

TruViu™ PLSS – Preliminary

TruViu™ PLSS has been specially designed for single-use pilot and small scale production bioprocess applications (< 2000L). The system consists of an I/O tower, a transmitter tower and a pump tower, with an optional TruFlow™ gas manifold. TruViu™ PLSS interfaces easily with the TruLogic™ Controller to deliver optimal performance when using the TruBio™ OS software. TruViu™ PLSS is designed to be flexible and modular with plug-and-play configuration, in order to maximize ease-of-use, simplify installation, and provide scheduled maintenance.



Features

- Powered by the DeltaV™ enabled TruLogic™ controller and TruBio™ OS
- Modular and flexible
- Plug and play configuration
- Includes auxiliary control loops for easy control solutions
- Includes the components required to control a typical pilot or small scale production unit

Dimensions

I/O Tower	30"(H) x 24"(W) x 9"(D)
T/T Tower	24"(H) x 24"(W) x 9"(D)
Pump Tower	24"(H) x 16"(W) x 9"(D)
HMI Station	19" screen: 23.1"(H) x 24.6"(W) x 15.72"(D)

Specifications

Rating	NEMA 12 NEMA 4X (2008 release – integrated cooler)
Operating Temperature	0 – 40°C (32–113°F)
Storage Temperature	-25 –70°C (-15 –158°F)
Relative Humidity	5– 95% (non-condensing)
Certification	Designed for CE, EN-61010, and UL-508 compliance

I/O Tower Components

Agitation	External Variable Speed Drive
Temperature	Heater/Cold Finger/RTD Control
Foam/Pressure	Discrete/Analog Input
Pumps	Up to Six (6) Variable Speed Peristaltic
Gas Control	Up to Six (6) Analog Mass Flow Controllers
Scales/Balances	Analog output or TruConnect™ serial
Auxiliary	Two (2) auxiliary control loops Six (6) auxiliary 4-20 mA inputs

T/T Tower Components

pH	HART enabled pH Transmitter (optional redundancy)
Dissolved Oxygen	HART enabled DO Transmitter (optional redundancy)
CO ₂	4-20 mA enabled Transmitter (optional)
Temperature	644H High Precision Temperature Transmitter (optional redundancy)

Pump Tower Components

Pumps	Up to four (4) Variable Speed Peristaltic Watson Marlow 313 series or 520 series
Standalone Pumps	Watson Marlow 320 series Watson Marlow 520 series Watson Marlow 620 series Watson Marlow 720 series



HMI Station Components

Monitor/Computer	17" color touch screen industrial PC
Certification	NEMA 12 NEMA 4X (optional)
Flat Panel Display	1280 x 1024, 24-bit color, 200 nits
Keyboard	standard US, 5 million keystrokes
Trackball	Serial or PS/2, > 1 million revolutions

Minimum Licensing Requirements (Modbus)

DeltaV™ Pro Plus	25 DST
DeltaV™ AO	25 DST
DeltaV™ Serial License	1 port