



The Four Stream Horizontal Ethanol Blender is an intelligent Blend Controller which makes use of the latest advancements in microprocessor technology to bring unparalleled accuracy to blending applications.

It can be configured from 2 to 4 streams depending on the application.

## Four Stream Horizontal Ethanol Blender

The Horizontal Ethanol Blender utilizes 4 product streams, the monitored stream is referred to as the Wild Stream, and the controlled stream is referred to as the Blend Stream. The Micro-Blend controller monitors the Wild Stream and controls the Blend Stream to the programmed blend ratio. The Blender is designed to be cost effective and simple to operate, yet provide control accuracy previously only found in expensive and complicated systems.

### Features

- Blend Stream product factored pulse output
- Wild Stream and Blend Stream product totals
- User-definable alarm conditions
- Smith (Type I), Brooks (Type II) and Modbus (Type IV) Protocol
- Infrared Hand-Held Controller
- EIA 485 (2-wire) communications at 1200/2400/9600/19,2000 baud
- Backlit LCD (Liquid Crystal Display) with 2 lines by 14 characters
- Internal watchdog low power protection
- 4 levels of password security (8 users definable)
- Built-in proving preset

### Applications

- Oxygenate Blending
- Analytical Blending
- 13 GPM - 130 GPM

**Electrical Inputs**

- AC Instrument Power: 120/240 VAC +/- 15%, 48 to 63Hz., 1.0A maximum or 240 VAC +/- 15%, 48 to 63 Hz
- Current Consumption: <50 mA. @120 VAC/<25 mA @ 240 VAC
- AC circuitry is fuse protected (Does not include inputs or outputs)
- Surge current 10A maximum for less than 0.1 seconds
- One (1) Optically isolated, AC solid state triac input (permissive input)
- Load voltage range: 90 to 280 VAC , 48 to 63 Hz.
- Steady state load current range: 0.05A (rms) minimum to 5A (rms) maximum into an inductive load
- Leakage Current @ Maximum Current rating: 100 microamps maximum @ 240 VAC
- Duty Cycle: 40/60 to 60/40 (on/off)

**Pulse Input**

(Pulses per Gallon / Liter / etc.)

- Type: DC  
Maximum Pulse Rate: 5 KHz
- Minimum 10 pulses per unit

**Electrical Outputs**

- Three (3) Optically isolated, AC solid state triac outputs (2 used for digital valve control - 1 for alarm output)
- Load voltage range: 90 to 280 VAC , 48 to 63 Hz.
- Steady state load current range: 0.05A (rms) minimum to 5A (rms) maximum into an inductive load
- Leakage Current @ Maximum Current rating: 100 microamps maximum @ 240 VAC
- Duty Cycle: 40/60 to 60/40 (on/off)

**Pulse Output**

- Open Collector Transistor
- 1, 1/10th, 1/100th, 1/1000th unit volume, or unfactored pulse output available

**Display**

- Module Format: 2 Line by 14 position display
- Type: Liquid Crystal Display Backlit
- Character Format: 5 by 7 dot matrix type

**Environmental**

- Ambient Operating Range: -40°F to 150°F (Display may appear slow at temperatures below 0°F)
- Humidity: 5 to 95% without condensation

**Communications**

- General Configuration: Multidrop Network. 32 Micro-Blend™ Systems may be connected to the same host
- Data Rates: 1200/2400/9600/19,200 Baud rate supported
- Data Format: 8 data bits/No parity/1 stop bit
- Type: Interfaceable with EIA-485 (2-wire) data communication standard

