



## eCUBE Recirculator Package

Okay, you understand the advantages of an ammonia recirculation system but proportional flow control is complex and you're not sure how effective the change will be without a full refrigeration control system. If your current budget constraints won't allow the purchase of a full control system, you might want to consider using a localized controller for that new recirculator. The field-wiring costs associated with localized controllers are minimal. If you select the right unit, it can even be integrated into a full control system at a later date.

Several methods and theories exist about the proper way to regulate flow in a recirculated system. Who has the right answer? What if a local controller was available that was capable of supporting all methods through configuration and / or add-on sensors? Our eCUBE Recirculator Package is the solution you're looking for. The unit provides:

- ★ An inexpensive reliable solution...
- ★ A comprehensive local user-interface...
- ★ Local set-point modifications...
- ★ Standalone complete recirculator control...
- ★ Support for flow switch, pump current, or pressure transducer flow regulation...
- ★ Full support of standby pump configurations...
- ★ Proportional VFD or standard ON /OFF pump control...
- ★ Local alarm notifications...
- ★ Full interface capabilities to communicate with a central system...
- ★ Remote master / slave recirculator control from a central control system...
- ★ Capability to detect a central control system failure and temporarily retake control of the local recirculator and associated pumps...

<i>RECIRCULATOR RV-1</i>		
<i>VESSEL Fill</i>		<i>40%</i>
<i>VESSEL Pressure</i>		<i>50.8 Psig</i>
<i>SETPOINT</i>		<i>52.0</i>
<i>PUMP Mode</i>	<i>MAIN</i>	<i>40Hz</i>
<i>PUMP Flow</i>		<i>OK</i>

### Package Features

**NEMA 4X Case**

- Indoor Use Only

**User Interface**

- 128x64 Pixel Backlit LCD
- 18 Membrane Keys

**Program Language Support**

- Std C; Assembler

**Communication Ports**

- Standard RS232 9-Pin
- RS485 Network (128K Baud)

**Input / Output Signal Support**

- Signal Conditioning Board (All STD Digital I/O Levels)
- 10 Digital Inputs
- 3 Hi-Speed Inputs (14 kHz sink)
- 3 Form C Relay Outputs
- 2 Form A Relay Outputs
- 2 Digital Outputs
- 4 Analog Input Points
- 4 Analog Output Points

**CPU / Memory**

- Atmel ATMEGA128 CPU
- 128k Memory (10K OS)

**Package Support**

- Standby Pump Support
- Current or Pressure Regulation
- Stand-alone Operation Mode
- Server Controlled Mode
- Signal Server Slave Mode

