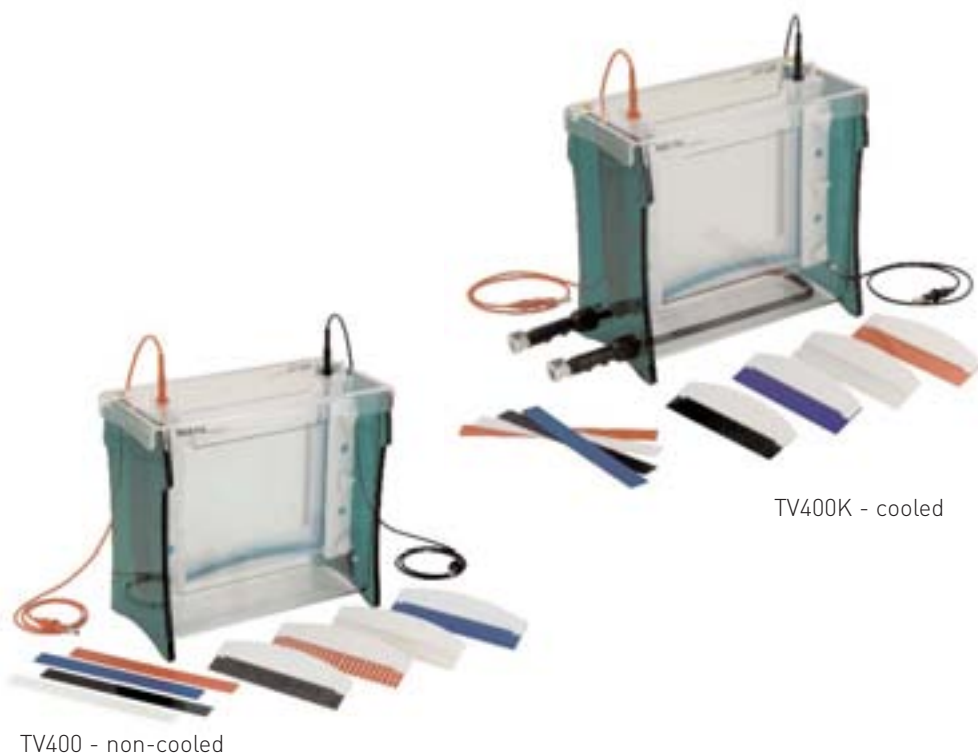


## Vertical Gel Units

### BENEFITS INCLUDE

- **Twin-plate 20.5 x 20cm maxi-gel unit** - designed specifically for higher resolution PAGE techniques requiring self-cast gels
- **Large format** - 20.5 x 20cm glass plate dimensions are ideal for running higher percentage polyacrylamide gels to resolve smaller proteins of similar MW
- **Two versions available:** -
  - Standard TV400 - non-cooled
  - Cooled TV400K - includes a cooling coil in the bottom of the gel tank
- **Enhanced cooling** - in the TV400YK - snap-lock connectors allow the cooling coil within TV400YK to be connected to the JULABO chiller unit for faster, higher voltage separations
- **Additional gel casting** - with the optional TV400-CB cam-pin casting base or TV400-MC2 and TV400-MC10 2 and 10 gel multicasters
- **Float glass plates** - 4mm thick - guarantee uniform gel thickness and even sample migration, and with ground edges to inhibit sample leakage during casting
- **Triple screws** - on each gel-clamp - act in conjunction with a counterbalanced, dovetailed silicone gasket to disperse pressure evenly along the height and breadth of the gel as the screws are tightened
- **Colour-coded combs and spacers** - available in 0.75, 1, 1.5 and 2mm thicknesses



## TV400 Standard & TV400K Cooled Twin-Plate Maxi-Gel Electrophoresis Units

The TV400 and TV400K twin-plate 20.5 x 20cm (W x H) maxi-gel units offer all the benefits of the TV100 and TV200 units, but in a much larger gel size and with increased sample throughput. A cooling coil within the TV400K gel tank allows faster separations to be performed at high voltage without compromising resolution.

