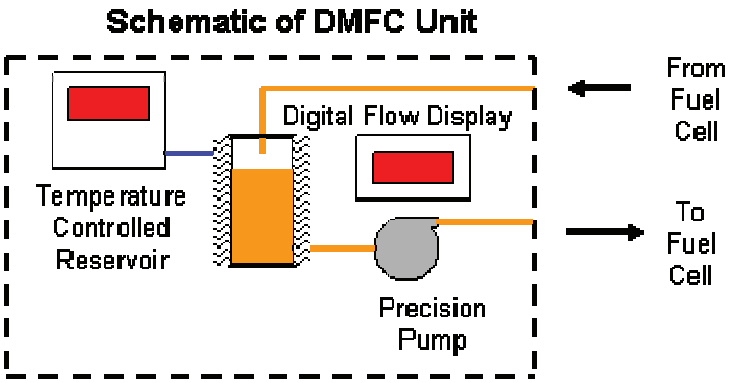
# DMFC™ Direct Methanol Unit

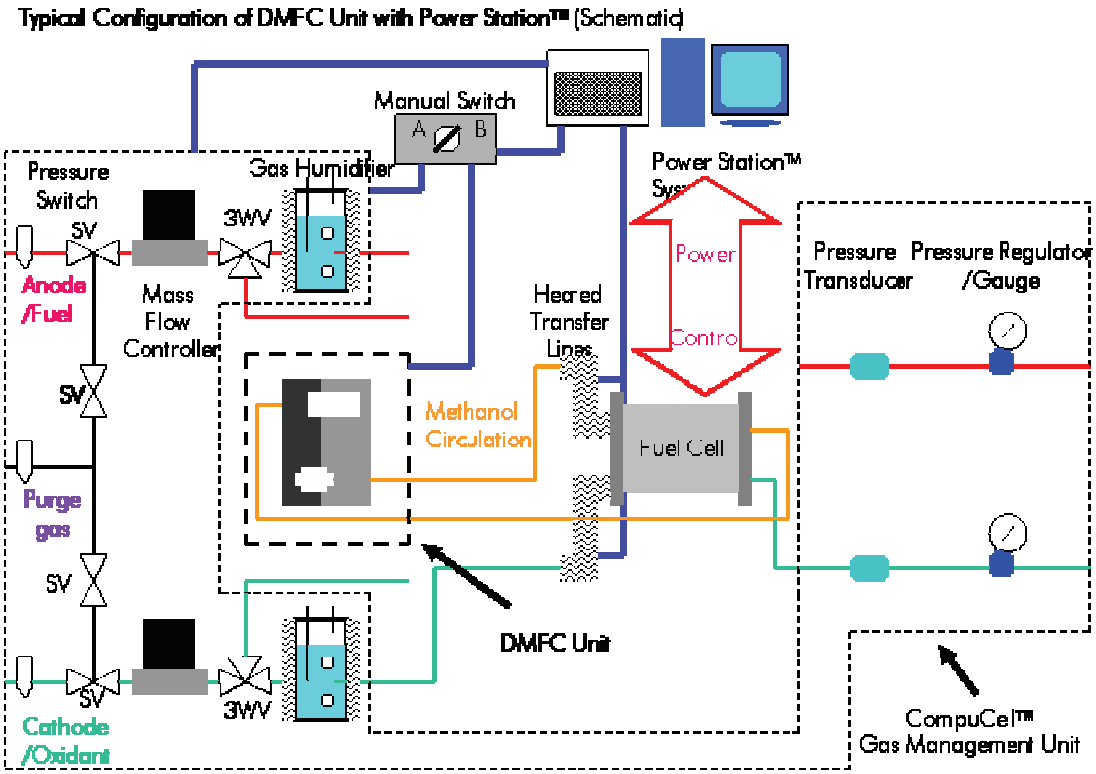
ElectroChem's Direct Methanol Unit provides a controlled source of high purity methanol or methanol/water solution for testing of methanol powered fuel cells.

