

## 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 Gel Tank 4200ml	Inner Buffer Chamber 700ml Gel Tank 4200ml
Recommended Running Conditions for Denaturing/Native PAGE Gel	Voltage 175 - 225V (8.75 - 11.25V/cm) Current 20 - 30mA Time 2.5 - 3.5h	Voltage 200 - 300V (10 - 15V/cm) Current 30 - 40mA Time 2 - 2.5h
Snap-lock Connectors for Cooling Coil	Inner Diameter n/a Outer Diameter n/a	Inner Diameter 10mm Outer Diameter 12mm
Quick-fit Tubing	Inner Diameter n/a Outer Diameter n/a	Inner Diameter 10mm 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 (8.75 - 11.25V/cm)	Voltage	200 - 300V (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.**



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,



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



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



### 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

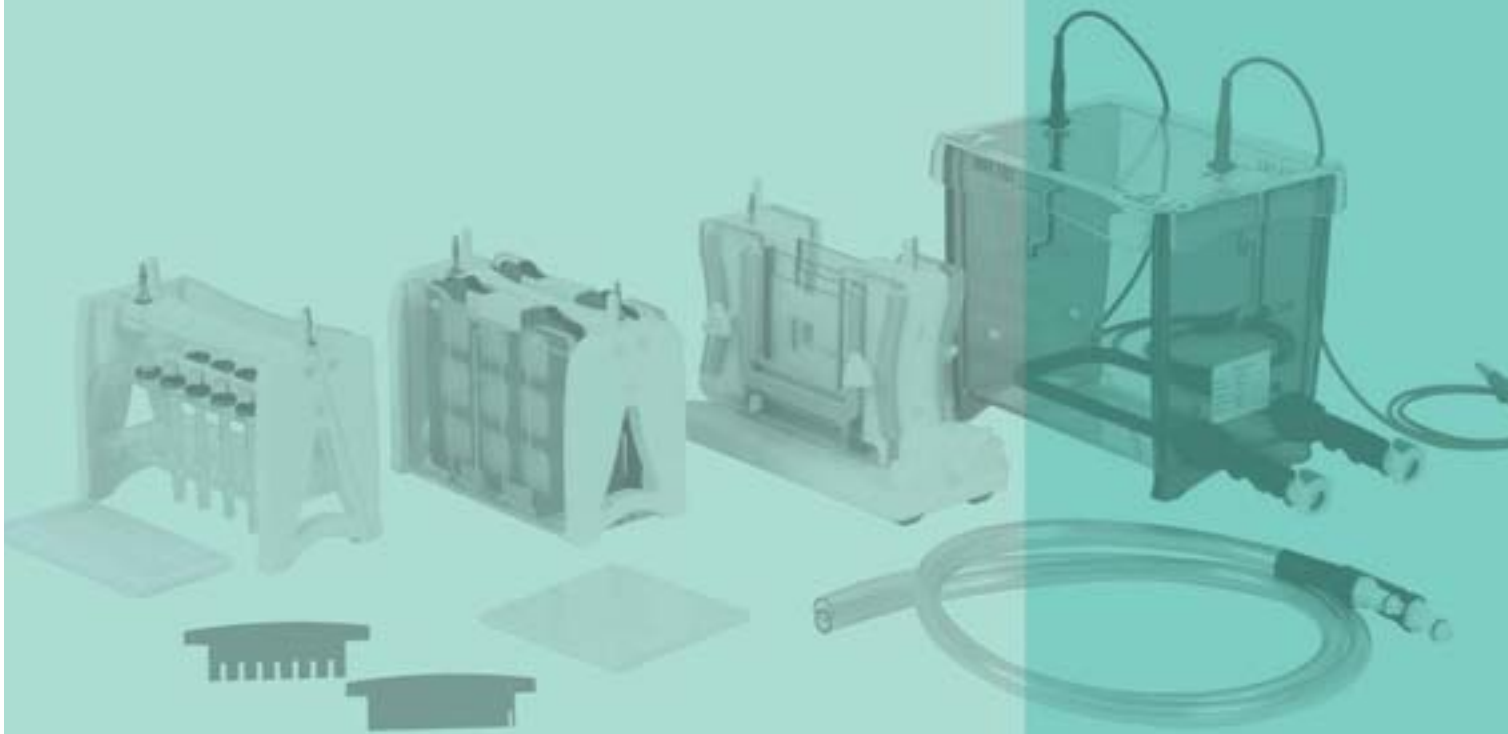
Part No.	Thickness (mm)	Sample Throughput	Tooth Width (mm)	Tooth Height (mm)	Max. Spacing (mm)	Sample Volume / Well (µl)
TV400-C0.25-24	0.25	24	4.75	5	2	6
*TV400-C0.25-36MC	0.25	36	2.5	5	2	3
TV400-C0.35-24	0.35	24	4.75	5	2	8
*TV400-C0.35-36MC	0.35	36	2.5	5	2	4
+TV400-C0.75-1D	0.75	1	152	20	n/a	2280
TV400-C0.75-10	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