

Vertical Gel Units

BENEFITS INCLUDE

- **Comprises** - one standard GRM and one CAPGRM, which are interchangeable within the same gel tank, allowing the user either to perform PAGE and IEF independently or as part of a fully integrated 2-D system
- **CAPGRM** - available in 3 sizes for first dimension electrophoresis of up to 10 ampholyte capillary gels, a maximum 8 or 17cm in length and 1 or 4mm in internal diameter



- **Capillary gels** - available in standard 1mm internal diameter for analytical IEF, or as optional 4mm capillaries for protein isolation
- **Gel extraction platform (GEP)** - for safe and easy collection and transfer of fragile, extruded capillary gels
- **Twin-plate standard GRM** - designed specifically for SDS-PAGE techniques requiring self-cast gels, although commercially available 10 x 10cm precast gels may be used in the TV100-GRM
- **Casting base and cooling** - included as standard - act in tandem with glass plate stops within the GRM to lock the plates firmly in position on the casting base, whereas snap-lock connectors allow the cooling coil within the tank to be connected to the JULABO chiller unit for high voltage/current separations
- **Colour-coded combs and spacers** - available in 1 and 1.5mm thicknesses, the latter suited to 1.5mm thick capillary gels for second dimension 2-D electrophoresis
- **SERVA ampholytes, 2-D and PAGE chemicals available** - see pages 135-142 for further details



TV Modular 2-D Systems

The TV modular 2-D systems provide a complete solution within one gel tank for two-dimensional (2-D) electrophoresis. These systems are available in existing TV100, TV200 and TV400 formats and comprise individual gel-running modules designed specifically for denaturing or native PAGE (GRM) and isoelectric focusing (IEF) with capillary gels (CAPGRM).

TECHNICAL SPECIFICATION

		TV100YK-2DSYS	TV200YK-2DSYS	TV400YK-2DSYS						
Unit Dimensions (W x D x H)		28 x 15 x 18cm	40 x 15 x 17cm	38 x 15 x 27.5cm						
Inner Tank Dimensions (W x D x H)		16.5 x 11 x 15cm	27 x 11 x 15cm	27 x 12.5 x 25cm						
Plate Dimensions (W x H x T)		10 x 10 x 0.2cm	20.5 x 10 x 0.4cm	20.5 x 20 x 0.4cm						
Standard Spacer Dimensions (W x H x T)		1 x 10 x 0.1cm	2 x 20 x 0.1cm	2 x 20 x 0.1cm						
Active Gel Dimensions (W x H)		8 x 8.5cm	16.5 x 8.5cm	16.5 x 17.5cm						
Sample Capacity		2 x 1 / 2 x 12	2 x 1 / 2 x 24	2 x 1 / 2 x 24						
Recommended Buffer Volume (PAGE GRM)	Inner Buffer Chamber	90ml	300ml	700ml						
	Gel Tank	1600ml	3800ml	4200ml						
Recommended Running Conditions for SDS-PAGE	Voltage	100 - 150V (10 - 15V/cm)	150 - 200V (15 - 20V/cm)	200 - 300V (10 - 15V/cm)						
	Current	10 - 15mA	15 - 20mA	30 - 40mA						
	Time	1 - 1.75h	1.5 - 2h	2 - 2.5h						
Capillary Dimensions	Inner Diameter	1mm	1mm	1mm						
	Outer Diameter	5mm	5mm	5mm						
	Length	80mm	80mm	170mm						
Recommended Buffer Volume (CAPGRM)	Upper Buffer Chamber	200ml	300ml	200ml						
	Gel Tank	1600ml	3800ml	1600ml						
Recommended Running Conditions for IEF of Capillary Gels		Pre-run	Separation	End of Run	Pre-run	Separation	End of Run	Pre-run	Separation	End of Run
	Voltage	200V	400V	500V	200V	400V	500V	200V	400V	500V
	Time	0.5h	3h	0.5h	0.5h	3h	0.5h	0.5h	6h to 18h	0.5h
	Volt-hours	100Vh	1200Vh	250Vh	100Vh	1200Vh	250Vh	100Vh	2400Vh	250Vh
Snap-lock Connectors for Cooling Coil	Inner Diameter	10mm			10mm			10mm		
	Outer Diameter	12mm			12mm			12mm		
Quick-fit Tubing	Inner Diameter	10mm			10mm			10mm		
	Outer Diameter	12mm			12mm			12mm		
Casting Base Silicone Seal Dimensions (W x L x H)		1.5 x 11 x 0.8cm			1.7 x 22.5 x 0.8cm			1.7 x 22.5 x 0.8cm		
Power Output Connectors (diameter)		Shrouded, 4mm			Shrouded, 4mm			Shrouded, 4mm		
Recommended Power Supplies		Consort EV215 or EV261			Consort EV215 or EV261			Consort EV215 or EV261		

ORDERING INFORMATION

Complete System

Twin-plate mini-gel unit with GRM and cooled gel tank, with built-in cooling coil and quick-fit tubing, lid, 2 x (10 x 10cm; W x H) plain glass plates, 2 x (10 x 10cm) notched glass plates, 1 x dummy plate, 4 x 1mm thick spacers, 2 x spacer aligners and 2 x 1mm thick 12-sample combs, casting base and 2 x silicone seals; CAPGRM, 10 x 1mm glass capillaries, 4 x 1.5mm thick spacers, 2 x 1.5mm thick 1-D preparatory combs, 10 x blanking ports and 1 x gel extraction platform

Part No.



