

Improve efficiency by increasing yields and shortening purification times



SPEC SHEET | PURIFICATION

PLC PURIFICATION SYSTEMS WITH AUTOSAMPLER

OPTIMIZE YOUR PURIFICATION

PLC Purification Systems with autosampler allow you to queue samples and create multiple, unattended purification runs.

COMPACT, OUT-OF-THE-BOX SYSTEM

PLC Purification Systems, along with a GX-241 Liquid Handler and VERITY® 4020 Single Syringe Pump, provide a compact, yet flexible purification platform, that is both modular and configurable.

KEY BENEFITS

- Increased throughput
- Reduced contamination and carryover
- Easily automated injection/run sequences
- Multi-injection of different samples when using prep HPLC, flash chromatography, or CPC columns



Figure 1

PLC Purification System with Autosampler

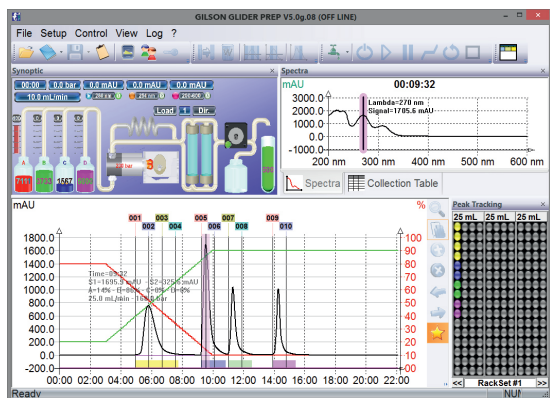


Figure 2

Gilson Glider Prep control software

ONE TOUCHSCREEN CONTROLS THE ENTIRE SYSTEM

- Pre-program or write methods as needed
- Quickly see and modify system parameters
- Conveniently print reports, export, or save them as PDF files

PLC 2050 AND 2250 PURIFICATION SYSTEMS

Flow Rate / Max Pressure	<p>PLC 2050 with Autosampler: Part #21140004 50 mL/min with pressure up to 300 bar (4351 psi)</p> <p>PLC 2250 with Autosampler: Part #21140005 250 mL/min with pressure up to 230 bar (3336 psi)</p>
Performance	<p>Flow rate accuracy: 2% (with H₂O degassed at 20°C)</p> <p>Repeatability: Better than 0.5%</p> <p>Repeatability standard deviation (RSD)</p>
Gradient Former	<p>Binary (standard)</p> <p>Quaternary (optional)</p> <p>Linear Response to gradients from 2% to 98%</p>
Injection	<p>Automatic or manual loop injection valve (optional)</p> <p>Additional injection pump (optional)</p> <p>Manual loop injection valve (optional)</p>
Valve Options	<p>Automatic backflush valve (optional)</p> <p>Manual column switching valve (optional)</p>
Column Holder	<p>Built-in column clamp for up to 40 mm OD columns (standard)</p> <p>Additional standalone holder (optional):</p> <ul style="list-style-type: none"> • Maximum height: 400 mm • Maximum diameter: 115 mm
Detection	<ul style="list-style-type: none"> • UV monochromator single wavelength detector, 254 nm by default (standard) • UV monochromator dual wavelength detector, 254/280 nm by default (optional) • UV Detector, 4-wavelength DAD, 200–400 nm (optional) • UV/VIS detector, 4-wavelength DAD, 200–600 nm (or 200–800 nm) (optional) • VERITY® 1900 MS Detector (optional) • Built-in ELS Detector (optional)
Collection	<ul style="list-style-type: none"> • Several rack options available • Rack overlays for easy tube identification (Optional) • Funnel rack with 16 outlets for large and variable collection volume in external high-capacity containers (optional) • Fraction collector cover kit (optional)
Control	<p>Touchscreen PC with Gilson Glider Prep software</p>
Power Requirements	<p>Line voltage 110-120 / 220-240 V-</p> <p>Line Frequency 50/60 Hz</p> <p>Wattage 450 W (maximum)</p> <p>Distribution TT or TN power system only</p> <p>Transient overvoltage Category II</p> <p>Class 1 equipment</p>
Electrical Protection	<p>General: Delayed action fuses 6.3A H 250 V-, T-type (24 V$\overline{\text{---}}$ and 5 V$\overline{\text{---}}$)</p> <p>Delayed action fuses with different ratings L 250 V-, T-type</p>

GX-241 LIQUID HANDLER AS AUTOSAMPLER

Sampler Type	Small footprint X/Y/Z with stationary rack design
Probe Positioning Performance	<p>Accuracy: ± 0.75 mm in X/Y/Z dimensions</p> <p>Repeatability: ± 0.20 mm in X/Y/Z dimensions</p>
Arm Speed	<p>0–350 mm/sec (300 mm/sec default) in X and Y dimensions</p> <p>0–150 mm/sec (125 mm/sec default) in Z dimension</p>
Horizontal Motion Strength	0.3 kg (0.7 lbs)
Vertical Punch Strength	1.8 kg (4 lbs)
Probe Rinse	Probe rinsing occurs through a dedicated rinse station with static and flowing rinse capabilities
Front Panel	Two digit display and indicator Lights for Power and Error
Contact Control	<p>Four inputs (contact closure, TTL), two relay outputs, and two switched + 24V 1A outputs</p> <p>Switching voltages higher than 30V or greater than 1 Amp of current may damage the instrument</p>
Environmental Conditions	<p>Indoor use only</p> <p>Altitude: Up to 2000m</p> <p>Temperature range: 5°C–40°C</p> <p>Humidity: Maximum relative humidity 80% for temperatures up to 31°C, decreasing linearly to 50% relative humidity at 40°C, pollution degree 2</p>
Safety and Compliance	The liquid handler has been certified to safety standards required in Canada (UL), Europe, and the United States (CE & RoHS). Refer to the instrument rear panel label and the <i>Declaration of Conformity</i> document for the current standards to which the instrument has been found compliant
Power Requirements	<ul style="list-style-type: none"> • Voltage: 24V DC • Current Rating (maximum): 6.25A, 150W <p>External Power Supply</p> <ul style="list-style-type: none"> • Voltage: 100–240V AC • Current rating: 6.24 Amp, 150 Watts
Dimensions* (WxDxH) *with Z-Arm installed and connected	39 x 50 x 47 cm (15.4 x 19.8 x 18.5 in)
Weight* *with Z-Arm Installed	7.7 kg (17 lbs)