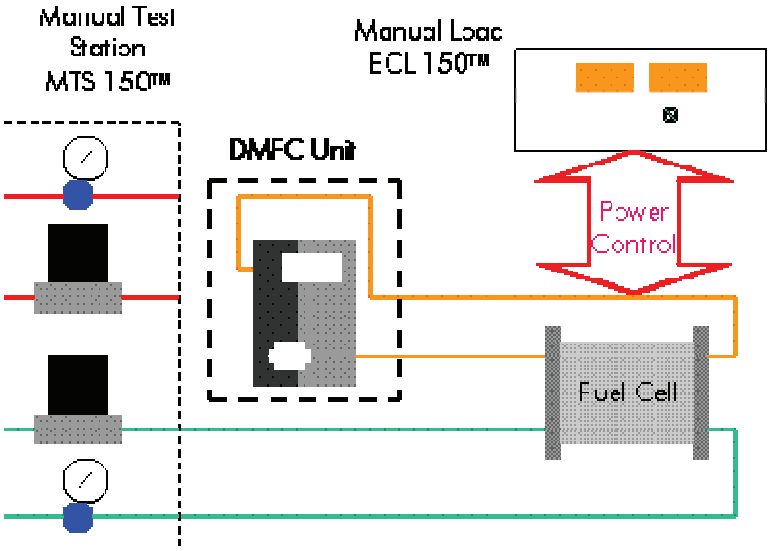
- Safe Operation with any methanol concentration.
- Operating pressure up to 20 psig.
- Temperature controlled methanol supply.
- Digital readout and setting of temperature
- Digital readout of flow rate
- Storage capacity 1 liter.
- All Stainless Steel Internal Plumbing
- Sight glass on reservoir
- Compatible with PowerStation; change between methanol and hydrogen with the flip of a scwicht

## Automatic or Manual Flow Control

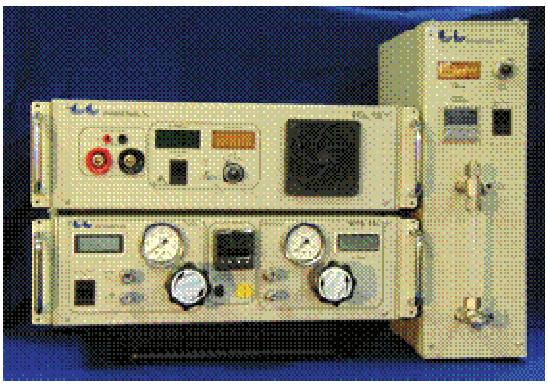
*Automatic* - flow rates under control of Power Station™
Compatible with Heated Gas Transfer Lines to maintain fluid temperature control
*Manual* - 10 Turn Potentiometer Flow Control






**Typical Configuration of DMFC Unit with Manual Test Station and Manual Load**



| Specifications: | |
|---|---|
| Pressure | Maximum Bottle Pressure 20 psig (2,3 Bar)<br>(Pressure relief valve set at 20 psig for safety.) |
| Fluid Capacity | 1 liter bottle |
| Pump Characteristics | Flow Rate 0,017 ml.rev. 68 ml/min max flow rate.<br>Max. differential pressure 20 psi. |
| Digital Fluid Flow Display | 4 digit display, minimum resolution 0,01 ml/min |
| Fluid Connections | 1/4" Swagelok™ Tubing Connectors<br>Front Panel<br>Output Methanol Reactant (1)<br>Return of Reactant to Bottle (1)<br>Ports for Refill of Bottle (1)<br>Ports for Drain of Bottle (1) |
| Temperature Controller | Front Panel Readout and Control<br>(Bottle temperature is not controlled by Power Station™) |
| Physical Characteristics | 5" W x 18" H x 12" D<br>(44 cm x 31 cm x 47 cm)<br>20 lbs. (9 kg) |
| Electrical Requirements | 110 VAC 4A or 220 VAC 2A |