

# VERITY® Purification Systems

Build the perfect system to fit your research



SPEC SHEET | PURIFICATION

VERITY® PURIFICATION SYSTEMS WITH VERITY® 3011 ISOCRATIC PUMP

## MAKE YOUR LAB LIFE EASIER

From automated GPC to prep HPLC, build your own VERITY® purification system that fits your research. Mix and match different models of liquid handlers, pumps, detectors, and fraction collectors to create the perfect system for your application.

## IT'S ABOUT YOUR SCIENCE

Easy-to-use purification systems controlled by intuitive software allow you to focus on your work.

## GET THE MOST FROM YOUR INVESTMENT

Durability backed by Gilson's decades long history in chromatography ensures that your VERITY system is built to last.



**Figure 1**  
VERITY® HPLC Purification System



**Figure 2**  
VERITY® 3011 Isocratic Pump

## VERITY 3011 ISOCRATIC PUMP

**Ideal for enabling chemical reaction monitoring, and supporting systems for environmental, food and beverage, and petroleum applications and for gel permeation chromatography (GPC), this pumping solution fits well in environmental, food, and beverage testing applications.**

- High pressure rating for accommodating industrial level applications
- Quick-connect pump heads for simple maintenance and reduced downtime
- Integrated touchscreen controller for convenient, stand-alone operation

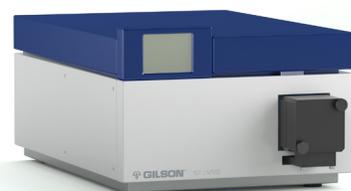
**VERITY® 3011 ISOCRATIC PUMP SPECIFICATIONS - PART NUMBER 38114001**

|  |  |
|--|--|
| Pump Type                                | Isocratic Pump   |
| Hydraulic System                         | Reciprocating single piston pump with passive dampening  |
| Pump Head                                | 5 SS (5 mL/min maximum); 10 SS (10 mL/min maximum)   |
| Flow Rate Specifications                 | <p><b>Programmable Flow Rate Range:</b><br/>                     5 SS: 0.001–5 mL/min<br/>                     10 SS: 0.05–10 mL/min</p> <p><b>Recommended Flow Rate Range:</b><br/>                     5 SS: 0.01–5 mL/min<br/>                     10 SS: 0.05–10 mL/min</p> <p><b>Flow Rate Increment:</b> 0.001 mL/min</p>  |
| Flow Accuracy                            | <p>± 2% of the requested flow rate with water at ambient temperature and pressure 1.4–600 bar (20–8700 psi)</p> <p><b>5 SS:</b> 0.1 to 5 mL/min, <b>10 SS:</b> 0.1 to 10 mL/min</p>  |
| Flow Precision                           | <p>&lt; 1% RSD with water at ambient temperature and pressure 1.4–600 bar (20–8700 psi)</p> <p><b>5 SS:</b> 0.05 to 5 mL/min, <b>10 SS:</b> 0.1 to 10 mL/min</p>   |
| Operating Pressure                       | 0–600 bar (0–8702 psi)   |
| Compressibility Compensation             | Settable compensation range 0–2000 Mbar <sup>-1</sup>  |
| Pressure Pulsation                       | < ± 2% amplitude at 1 mL/min at 100 bar (1500 psi) and 410 bar (6000 psi)  |
| Priming                                  | Manual with built-in prime/purge valve via syringe   |
| Wetted Materials                         | 316L stainless steel, sapphire, HDPE, PTFE, ruby, PCTFE  |
| Operating Modes                          | Constant flow rate (Flow), constant volume or time (Dispense), and time-based sequence (Program)   |
| Control and Communication Specifications | <p><b>Control:</b> Remote control via GECP over USB or RS-232</p> <p><b>Inputs:</b> Four digital inputs: Start/Stop; Pause/Resume; Program Wait; Error</p> <p><b>Outputs:</b> 24VDC; Relay (24VDC, 24 W) and one analog output channel for outputting pressure sensor reading (0–1V for 0–600 bar)</p> <p><b>Front Panel:</b> Capacitive touchscreen control</p> <p><b>Software:</b> TRILUTION® LC 3.0 with Service Pack 8 on Windows® 7</p> |
| Electrical Specifications                | <p><b>Line Voltage:</b> 120 to 240 VAC</p> <p><b>Frequency:</b> 50 to 60 Hz</p> <p><b>Power Consumption:</b> 75 W</p>  |

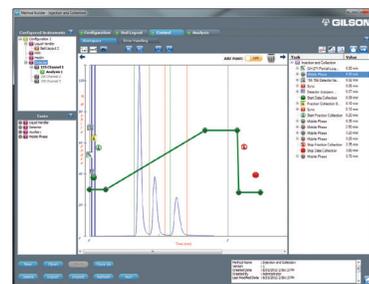
**LEARN MORE ABOUT VERITY® PURIFICATION SYSTEM COMPONENTS AT GILSON.COM**



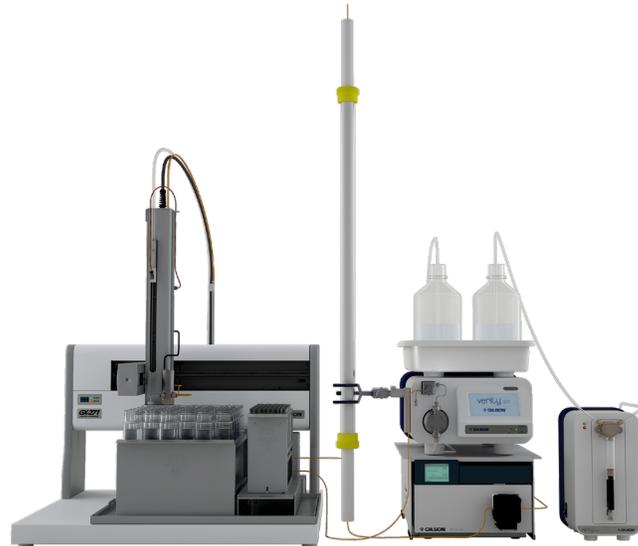
VERITY® 4020 Syringe Pump and GX-271 Liquid Handler



157 and 159 UV/VIS Detectors



TRILUTION® LC Software



**Figure 3**  
VERITY® Gel Permeation Chromatography (GPC) System