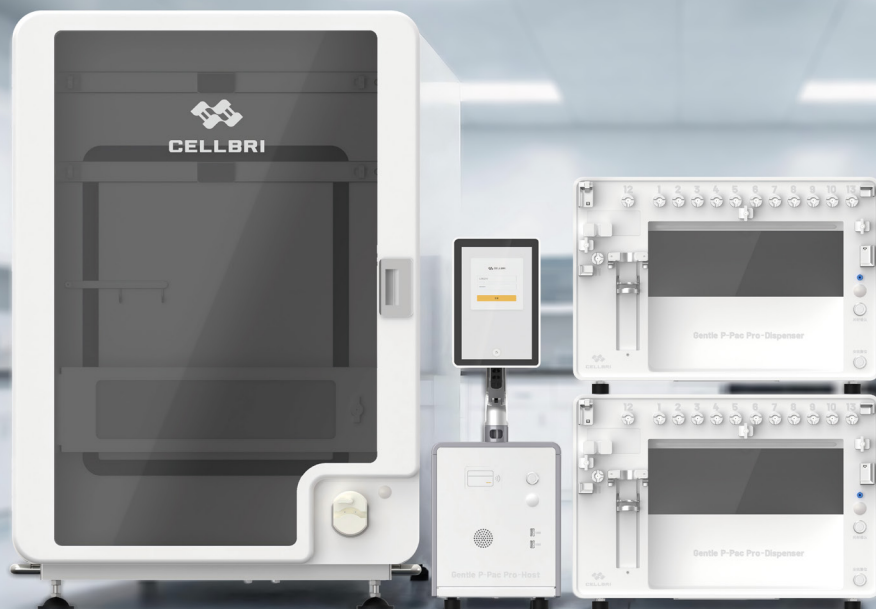




Your Cell Therapy.
Automated Your Way.

Gentle P-Pac ProTM

High-precision Automated Fill & Finish Workstation

Unlock modular, GMP-ready cell processing that includes the Gentle Flex series coupled with the Gentle P-Pac Pro - a high-throughput, automated, fill and finish platform for viral and cell processing.

Whether you're running small-batch autologous or large-scale allogeneic workflows, our open automation approach gives you the flexibility to define and adapt your protocols, without compromising on consistency, traceability, or throughput.

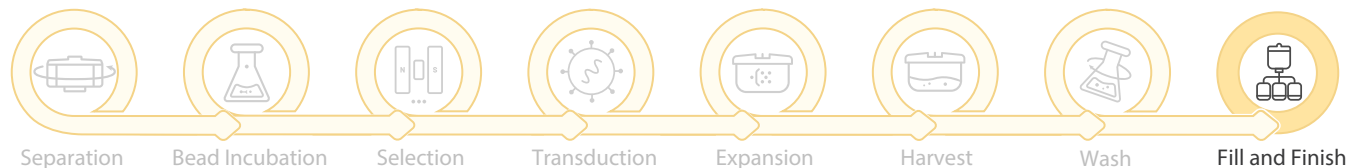
System Overview

Gentle P-Pac Pro is a high-precision, fully enclosed automated fill and finish workstation engineered for large-scale cell and viral product manufacturing. Built on CellBri's advanced automation platform, the Gentle P-Pac Pro supports GMP-compliant, closed-system fill and finish of advanced medicinal therapeutic products — including genetically modified cell therapies and virus-based vectors, while maintaining product integrity through precision dispensing control, integrated temperature regulation, and real-time process monitoring.

