183 S/N > 500
NCI scan sensitivity:	100fg octafluoronaphthalene m/z 272 S/N > 500

Installation Example

Power Requirement

Frequency:	50/60 Hz
GC:	1800VA (115VAC)/*2600VA (230VAC) * High power oven
MS:	1000VA (100 – 230 VAC)

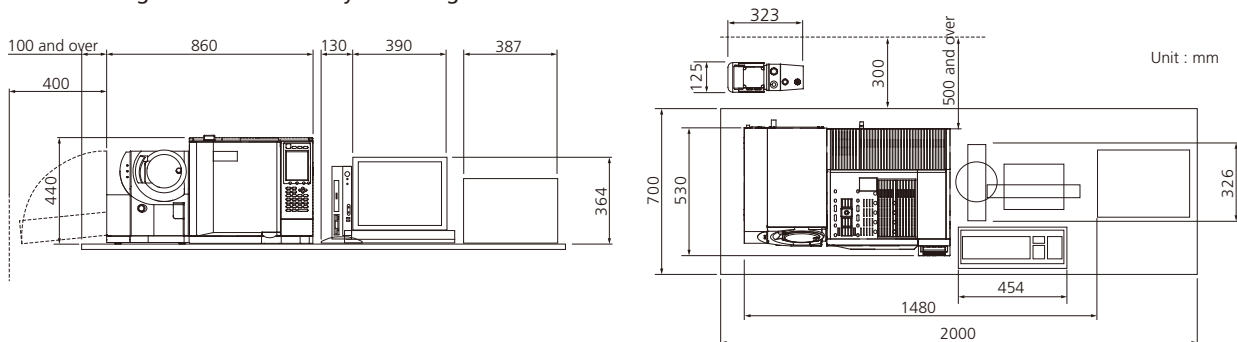
Environment

Temperature:	Constant temperature between 18 to 28°C
Humidity:	40 to 70 % (No condensation)

Size and Weight

GC/MS:	74kg
Rotary pump:	10kg

Size and weight of PC/Printer vary according to models.



For More Information

For more information on shimadzu products, visit our website at <http://www.shimadzu.com/>

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