### TECHNICAL SPECIFICATION

|   | TV400  | TV400K  |
|---|--|---|
| Unit Dimensions (W x D x H)                                   | 28.5 x 15 x 27.5cm   | 38 x 15 x 27.5cm  |
| Inner Tank Dimensions (W x D x H)                             | 27 x 12.5 x 25cm   | 27 x 12.5 x 25cm  |
| Plate Dimensions (W x H x T)                                  | 20.5 x 20 x 0.4cm  | 20.5 x 20 x 0.4cm   |
| Standard Spacer Dimensions (W x H x T)                        | 2 x 20 x 0.1cm   | 2 x 20 x 0.1cm  |
| Active Gel Dimensions (W x H)                                 | 16.5 x 17.5cm  | 16.5 x 17.5cm   |
| Maximum Sample Capacity                                       | 2 x 48   | 2 x 48  |
| Recommended Buffer Volume                                     | Inner Buffer Chamber 700ml<br>Gel Tank 4200ml                                    | Inner Buffer Chamber 700ml<br>Gel Tank 4200ml                             |
| Recommended Running Conditions for Denaturing/Native PAGE Gel | Voltage 175 - 225V<br>(8.75 - 11.25V/cm)<br>Current 20 - 30mA<br>Time 2.5 - 3.5h | Voltage 200 - 300V<br>(10 - 15V/cm)<br>Current 30 - 40mA<br>Time 2 - 2.5h |
| Snap-lock Connectors for Cooling Coil                         | Inner Diameter n/a<br>Outer Diameter n/a   | Inner Diameter 10mm<br>Outer Diameter 12mm                                |
| Quick-fit Tubing  | Inner Diameter n/a<br>Outer Diameter n/a   | Inner Diameter 10mm<br>Outer Diameter 12mm                                |
| Power Output Connectors (diameter)                            | Shrouded, 4mm  | Shrouded, 4mm   |
| Recommended Power Supplies                                    | Consort EV243  | Consort EV243   |



TV400YK - cooled + casting

TV400Y - non-cooled + casting

## TV400Y Standard & TV400YK Cooled Twin-Plate Maxi-Gel Electrophoresis Units

The TV400Y and TV400YK twin-plate 20.5 x 20cm (W x H) maxi-gel units offers all the benefits of the TV100 and TV200 units, but in a much larger gel size and with increased sample throughput. Both units include, as standard, a precision engineered casting base, which acts in tandem with our recently modified TV400-GRM to provide simple, leak-free casting.

### TECHNICAL SPECIFICATION

|   | TV400Y               |                                  | TV400YK              |                             |
|---|----------------------|----------------------------------|----------------------|-----------------------------|
| Unit Dimensions (W x D x H)                                   | 28.5 x 15 x 27.5cm   |                                  | 38 x 15 x 27.5cm     |                             |
| Inner Tank Dimensions (W x D x H)                             | 27 x 12.5 x 25cm     |                                  | 27 x 12.5 x 25cm     |                             |
| Plate Dimensions (W x H x T)                                  | 20.5 x 20 x 0.4cm    |                                  | 20.5 x 20 x 0.4cm    |                             |
| Standard Spacer Dimensions (W x H x T)                        | 2 x 20 x 0.1cm       |                                  | 2 x 20 x 0.1cm       |                             |
| Active Gel Dimensions (W x H)                                 | 16.5 x 17.5cm        |                                  | 16.5 x 17.5cm        |                             |
| Maximum Sample Capacity                                       | 2 x 48               |                                  | 2 x 48               |                             |
| Recommended Buffer Volume                                     | Inner Buffer Chamber | 700ml                            | Inner Buffer Chamber | 700ml                       |
|   | Gel Tank             | 4200ml                           | Gel Tank             | 4200ml                      |
| Recommended Running Conditions for Denaturing/Native PAGE Gel | Voltage              | 175 - 225V<br>(8.75 - 11.25V/cm) | Voltage              | 200 - 300V<br>(10 - 15V/cm) |
|   | Current              | 20 - 30mA                        | Current              | 30 - 40mA                   |
|   | Time                 | 2.5 - 3.5h                       | Time                 | 2 - 2.5h                    |
| Snap-lock Connectors for Cooling Coil                         | Inner Diameter       | n/a                              | Inner Diameter       | 10mm                        |
|   | Outer Diameter       | n/a                              | Outer Diameter       | 12mm                        |
| Quick-fit Tubing  | Inner Diameter       | n/a                              | Inner Diameter       | 10mm                        |
|   | Outer Diameter       | n/a                              | Outer Diameter       | 12mm                        |
| Casting Base Silicone Seal Dimensions (W x L x H)             | 1.7 x 22.5 x 0.8cm   |                                  | 1.7 x 22.5 x 0.8cm   |                             |
| Power Output Connectors (diameter)                            | Shrouded, 4mm        |                                  | Shrouded, 4mm        |                             |
| Recommended Power Supplies                                    | Consort EV243        |                                  | Consort EV243        |                             |

