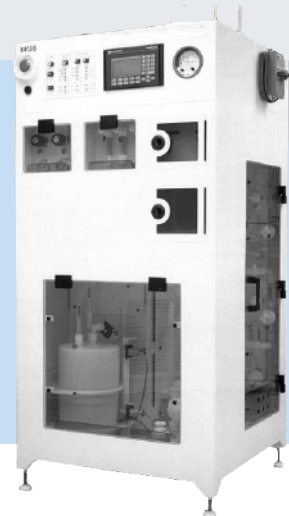


MegaBlend™ 1100PV

Precision Blending and Distribution System

- » Space-efficient design
- » Blend and distribution circuit
- » Stabilized filtration of the day tank
- » Blend accuracy of $\pm 0.5\%$
- » Simple modification of blend recipes
- » Dual pressure vessels with auto-changeover for enhanced filtration performance
- » SEMI S2-93 reviewed



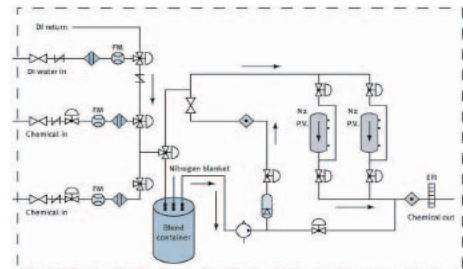
System Features

The MegaBlend 1100PV blends/dilutes chemicals that are fed from a remote bulk chemical distribution unit. Precision flowmeters blend up to three chemicals or two chemicals with DI water to a volumetric accuracy of $\pm 0.5\%$, relative to the incoming chemistry. The blended chemical is transferred to the day tank and one of the two pressure vessels on demand. The blended chemical in the "on-line" pressure vessel is then available to dispense to the use point through an output filter. With comprehensive PLC control and user-friendly graphical operator interface, blend recipes can be easily modified.

- Excess flow indication and shutdown
- Photoelectric leak detection and alarm
- Manual DI/N₂ pump and filter purging
- Recirculating DI spray guns
- Blend tank sample port
- Cabinet door interlocks
- Encapsulated or cartridge dispense filter
- Cartridge filter (10")
- Fed from pressurized input

Options

- Aspirated drain
- Conductivity module
- FRPP cabinet (S2-93 and FM4910 reviewed)
- CE Mark 220 V, 50Hz
- Redundant pump



Reliability

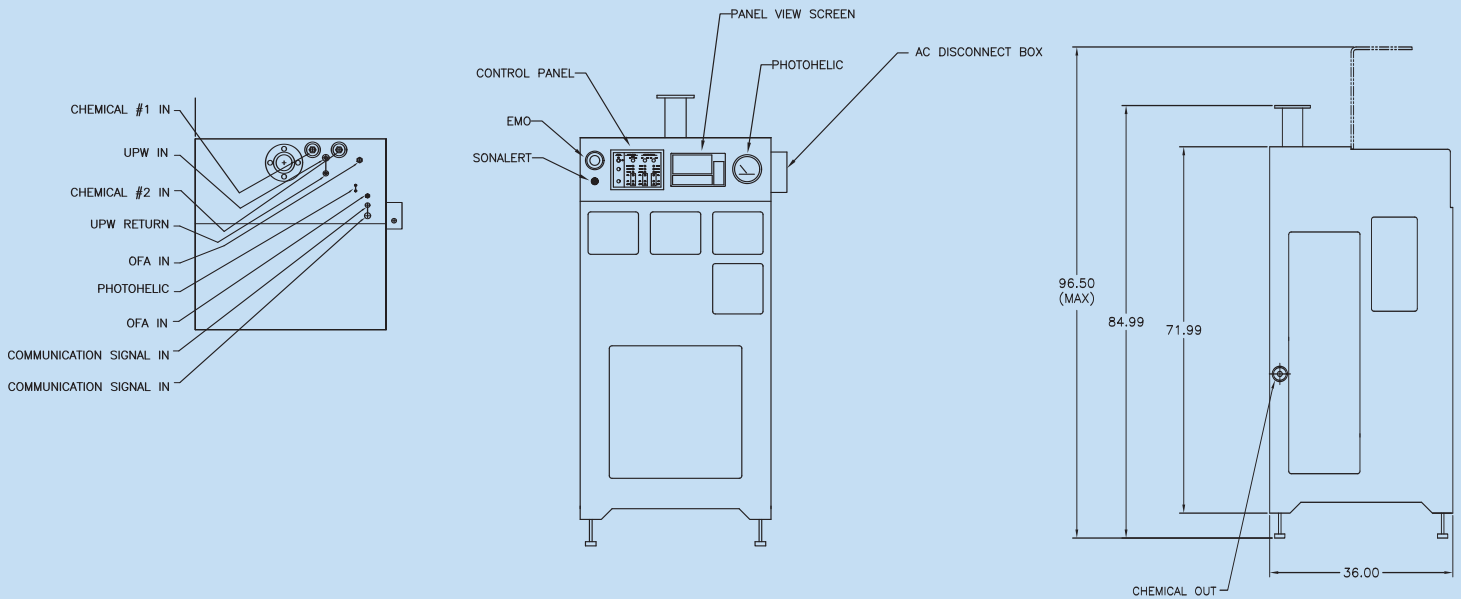
- > 4,000 hrs MTBF
- > 2,500 hrs MTBA
- < 2 hrs MTTR
- > 99.5% availability

Performance

- Flow rate: 2.5 GPM @ 25 psi
(DI water @ Exit of CDU outlet)
- Accurate/repeatable blend: $\pm 0.5\%$ relative

Utilities for testing

- DI water (18 meg ohm)
- Semiconductor grade nitrogen (99.999%)
- Clean dry air



Controls

- Allen-Bradley SLC 500 series PLC
- Allen-Bradley Panelview 550 GUI
 - System P&ID/status
 - Alarm and warning screens
 - Distribution valve box status
 - Pump and filter runtime screens
 - Password protected blend and flush recipe modification screens
 - Password protected calibration screens
 - Password protected maintenance screens
 - Manual activation of valves/pumps from maintenance screens
- Connectivity to system PLCs & MegaView™ Supervisory via DH+ network
- Local and remote EMO capability
- Communication with PC via PLC network

Components

- Teflon pump with pulsation dampening
- Non-intrusive level sensor
- Precision flowmeters
- Photoelectric leak detectors

Model	1100PV
Application	Acid, bases, oxidizers
Make-up rate	0.5 GPM
# of chemicals	Three or two plus DI
Flowpath	3/4"
Pressure vessel size	2.5 Gallon
Repeatability	±0.5% Volumetric accuracy
Materials -Flowpath	PFA Teflon™ tubing
Cabinet Materials	Polypropylene
Safety	S2-93 Reviewed
Footprint	42" x 36" x 94"

Facility requirements	1100PV	Connection Type
DI water	5 GPM @ 25 psi	1/2" Teflon™ Flaretek
N ₂	2 SCFM, 90 psi	1/2" SS Swagelok
CDA	10 SCFM, 80 psi	3/8" SS Swagelok
Exhaust	130 SCFM, 2" H ₂ O	3" Pipe flange
Process drain	30 psi, 5 GPM	1" FNPT polypro
Power	120 VAC, 15 AMP service	3/4" Conduit
Cabinet drain	Gravity	3/4" FNPT polypro



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