

intelligent solution

SMART SAVER[®]

SOLVENT RECYCLING UNIT



USB Solvent Recycler

SmartSaver recycler saves up to 90% of mobile phase by redirection of the pure solvent to the solvent reservoir during the isocratic HPLC. SmartSaver brings quite new approach to solvent recycler design. Very compact instrument is powered directly from chromatography data system PC, no power adapter is required. User friendly software is provided to configure the parameters, and to perform on-line monitoring/audit trail. Analog input allows unipolar or bipolar operation within range of $\pm 1V$. TTL/contact closure can be configured as start, auto-zero or valve position control input.

Operational principle

SmartSaver continuously monitors output signal of the chromatographic detector. Analog-to-digital converter produces digital data for further evaluation in build-in processor. If the input signal level exceeds the preset value (threshold), SmartSaver redirects the flow to the waste, respecting the transport time from detector to the switching valve. When signal goes down SmartSaver is waiting for transport delay again and then switch the mobile phase back to the reservoir. Autosampler injection marker connected to the SmartSaver may ensure the zeroing of signal input at the moment of injection.

Computer requirements

Personal computer (data system) running Microsoft Windows™ Windows™ 98/2000/XP/Vista(32)/7(32) with one free USB port.

Specification

Input Range:	± 1000 mVolts
Threshold:	1 - 1000 mVolts (detects both positive and negative peaks)
Delay:	0 – 255 second
Autozero:	50% of input range
Valve:	3 way electrically actuated, $\frac{1}{4}$ - 28" flat bottom fittings, 30 psi max.
Wetted Materials:	PTFE (valve body), PTFE (valve membrane, tubing)
Inputs:	analog, TTL (contact closure) user configurable
Indicators:	ready (yellow) LED, recycle (green) LED
PC Communication:	USB
Power Requirements:	5 V/100mA (USB powered)