### BENEFITS INCLUDE

- **Twin-plate 20.5 x 20cm maxi-gel unit** - designed specifically for higher resolution PAGE techniques requiring self-cast gels
- **Large format** - 20.5 x 20cm glass plate dimensions are ideal for running higher percentage polyacrylamide gels to resolve smaller proteins of similar molecular weight
- **Casting base** - included as standard with both units
- **Two versions available:** -  
Standard TV400Y - non-cooled + casting  
Cooled TV400YK - cooled + casting
- **Glass plate stops** - within the newly modified GRM - lock the glass plates firmly into position onto soft silicone gaskets in the casting base to ensure leak-free gel-casting
- **Enhanced cooling** - in the TV400YK - snap-lock connectors allow the cooling coil within TV400YK to be connected to the JULABO chiller unit for faster, higher voltage separations
- **Additional gel casting** - with the optional TV400-MC2 and TV400-MC10 2 and 10 gel multicasters
- **Float glass plates** - 4mm thick - guarantee uniform gel thickness and even sample migration, and with ground edges to inhibit sample leakage during casting
- **Triple screws** - on each gel-clamp - act in conjunction with a counterbalanced, dovetailed silicone gasket to disperse pressure evenly along the height and breadth of the gel as the screws are tightened
- **Colour-coded combs and spacers** - available in 0.75, 1, 1.5 and 2mm thicknesses

### Complete System

Twin-plate wide format mini-gel unit with GRM and gel tank, lid, 2 x (20.5 x 20cm; W x H) plain glass plates, 4 x 1mm spacers, 2 x spacer aligners, 2 x (20.5 x 20cm) notched glass plates, 1 x dummy plate and 2 x 1mm thick 24-sample combs

Part No.



TV400

Twin-plate wide format mini-gel unit with GRM and cooled gel tank, with built-in cooling coil and quick-fit tubing, plus lid, 2 x (20.5 x 20cm; W x H) plain glass plates, 4 x 1mm spacers, 2 x spacer aligners, 2 x (20.5 x 20cm) notched glass plates, 1 x dummy plate and 2 x 1mm thick 24-sample combs,



TV400K

Twin-plate wide format mini-gel unit with GRM and gel tank, lid, 2 x (20.5 x 20cm; W x H) plain glass plates, 4 x 1mm spacers, 2 x spacer aligners 2 x (20.5 x 20cm) notched glass plates, 1 x dummy plate, 2 x 1mm thick 24-sample combs, casting base and 2 x silicone seals



TV400Y

Twin-plate wide format mini-gel unit with GRM and cooled gel tank, with built-in cooling coil and quick-fit tubing, plus lid, 2 x (20.5 x 20cm; W x H) plain glass plates, 4 x 1mm spacers, 2 x spacer aligners, 2 x (20.5 x 20cm) notched glass plates, 1 x dummy plate, 2 x 1mm thick 24-sample combs, casting base and 2 x silicone seals



