



verity[®] 1900 MS Detector

Bringing Mass Spectrometry to Your Lab

Increase the Pace of Your Discovery

Save valuable time by confirming the molecular weight of the contents of every collected fraction during the purification process, eliminating the need for subsequent analytical verification.

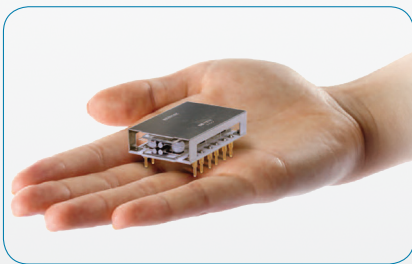
Collect fractions based on target mass, which allows you to:

- Reduce the number of fractions per prep injection
- Dry down fewer fractions
- Reconstitute and analyze fewer fractions

Experience Unparalleled Accessibility

Chip-based technology revolutionizes the way mass spec is perceived and approached. Miniaturized system components allow the VERITY[®] 1900 MS Detector to:

- Consume less power
- Need little maintenance
- Conserve valuable bench space
- Require no nitrogen generator or roughing pump
- Offer reduced noise levels compared to traditional MS



Chip-Based Mass Spectrometry



The VERITY[®] 1900 MS Detector is a Single Quadrupole Mass Spec Detector with Integrated Splitter and Make-up Pump



VERITY® 1900 MS TECHNICAL SPECIFICATIONS

Ion Source	Spraychip® electrospray ionization source
Ionization Modes	Positive and negative ESI
Sample Inlet	Compatible with standard capillaries and unions e.g., 1/32" tubing
Flow Rate Range	0.3–2000 µL/min
Mass Analyzer	Ionchip® quadrupole mass filter
Mass Range	m/z 50 – 800 with Ionchip® 150
Mass Accuracy	$\pm m/z$ 0.3 in full scan*
Mass Resolution	m/z 0.7 \pm FWHM *
Sensitivity	10 pg of reserpine yields a peak in SIM mode with a S/N ratio of 10:1 (RMS)
Interface	Vac-chip™ microengineered atmospheric pressure interface
Detector	Electron multiplier
Dynamic Range	3 orders of magnitude
Scan Modes	Full scan, SIM (4 m/z channels), simultaneous scan/SIM, and timed SIM
Scan Rate	m/z 1,500/s (7,500 pts/s)
Pumping System	Integrated oil-free pumps
Connections	Ethernet, 5 x USB 2 x digital in (e.g., LC trigger input), 2 x digital out 4 x in (e.g. UV Trace), 4 x out (e.g., triggering external device) 1 x RS232 (e.g., syringe pump control)
Power Requirements	Power: 250 W (operating), 300 X (peak) Line voltage: 100–240 V AC \pm 10% Line frequency: 50/60 Hz
Nitrogen Gas	Pressure 2–6 bar (29–87 psi) Purity (\geq 99.5%) 6 mm OD push fit connection
Pump Exhaust	Exhaust connects to a 8 mm OD push fit
Dimensions (L x W x H)	55 x 35 x 25 cm (22 x 14 x 10 in.) **
Weight	32 kg (70.5 lbs.)

* In a temperature controlled environment, 20°C \pm 3 °C

** +5 cm are needed around the base of the instrument L x W for ventilation

MiDas™ TECHNICAL SPECIFICATIONS

Pump	
Flow Range	0.001–9.999 mL/min
Max Pressure	400 bar (5802 psi) at 9.999 mL/min
Flow Accuracy	\pm 1% at 1 mL/min
Splitter	
Max Pressure	69 bar (1001 psi)
Switching Frequency Range	0.2–2.0 Hz
Injection Valve	
Max Pressure	414 bar (6005 psi)
Stop – Stop Actuation Speed	100–280 ms
Port to Port Volume	0.28–0.50 µL
Other Specifications	
Connections	USB controlled via VERITY® 1900 MS
Power Requirements	Power: 50 W Line Voltage: 100–240V AC \pm 10% Line Frequency: 50/60 Hz
Dimensions (L x W x H)	36 x 35.5 x 16.5 cm (14.2 x 14 x 6.5 in.)
Weight	11.8 kg (26 lbs.)

VERITY® 1900 MS with MiDas™ TECHNICAL SPECIFICATIONS

Environmental Conditions	Indoor Use Operating: 15°C–30°C with 40% – 80% relative humidity noncondensing Storage: 4°C–50°C with 10% – 90% relative humidity noncondensing
Safety and Compliance	The instruments have been certified to safety standards specified for Canada, Europe, and the United States. Refer to the instrument rear panel labels and the Declaration of Conformity documents for the current standards to which the instruments have been found compliant.
Software Control	PC control via Ethernet and TRILUTION® LC Software Control via Ethernet and Glider Prep and Masscape® Software