- **Scalable Throughput:** Supports fill volumes from 0.15 to 10 L with modular dispensing configurations capable of processing thousands of fill bags per batch
- **High-Precision Dispensing:** Precision control delivers volumetric accuracy of <10%, ensuring reproducible, reliable results across a range of vial and bag fill volumes
- **Uniform Cell Distribution:** Achieves fill density <10% CV, maintaining consistent dosage accuracy across T Cells and MSCs
- **Temperature-Controlled Throughput:** Integrated 2–8 °C temperature control with real-time monitoring preserves cell viability during the fill and finish process, with post-processing viability loss < 5%
- **Fully Enclosed Architecture:** Bag-to-bag closed-system design eliminates open handling and removes the dependency on traditional Grade A/B cleanroom environments, with 21 CFR Part 11 compliance enabling use in Grade C environments
- **Automated Traceability:** Unit-specific identification codes and protocol-driven operation support full batch traceability and reduce operator variability across multi-bag workflows

Where it Fits in Your Workflow

Engineered as part of CellBri's configurable modular automation suite, the Gentle P-Pac Pro integrates with other unit operations to build out the entire workflow from isolation through final formulation and fill / finish.



Features + Functional Coverage

Technical Specifications

Product Specifications

Mixing Module	Host Module	Dispensing Module
765W × 715D × 1125H mm ³ (30.12L × 28.15W × 44.29H in)	250W × 717D × 718H mm ³ (9.84L × 28.27W × 28.31H in)	580W × 327D × 410H mm ³ (22.83L × 12.87W × 16.14H in)
165kg (363.8 lb)	14.5kg (32.0 lb)	35.5kg (78.3 lb)

Example Configuration: 1 × Host Module + 1 × Mixing Module + 12 × Dispensing Modules. When the dispensing modules are stacked in three tiers, the overall system footprint is approximately 3600 × 717 × 1200 mm (141.73L × 28.23W × 47.24H in).

Power Supply

Power Supply	100–240 VAC, 50/60 Hz
Max Power Consumption	300 W
UBS	2.0 × 2
Ethernet Port	100Mbit/s