TV100YK-2DSYS

Twin-plate wide format mini-gel unit with GRM and cooled gel tank, with built-in cooling coil and quick-fit tubing, lid, 2 x (20.5 x 10cm; W x H) plain glass plates, 2 x (20.5 x 10cm) notched glass plates, 1 x dummy plate, 4 x 1mm thick spacers, 2 x spacer aligners and 2 x 1mm thick 24-sample combs, casting base and 2 x silicone seals; CAPGRM, 10 x 1mm glass capillaries, 4 x 1.5mm spacers, 2 x 1.5mm thick 1-D preparatory combs, 10 x blanking ports and 1 x gel extraction platform



TV200YK-2DSYS

Twin-plate maxi-gel unit with GRM and cooled gel tank, with built-in cooling coil and quick-fit tubing, lid, 2 x (20.5 x 20cm; W x H) plain glass plates, 2 x (20.5 x 20cm) notched glass plates, 1 x dummy plate, 4 x 1mm thick spacers, 2 x spacer aligners and 2 x 1mm thick 24-sample combs, casting base and 2 x silicone seals; CAPGRM, 10 x 1mm glass capillaries, 4 x 1.5mm thick spacers, 2 x 1.5mm thick 1-D preparatory combs, 10 x blanking ports and 1 x gel extraction platform



TV400YK-2DSYS

See page 76 for a full list of replacement parts and accessories

TV Modular Systems Accessories

Replacement Parts & Accessories

Description	TV100YK-MODSYS	TV200YK-MODSYS	TV400YK-MODSYS
	Part No.	Part No.	Part No.
1 x gel-running module	TV100-GRM	TV200-GRM	TV400-GRM
2 x quick-fit tubes for cooling coil	TCS-CC	TCS-CC	TCS-CC
2 x plain glass plates	TV100-PG	TV200-PG	TV400-PG
2 x notched glass plates	TV100-NG	TV200-NG	TV400-NG
1 x dummy plate	TV100-DP	TV200-DP	TV400-DP
2 x 1mm thick spacers	TV100-S1	TV200-S1	TV400-S1
1 x 1mm thick 12-sample combs	TV100-C1-12	-	-
1 x 1mm thick 24-sample combs	-	TV400-C1-24	TV400-C1-24
2 x spacer aligners	TV100-SA	TV400-SA	TV400-SA
1 x cam-pin casting base with 2 silicone seals	TV100-CB	TV400-CB	TV400-CB
2 x silicone seals for cam-pin casting base	TV100-CB-SEALS	TV400-CB-SEALS	TV400-CB-SEALS
2 x 0.2mm thick, platinum electrode wire	PT-0.2	PT-0.2	PT-0.2
2 x 1 metre power leads with shrouded 4mm power output connectors	CABLE-4	CABLE-4	CABLE-4
2 x 1.5mm thick spacers	TV100-S1.5	TV200-S1.5	TV400-S1.5
1 x 1.5mm thick 1-D preparatory combs	TV100-C1-1D	TV400-C1-1D	TV400-C1-1D
1 x capillary gel-running module	TV100-CAPGRM	TV200-CAPGRM	TV400-CAPGRM
10 x 1mm glass capillaries	TV100-CAPROD	TV100-CAPROD	TV400-CAPROD
10 x 4mm glass capillaries, ideal for preparatory IEF and protein purification	TV100-CAPROD4	TV100-CAPROD4	TV400-CAPROD4
10 x blanking ports	TV100-CAPB	TV100-CAPB	TV100-CAPB
1 x gel extraction platform	TV100-GEP	TV100-GEP	TV400-GEP
1 x electroblotting gel-running module with built-in plate electrodes	TV100-EBGRM	TV200-EBGRM	TV400-EBGRM
1 x colour-coded electroblotting cassette	TV100-EBC	TV200-EBC	TV400-EBC
4 x fibre pads	TV100-FP	TV200-FP	TV400-FP

Use these part numbers when ordering replacement parts for each TV100, TV200 and TV400 complete modular MODSYS system

Use these part numbers when ordering replacement parts for each TV100, TV200 and TV400 modular 2DSYS system

Use these part numbers when ordering replacement parts for each TV100, TV200 and TV400 modular EBSYS system



See pages 135-142 for SERVA chemicals, reagents and buffers for SDS-PAGE, electroblotting and 2-D capillary gel electrophoresis



See page 142 for Scie-Plas blotting membranes



Contact sales@scie-plas.co.uk for technical information and protocols on SDS-PAGE, electroblotting and 2-D capillary gel electrophoresis