

S61

NWPEC

AUTOMATIC VAPORIZER

Rapid, reliable vaporization of high-pressure liquid samples for GC analysis



350°C MAX

±0.1°C CONTROL

7" TOUCHSCREEN

01

CONSISTENT VAPORIZATION

A special heating vaporization valve ensures consistent pressure at the vaporization outlet, eliminating discrimination and poor repeatability.

02

FULL AUTOMATION

Full gasification, automatic purging and an atmospheric balance valve deliver high injection repeatability without manual intervention.

03

BROWSER CONTROL

All parameters can be configured and programmed via a web browser — check status, edit and download parameters remotely.

04

GC-READY INTEGRATION

Standard I/O for mainstream GC and direct connection to the Mx series, with method editing in the GC software.

KEY S61 ADVANTAGES

- Full gasification and auto-purging of sample pathways
- Atmospheric balance valve for the sample loop ensures high repeatability
- Auto-set injection time and volume; 350°C maximum temperature with ±0.1°C control
- 7-inch touch screen shows operations and records history
- Inert coating for all sample tubing; 1/16" inert-coated stainless steel lines
- Inline filter guarantees sample authenticity and protects the GC
- Flowmeter for real-time flow monitoring
- Full-length heat tracing for fast, accurate vaporization of wide-boiling-point samples
- Standard I/O interfaces for mainstream GC; direct connection to Mx series GC
- S61-X multi-channel option: automatic switching of 4–6 sample cylinders
- S61-R portable flash evaporation module — direct fit to P6 portable GC
- Compact 350 × 400 × 260 mm benchtop, only 50 W, ~25 kg

S61 AUTOMATIC VAPORIZER



HEATING VAPORIZATION VALVE

Special heated valve keeps a consistent pressure at the vaporization outlet, solving discrimination and repeatability issues.

INLINE FILTER

Built-in inline filter removes particulates, guaranteeing sample authenticity and protecting downstream analytical systems.

ATMOSPHERIC BALANCE VALVE

Sample-loop pressure is balanced against atmosphere before injection, ensuring highly repeatable split results.

7-INCH TOUCH SCREEN

Color touchscreen displays live operations and records full history for traceability and audit.

HEATED INERT PATH

All tubing is inert-coated and heated; transfer line to the GC is heat-traced up to 250°C.

CORE TECHNOLOGIES

ENGINEERED FOR REPRODUCIBLE VAPORIZATION FROM HIGH-PRESSURE LIQUIDS TO GC-READY GAS



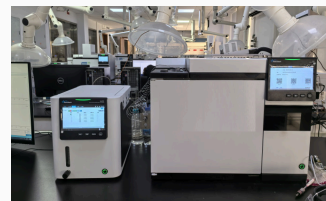
PRECISE VAPORIZATION

- 350°C max temperature, $\pm 0.1^\circ\text{C}$ control
- Consistent outlet pressure, no discrimination
- Full gasification of liquid / vapor-liquid samples
- Inline filter for sample authenticity
- Handles wide-boiling-point samples accurately



FLEXIBLE CONFIGURATIONS

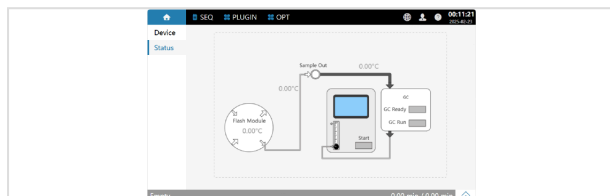
- S61-X: auto-switching of 4–6 cylinders
- Customizable quick-connects (default 1/4")
- Auto purge, vaporize and inject per channel
- Heated, insulated full-path tubing
- Web browser management, no extra software



SEAMLESS GC INTEGRATION

- Standard I/O for mainstream GC systems
- Direct connection to Mx series GC
- Method editing in GC software
- S61-R portable module fits P6 portable GC
- RS485 / RS232 / TCP/IP / EVENT / BCD

PERFORMANCE PROOF



Intuitive Control, Full Traceability

The 7-inch touchscreen shows real-time device status, flow monitoring and a complete operation history. All parameters can be configured and programmed via a browser, with status check, parameter edit and download. The system supports the UniLite plugin and PC-side control software for seamless workflow integration.

Reference: S61 with 7" touchscreen; supports UniLite plugin and PC-side control software.

APPLICATION AREAS

LPG & LNG

Full composition of liquefied petroleum gas and LNG by capillary GC

OLEFINS

Trace water, oxygen and sulfur in polymerization-grade ethylene and propylene

BUTADIENE

Trace water in butadiene for industrial use — coulometric Karl Fischer

DIMETHYL ETHER

Sampling and GC analysis of dimethyl ether content in LPG

VINYL CHLORIDE

Trace water analysis in vinyl chloride monomer

REFRIGERANTS

Trace water in refrigerants; trace impurities in butene and other olefins

S61

TECHNICAL SPECIFICATIONS

MAIN SYSTEM

Maximum Temperature	350°C, ±0.1°C control
Vaporization	Special heating vaporization valve, consistent outlet pressure
Sample Loop	Atmospheric balance valve (standard)
Filtration	Inline filter
Purging	Fully automatic
Display	7-inch touchscreen, operation history records
Flow Monitoring	Built-in flowmeter, real-time
Sample Tubing	1/16" inert-coated stainless steel
Pipeline Heating	Full-length heat tracing; GC transfer line up to 250°C

SAMPLING & INTERFACES

Cylinder Interface	1/16" stainless-steel ferrule
Multi-Channel Switching	Stainless-steel quick-connect, customizable (default 1/4")
External Interfaces	RS485, RS232, TCP/IP, EVENT, BCD
Access Method	Browser-based status view and control
GC Compatibility	Standard I/O for mainstream GC; direct Mx series connection

PERFORMANCE HIGHLIGHTS

350°C

Maximum vaporization temperature

±0.1°C

Temperature control accuracy

4–6

Channels with S61-X auto-switching

250°C

Heated GC transfer line

100 W

Power consumption

ELECTRICAL & ENVIRONMENT

Power Supply	220 V, 50 Hz
Power	50W
Operating Temperature	0°C to 50°C
Storage Temperature	–20°C to 70°C
Operating Humidity	10% to 90%
Storage Humidity	5% to 90%
Dimensions	350 × 400 × 260 mm
Net Weight	Approximately 25 kg

SOFTWARE & CONTROL

Supporting Software	UniLite plugin; PC-side control software
Remote Access	Browser-based parameter edit and download
Data Records	Operation history on touchscreen

CONFIGURATIONS

S61-X — Multi-channel automatic liquid sample switching (4–6 cylinders), full auto purge / vaporize / inject

S61-R — Portable flash evaporation module, direct installation on P6 portable GC injection port