Functional Parameters Chart

Filling Density Uniformity

Cell Type	Density CV
T cells	< 5%
MSC	< 10%

Filling Accuracy

Fill Volume Range (mL)	Accuracy
2–5 mL	±0.2 mL
5–25 mL	±0.5 mL
25–150 mL	2%

Mixing Volume

Bag Capacity	Maximum Working Volume
20 L	10 L
10 L	6 L
5 L	3 L
3 L	1.8 L

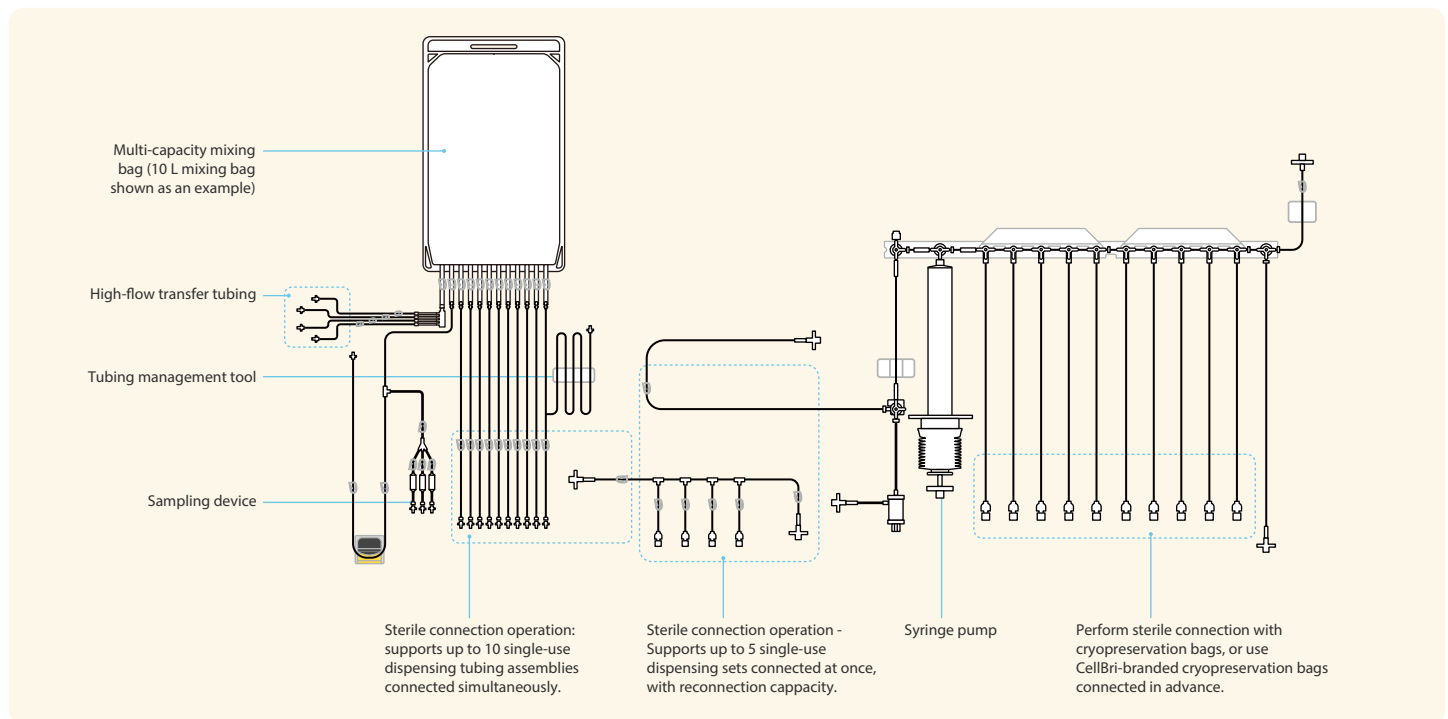
Temperature Control Range: 2–8 °C

Filling Speed: Approximately 100 bags/hr (10 mL fills, single dispensing module)

Control & Monitoring

Category	Specification
Mixing Technology	Soft squeezing with adaptive compression based on residual volume
Dispensing Precision	Intelligent speed adjustment, high-precision flow sensors
Post-Thaw Performance	High viability and density consistency after cryopreservation
Packaging Format	Customizable volume and quantity
User Interface	10.1-inch Touch screen: Intuitive, icon-based navigation
Linux Software	Customizable Parameters, Workflow automation, real time monitoring and data logging
Sensors	Liquid Sensor x 5, Temperature Sensor x 1, Pressure Sensors x 2

