



# WHEATON<sup>®</sup> Peristaltic Pumps

Advancing the Science of Liquid Handling



# WHEATON®

## Peristaltic Pumps

### Advancing the Science of Liquid Handling

- Highly intuitive Icon Driven User Interface enables fast, easy setup and operation
- Trouble-Free Calibration protocol requires minimal user inputs
- Ultra High Precision Stepper Motor ensures accurate dispense volumes required for multi-well plates and microcentrifuge tubes
- Compact Design with large 5" LCD backlit display
- Programming and help screens provided in six languages to enable User-Friendly Operation in international laboratories
- Engineered to comply with Industry Standards including UL, CSA, CE, WEEE and RoHs Compliant

The WHEATON OmniSpense® ELITE and UniSpense® PRO are intelligent peristaltic pumps for all of your dispensing needs. Whether you are making sterile liquid transfers to and from containers or filling vials or titer plates, these pumps will simplify and accelerate your laboratory throughput.

The systems are operated via a large 5" backlit liquid crystal display and chemical resistant keypad. Options are displayed as large icons for quick operation and easy recognition in national and international markets. The pumps also feature a small footprint and an angled polarized display perfect for use under a fume hood or biological safety cabinet.

Calibration of the units is simplified to a single intuitive calibration screen that walks the user through the process stepwise. This eliminates scrolling through menus and complicated instruction manuals.

The OmniSpense ELITE and UniSpense PRO can be specifically outfitted and programmed for your process. These programs can be saved and recalled at a later time for a quick application turnaround. Both pumps support tubing with different specifications and the OmniSpense ELITE can use stacked pump heads or microcassette heads for multiple small volume dosing.

The UniSpense PRO is a dual-speed, dedicated dispensing pump designed to accommodate single or multiple filling applications. The OmniSpense ELITE is a variable speed dispensing pump with a built-in FLOW mode. The FLOW mode allows for real time tracking of a single liquid transfer. The pump can be paused and restarted for more involved processes.

The OmniSpense ELITE and UniSpense PRO help menus are English, Chinese, French, Japanese, Korean, and Spanish language enabled. These menus ensure that the Icon Driven display is easily understood by national and international laboratories.

The OmniSpense ELITE and UniSpense PRO are ideal for any laboratory or clinical setting where accurate and precise liquid dispensing is important.

Model Pump	VAC	Hz	WATTS	Operating Speed (RPM)	Tubing Sizes Available (mm ID)	Dispense Ranges for Tubing	Flow Rate Ranges for Tubing	Accuracy Midrange	Delay Time / Sec	Weight	Dim. with Pumphead (H x W x D)	Optional Pump Head Support
						mL	mL / min					
OmniSpense® ELITE	100-240	50/60	37	0.5-400	2	.01-9999.99	20.4 - 174mL / min	As High as ± 1%	0.5-60 Automatic Mode	11.8 / 5.4 lbs / kg	7 x 8.75 x 13 17.3 x 22.3 x 33.0cm	<ul style="list-style-type: none"> <li>• Stack up to 2 Pump Heads</li> <li>• Stacking Pump Head for 2.3mm Wall Tubing</li> <li>• Pump Head for 1.6mm Wall Tubing</li> <li>• Stacking Pump Head for 1.6mm Wall Tubing</li> <li>• 5-Channel Pump Head for Small-Bore Tubing</li> </ul>
					3	.01-9999.99	40.2 - 354mL / min					
					6	.01-9999.99	131 - 1176mL / min					
					8	.01-9999.99	200 - 1746mL / min					
UniSpense® PRO	100-240	50/60	37	75 & 150	2	.01-9999.99	30 & 60mL / min	As High as ± 1%	0.5-60 Automatic Mode	11.8 / 5.4 lbs / kg	7 x 8.75 x 13 17.3 x 22.3 x 33.0cm	<ul style="list-style-type: none"> <li>• Pump Head for 1.6mm Wall Tubing</li> <li>• Pump Head for 2.3mm Wall Tubing</li> </ul>
					3	.01-9999.99	60 & 120mL / min					
					6	.01-9999.99	270 & 540mL / min					
					8	.01-9999.99	540 & 1080mL / min					

# Peristaltic Pumps

## Key Features

### Advanced Control Features

- Icon Driven User Interface allows for easy setup and operation
- Large Backlit LCD Display is easy to view from a distance or an angle
- Durable Front Overlay is resistant to chemicals and wear
- Polarized and Angled Screen allows for glare free viewing
- “Trouble-Free” Calibration Screen allows for accurate and quick calibration
- Ultra High Precision Stepper Motor ensures repeatability and accuracy