TV400YK

### Replacement Parts & Accessories

|   |                |
|---|----------------|
| 1 x TV400 gel-running module  | TV400-GRM      |
| 2 x quick-fit tubes for cooling coil                                      | TCS-CC         |
| 2 x (20.5 x 20cm) plain glass plates with 0.75mm bonded spacers for TV400 | TV400-PGS0.75  |
| 2 x (20.5 x 20cm) plain glass plates with 1mm bonded spacers for TV400    | TV400-PGS1     |
| 2 x (20.5 x 20cm) plain glass plates with 1.5mm bonded spacers for TV400  | TV400-PGS1.5   |
| 2 x (20.5 x 20cm) plain glass plates with 2mm bonded spacers for TV400    | TV400-PGS2     |
| 2 x (20.5 x 20cm) plain glass plates for TV400                            | TV400-PG       |
| 2 x (20.5 x 20cm) notched glass plates for TV400                          | TV400-NG       |
| 1 x (20.5 x 20cm) dummy plate   | TV400-DP       |
| 2 x 0.75mm thick spacers for TV400  | TV400-S0.75    |
| 2 x 1mm thick spacers for TV400   | TV400-S1       |
| 2 x 1.5mm thick spacers for TV400   | TV400-S1.5     |
| 2 x 2mm thick spacers for TV400   | TV400-S2       |
| 2 x spacer aligners for TV400   | TV400-SA       |
| 1 x cam-pin casting base with 2 silicone seals                            | TV400-CB       |
| 2 x silicone seals for cam-pin casting base                               | TV400-CB-SEALS |
| 1 x caster system for 2 x (20.5 x 20cm) gradient wide format mini-gels    | TV400-MC2      |
| 1 x caster system for 10 x (20.5 x 20cm) gradient wide format mini-gels   | TV400-MC10     |
| 2 x 0.2mm thick, platinum electrode wire                                  | PT-0.2         |
| 2 x 1 metre power leads with shrouded 4mm power output connectors         | CABLE-4        |