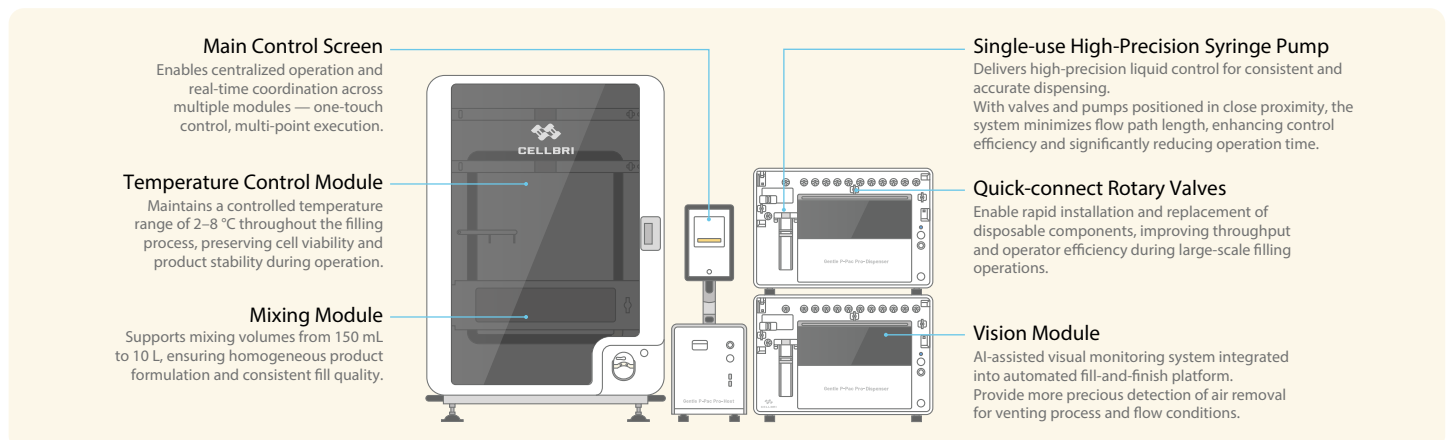
Single-Use Consumables Configuration

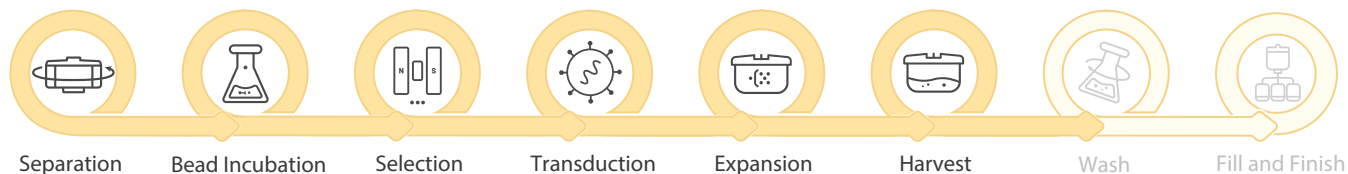


Why Choose Gentle P-Pac Pro?

- ✓ **End-to-End Traceability** — Unit-specific identification codes track each filled bag throughout the entire process, supporting full batch traceability across multi-bag workflows
- ✓ **Automated Efficiency** — Protocol-driven automation continuously optimizes operator efficiency and process productivity, reducing manual handling and associated labor costs
- ✓ **Consistent Uniformity** — Closed-system, automated fill and finish delivers product uniformity within 5%, ensuring stable and reproducible results across every batch
- ✓ **Contamination Risk Mitigation** — Fully enclosed, single-use architecture minimizes contamination risk and removes dependency on traditional Grade A/B cleanroom environments

System Architecture Overview





Gentle Flex & Gentle Flex Pro



Automated, closed platforms for a wide range of critical cell processing operations.

Gentle n-MagS



Nano-magnetic bead sorting for CD3+ and other target populations.

Gentle EXP



A fully enclosed, rocking bioreactor optimized for efficient, scalable expansion.

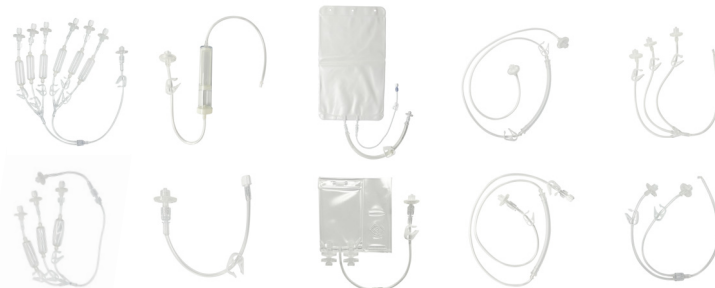
Ensure sterility, compatibility, and traceability with CellBri's tools and single-use consumables.

Small Tools



CB Leakguard: Portable leak testing unit.
CB Transfer: Automated liquid transfer unit.

Consumables



Available with a modular suite of consumables, including 500 mL, 3 L, and 5 L mixing bags, with tubing sets supporting up to 250 mL fills per bag. All kits are sterile, single-use, and engineered for closed-system use.

- Single-Use Dispensing Consumables kit
- Disposable Sterile Samplers
- Tubing & Connectors
- Cell Bags for Expansion
- Combo Kits for Blood Filtration and Formulation Sampling

CellBri partners with you to deliver comprehensive solutions that support your entire workflow.