The TPS-384 offers 384 channel high performance pipetting that is ideal for low-volume multichannel microplate pipetting and for serial dilution applications. The microprocessor-controlled pipetting mechanism provides accurate and precise pipetting of microliter or sub-microliter volumes of samples into 96, 384 or 1536-well microplates. The high-speed pipetting system provides short processing times by delivering liquids through up to 384 channels simultaneously with precise volume control.
The Total Pipetting Solution (TPS) represents a new generation of affordable liquid handling systems with the versatility and reliability required for today’s demanding laboratory environment. With the innovative Externally Sealed Pipette (ESP™) tips, the TPS pipetting system surpasses its competition in terms of applications diversity and reliability. This powerful pipettor has a compact size that easily fits on laboratory benches and also can be placed in suitable laboratory hoods.

The TPS-384 uses Apricot Designs’ unique head design which employs high-precision manufacturing to produce reasonably-priced heads that are independent of the pipetting mechanism. The TPS-384 electronically loads and unloads pipetting heads in a few seconds, allowing simple and easy set-up for the task at hand. The TPS-384 will automatically index the pipetting head if necessary for accessing 1536-well plates.

**Features**

- 384 pipetting channels for fastest operations of 384 liquid addition or 384-to-384 plate replication.
- Flexible design for liquid transfers and pipetting operations for 96, 384 and 1536-well microplates and can also be used for serial dilutions by row or column.
- Uses the unique easy-change head system from Apricot Designs, allowing the user to build a diverse head library with a reasonable investment. The heads are interchangeable with other Apricot pipettors.
- Select from 12 to 15 deck positions that can be used for plates, reservoirs, or tips for optimal walkway automation.
- Automatic disposable tip loading and unloading for Apricot ESP tips. The disposable tip loading location is accessible by robotics for expanded capacity.
- Intuitive graphical user interface via serial interface control.
- Small footprint conserves bench space and fits easily into suitably-sized hoods.

**Options (continued)**

- Disposable tip heads with 8, 12, 16, 24, 96 or 384 channels for Apricot ESP tips, Apricot 550 tips, or Biomek® FX tips.
- Tip washing system with recirculating pump.
- Optional built-on ducted or recirculating hood enclosure.

**Automation**

- The open deck design makes it easy to use robotics to supply labware and disposable tips to the TPS-384. It can be integrated as part of an automation workcell by combining it with laboratory automation software and robotics.

**Options**

- Fixed tip heads with 8, 12, 16, 24, 96 and 384 channels.

**Applications**

- Serial dilution (by row or column).
- Plate replication.
- Plate reformatting.
- Reagent addition.
- Compound addition.

**Specifications**

- **Dispensing Precision**  
  <2% CV at 1 ul (96)  
  <2.8% CV at 1 ul (384)  
  < 2% CV at 5 ul (96 4-in-1)  
  +/- 1% at 1 ul (96)  
  +/- 1.25 % at 1 ul (384)
- **Dispensing Accuracy**  
  0.1 ul
- **Resolution**  
  0.1 ul
- **Pipette Volume**  
  0.5 - 125 ul  
  (1 - 500 with 4-in-1 head)
- **Dimensions** (3x3)  
  28”L x 23”W x 27”H  
  711L x 585W x 686H mm
- **(3x4)**  
  35”L x 23”W x 27”H  
  889L x 585W x 686H mm
- **(3x5)**  
  41”L x 23”W x 27”H  
  1042L x 585W x 686H mm
- **Weight**  
  Approx. 190 lbs (95 kg)
- **Power**  
  100 to 240 VAC, 50/60 HZ
- **Operating Temperature**  
  50 - 100 °F