



# Agilent 5975C Series GC/MSD System

## Data Sheet



### GC/MSD

The Agilent 5975C Series Gas Chromatograph/Mass Selective Detector System with Triple-Axis HED-EM Detector offers high performance and flexibility with many options. The mass selective detector can be combined with either a compact Agilent 6850 GC, or the full-featured Agilent 6890N GC, or the high-performance 7890A GC. Liquid autosamplers range from an injector tower to a CTC PAL system.

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#### Mass Selective Detector

Mode (standard)	EI
Modes (optional)	PCI, NCI, EI with CI source
Ion source type	Noncoated inert EI source for turbomolecular pump systems (optional for diffusion pump system) Stainless steel EI source for diffusion pump system
Mass filter	Monolithic hyperbolic quadrupole
Maximum mass	1050 u
Detector	Triple-Axis HED-EM with extended life EM
Scan rate (electronic)	Up to 12,500 u/s
Pumping system	65 L/s diffusion pump, 70 L/s or 262 L/s turbomolecular pump with 2.5 m <sup>3</sup> /h mechanical pump

#### Gas Chromatograph (6850, 6890N, or 7890A GC)

*For more specifications on GCs refer to the GC Data Sheet*

Injector	Split/splitless (standard), others available
Autosampler	G2880A, 7683, CombiPAL, or G1888A (and more ...)
Oven temperature	Ambient +4 °C– 450 °C (6890/7890A) or +5 °C– 350 °C (6850)
Oven ramps/plateaus	6850 and 6890: 6/7; 7890A: 20/21. Negative ramps are allowed.
Electronic pneumatic control (EPC)	Auto pressure regulation for split/splitless, septum purge
Carrier gas control modes	Constant pressure and flow modes; pressure and flow programmable
Pneumatic splitter	Capillary Flow Technology devices for effluent splitting, backflushing, and column switching



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## Data System

eMethods	Transfer methods between 5975 and 5973 Series MSDs
Simultaneous MS and GC	Six signals for the 7890A GC systems and four signals for the 6890A Series GC systems (up to two MS) detector data acquisitions
SIM/Scan	Automated SIM setup and high performance synchronous SIM/scan operation
Application autotunes	One-click autotune for BFB, DFTPP
Spectral libraries (optional)	NIST, Wiley, Pfleger-Mauer Drug, Stan pesticide
Spectral DRS and RTL databases (optional)	Pesticides and endocrine disrupters, volatiles, PCBs, toxicology, FAMES, flavors, organotin compounds, hazardous chemicals, indoor air toxics, Japan Positive List, forensic toxicology and environment semi-volatiles
21CFR11 Compliance	Optional software available

## Installation Checkout Specifications

El scan sensitivity	1- $\mu$ L injection of a 1-pg/ $\mu$ L OFN standard scanning from 50 to 300 u will give a nominal $m/z$ 272 ion With Helium: S/N <b>400:1</b> for turbo systems, <b>200:1</b> for the diffusion system With Hydrogen: S/N <b>100:1</b> for turbo systems and <b>50:1</b> for the diffusion system
PCI scan sensitivity	1- $\mu$ L injection of a 100-pg/ $\mu$ L BZP standard scanning from 80 to 230 u will give <b>125:1</b> S/N with Methane and <b>500:1</b> with Ammonia at nominal $m/z$ 183 ion
NCI scan sensitivity	2- $\mu$ L injection of a 100-fg/ $\mu$ L OFN standard scanning from 50 to 300 u will give <b>600:1</b> S/N with Methane and <b>300:1</b> with Ammonia at nominal $m/z$ 272 ion

## Physical Requirements (with Agilent 6890 and 7890A GCs)

Dimensions (GC/MSD)	88 cm (w) $\times$ 56 cm (d) $\times$ 50 cm (h) Additional space should be added for the data system and printer.
Weight (GC/MSD)	81 or 96 kg (depending on configuration)

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