### TV400 Combs

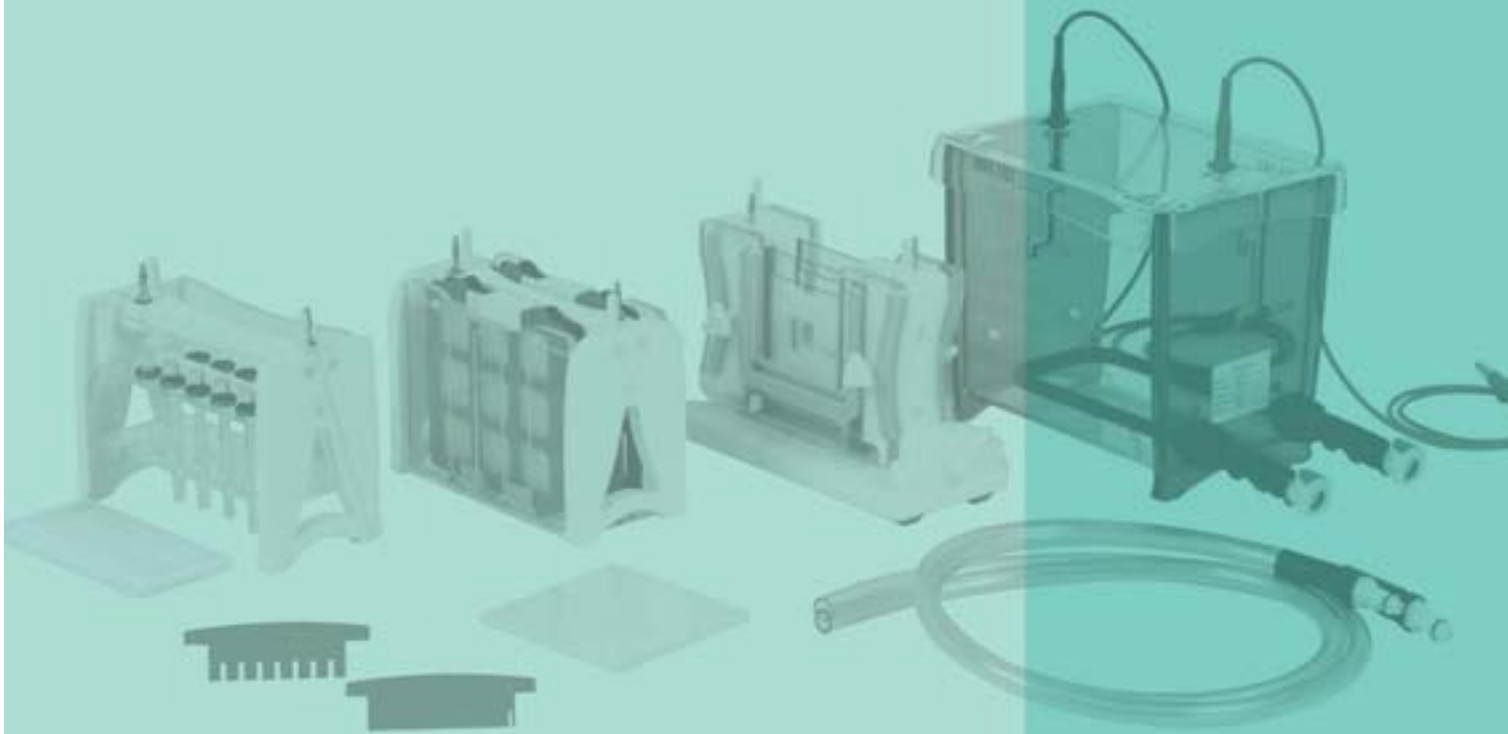
| Part No.          | Thickness (mm) | Sample Throughput | Tooth Width (mm) | Tooth Height (mm) | Max. Spacing (mm) | Sample Volume / Well (µl) |
|-------------------|----------------|-------------------|------------------|-------------------|-------------------|---------------------------|
| TV400-C0.25-24    | 0.25           | 24                | 4.75             | 5                 | 2                 | 6                         |
| *TV400-C0.25-36MC | 0.25           | 36                | 2.5              | 5                 | 2                 | 3                         |
| TV400-C0.35-24    | 0.35           | 24                | 4.75             | 5                 | 2                 | 8                         |
| *TV400-C0.35-36MC | 0.35           | 36                | 2.5              | 5                 | 2                 | 4                         |
| +TV400-C0.75-1D   | 0.75           | 1                 | 152              | 20                | n/a               | 2280                      |
| TV400-C0.75-10    | 0.75           | 10                | 11               | 20                | 5.5               | 165                       |
| *TV400-C0.75-18MC | 0.75           | 18                | 6                | 20                | 3                 | 90                        |
| TV400-C0.75-24    | 0.75           | 24                | 4.75             | 20                | 2                 | 71                        |
| *TV400-C0.75-36MC | 0.75           | 36                | 2.5              | 20                | 2                 | 37                        |
| TV400-C0.75-48    | 0.75           | 48                | 2.35             | 20                | 1                 | 35                        |
| +TV400-C1-1D      | 1              | 1                 | 152              | 20                | n/a               | 3040                      |
| TV400-C1-10       | 1              | 10                | 11               | 20                | 5.5               | 220                       |
| *TV400-C1-18MC    | 1              | 18                | 6                | 20                | 3                 | 120                       |
| TV400-C1-24       | 1              | 24                | 4.75             | 20                | 2                 | 95                        |
| *TV400-C1-36MC    | 1              | 36                | 2.5              | 20                | 2                 | 50                        |
| TV400-C1-48       | 1              | 48                | 2.35             | 20                | 1                 | 47                        |
| +TV400-C1.5-1D    | 1.5            | 1                 | 152              | 20                | n/a               | 4560                      |
| TV400-C1.5-10     | 1.5            | 10                | 11               | 20                | 5.5               | 330                       |
| *TV400-C1.5-18MC  | 1.5            | 18                | 6                | 20                | 3                 | 180                       |
| TV400-C1.5-24     | 1.5            | 24                | 4.75             | 20                | 2                 | 142                       |
| *TV400-C1.5-36MC  | 1.5            | 36                | 2.5              | 20                | 2                 | 75                        |
| TV400-C1.5-48     | 1.5            | 48                | 2.35             | 20                | 1                 | 70                        |
| +TV400-C2-1D      | 2              | 1                 | 152              | 20                | n/a               | 6080                      |
| TV400-C2-10       | 2              | 10                | 11               | 20                | 5.5               | 440                       |
| *TV400-C2-18MC    | 2              | 18                | 6                | 20                | 3                 | 240                       |
| TV400-C2-24       | 2              | 24                | 4.75             | 20                | 2                 | 190                       |
| *TV400-C2-36MC    | 2              | 36                | 2.5              | 20                | 2                 | 100                       |
| TV400-C2-48       | 2              | 48                | 2.35             | 20                | 1                 | 94                        |

\*Multi-channel compatible

+Suitable for 1-D preparatory or 2-D electrophoresis

### DO YOU NEED...?

|                                |              |
|--------------------------------|--------------|
| ACRYLAMIDE                     | SEE PAGE 136 |
| A CAPILLARY GEL-RUNNING MODULE | SEE PAGE 74  |
| A GEL DOCUMENTATION SYSTEM     | SEE PAGE 108 |
| A MULTICASTER                  | SEE PAGE 90  |
| A GRADIENT MIXER               | SEE PAGE 89  |



# TV Modular Systems