### User-Friendly Design Features

- Low Profile Design reduces space required on the bench or in a hood
- Pump Settings can be saved and recalled saving time in multi-use settings. Nine quick retrieval setups are available
- Compliance to Industry Standards: UL / CSA / CE / RoHS / WEEE
- Multi-Language Help Screens: English, Chinese, French, Japanese, Korean, and Spanish

### OmniSpense® ELITE Additional Features

- Multiple Stacking Pump Heads allows for higher volumes and multiple fill applications with one pump
- Microcassette Head is ideal for precision micro-dispensing of liquids in well plates, microtubes or microcentrifuge tubes
- Works with 1, 2, 3, 6 and 8mm tubing
- Pump allows for Different Ramping Profiles to avoid splashing or foaming
- Accommodates a variety of Dispensing and Process Applications

#### Home Screen

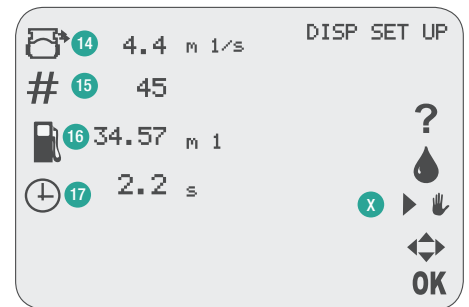
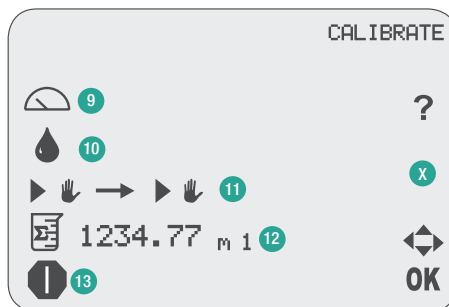
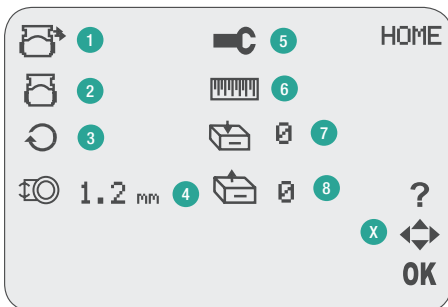
- 1 Mode
- 2 Pump Head Type
- 3 Direction
- 4 Tubing Diameter
- 5 Setup
- 6 Calibration
- 7 Save Settings
- 8 Recall Settings

#### Calibration Screen

- 9 Pump Speed Adjustment
- 10 Prime
- 11 Start & Stop of Calibration
- 12 Calibration Volume
- 13 Pump Movement Indicator

#### Dispensing Screen

- 14 Flow Rate
  - 15 Dispenses Per Batch
  - 16 Volume Per Dispense
  - 17 Time Between Dispenses
- X Right Screen - Active Keys



# Peristaltic Pumps

## Accessories

### Hose Barb / Luer Adapter

- The luer adapter allows connection to equipment and components with a female luer connector.



### Footswitch

- Utilize the convenience of a hands-free pump by installing the optional footswitch.



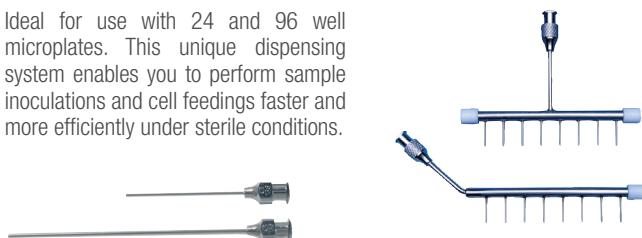
### Polypropylene Nozzle & Glass Sinker

- The nozzle connects to the pump tubing for dispensing of liquids.
- The glass sinker is used to secure tubing when drawing from a container.



### Microtest Manifolds & Dispensing Cannulas

- Ideal for use with 24 and 96 well microplates. This unique dispensing system enables you to perform sample inoculations and cell feedings faster and more efficiently under sterile conditions.



### Tubing Support Stand

- Optional tubing support stand conveniently holds the tubing in place for filling operations.



### Silicone Tubing

- Assembly consists of 1.5m (5-foot) section of silicone tubing with a wall thickness of 2.3mm, a borosilicate glass sinker, and a polypropylene delivery nozzle. Bulk tubing also available.



Cat. No	Description	Qty/Case
<b>Tubing Accessories</b>		
02911619	Hose Barb/Luer Adapter (fits 2 and 3mm)	1
02-928-100	Footswitch	1
02-913-314	2 and 3mm Polypropylene Nozzle	6
02-913-315	6mm Polypropylene Nozzle	6
02-913-316	8mm Polypropylene Nozzle	6
22312144	Small Glass Sinker (fits 2 and 3mm ID tubing)	6
02928102	Large Glass Sinker (fits 6 and 8mm ID tubing)	6

<b>Tubing Support Stand</b>		
13-683-4	Tubing Support Stand	1

<b>Silicone Tubing Assembly, 2.3 mm wall thickness</b>		
22-246-640	2mm ID, 5 ft Section (1.5m)	1
13-683-8	3mm ID, 5 ft Section (1.5m)	1
13-683-9	6mm ID, 5 ft Section (1.5m)	1
13-683-10	8mm ID, 5 ft Section (1.5m)	1

<b>Silicone Tubing, 2.3mm wall thickness</b>		
02928101	2mm ID, 25 ft Section (7.62m)	1
03-410-8D	3mm ID, 25 ft Section (7.62m)	1
03-410-8E	6mm ID, 25 ft Section (7.62m)	1
02-913-310	8mm ID, 25 ft Section (7.62m)	1

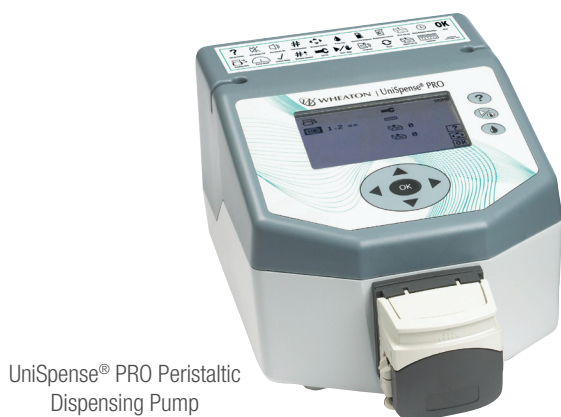
<b>Microtest Manifolds</b>		
13-708-1	4 Position, Straight, 24 Well	1
13-708-2	8 Position, Straight, 96 Well	1
02-912-801	4 Position, Angular, 24 Well	1
13-708-4	8 Position, Angular, 96 Well	1
02-912-802	12 Position, Straight, 96 Well	1
02-912-803	12 Position, Angular, 96 Well	1

<b>Dispensing Cannulas w/Luer Lock</b>		
1370813	18 Gauge x 2 in	1
13-708-14	14 Gauge x 4 in	1

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## Peristaltic Pumps

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Functionality	UniSpense® PRO	OmniSpense® ELITE
Modes	Dispense Mode	Dispense Mode and Flow Mode
Motor	Dual Speed 75 and 150 RPM	Variable Speed 0.5 to 400 RPM
Direction	Unidirectional; Clockwise	Bidirectional; Clockwise and Counterclockwise
Ramp	Not Offered	User Ramp Control for Dispense and Flow Modes – 5 Profiles
Drawback	Not Offered	For Filling into a Closed Container
Pump Heads	Single	Single, Dual, Microcassette

### Suggested Applications

#### Research, Development, and Quality Control

Transfer and distribution of fluids into smaller containers, serial dilutions, sample preparation, and media dispensing.

#### Pharmaceutical and Biotechnology

Dispensing microbiological media, pill coating, dilutions, transferring live cells, additions and harvests to and from bioreactors, packaging and filling.

#### Food and Beverage

Common uses include dispensing flavorings, colorings, vitamins, and other additives in processing applications, and simple dispensing of end products on production lines or into shelf packages.

#### Waste Water and Sample Collection

Industrial and QC applications, environmental compliance hazardous/toxic materials evaluation and site sampling for liquids, sludge, earth/soil, water, etc. Ideal for sampling from barrels and drums.

#### International

The Icon Driven display and multi-language help screen will work well in laboratories abroad.

### Catalog Product Numbers

UniSpense® PRO - 13-687-447

OmniSpense® Elite - 13-687-446

# Peristaltic Pumps

## Pump Heads



Stacking Pump Head with Standard Pump Head



Stacking Pump Head



Microcassette Pump Head

### Optional Pump Heads

Cat. No.	Description	Qty/Case
13-687-442	Optional Stacking Pump Head for 2.3mm Wall Tubing	1
13-687-443	Optional Pump Head for 1.6mm Wall Tubing (tubing not available from WHEATON)	1
13-687-444	Optional Stacking Pump Head for 1.6mm Wall Tubing (tubing not available from WHEATON)	1
13-687-445	Optional 5-Channel Pump Head for use with Small Bore Tubing with fixed stops (tubing not available from WHEATON)	1

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