



# Advanced excellence

New Brunswick Excella® budget-saving laboratory shakers for superior performance

# Excella® budget-saving shakers

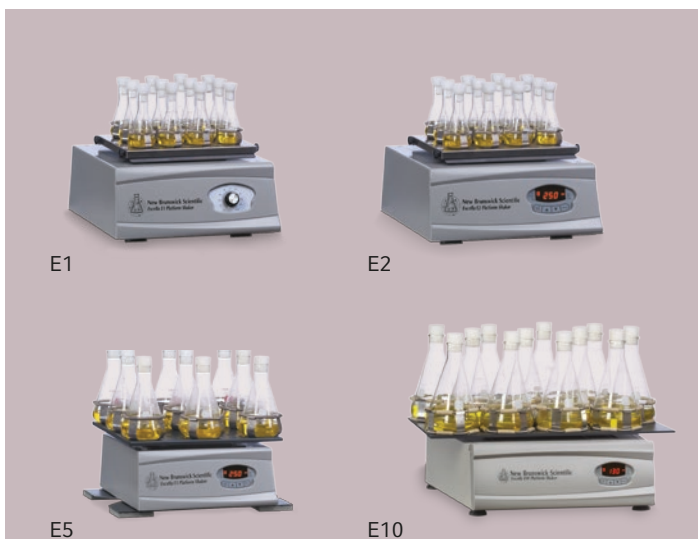
## Excellent Excella®

Eppendorf's New Brunswick Excella® biological shakers provide advanced features and excellent performance at an affordable price. All eight temperature-controlled and open-air Excella® models feature heavy-duty drives, providing long life and quiet operation under moderate loads and at speeds up to 400 rpm. A wide variety of interchangeable platforms, clamps, and test tubes provide expansive levels of flexibility. Excella®... simply the best performing biological shakers in their price range!

## Product features

- > Microprocessor controls to enable precise setting of speed, running time, and temperature<sup>1</sup>
- > Unique acceleration/deceleration circuit to prevent sudden starts and stops<sup>1</sup>
- > Timer to enable programmable shaking periods from 0.1 - 99.9 hrs with automatic shutoff
- > Clear audible and visible alarms to alert you to setpoint deviations of  $\geq 2$  rpm and  $\geq 5^{\circ}\text{C}$ <sup>1</sup>
- > Certification: cETLus meets UL, CSA and CE standards

<sup>1</sup> Applies to all models except the analog-controlled E1, which is provided with reference calibrations that allow the shaker to be set manually for reproducible results from one run to the next



## Benchtop open-air shakers

- > E1 & E2 series: flasks up to 500 mL
- > E5 & E10 series: flasks up to 6 liters
- > Agitation 50 - 400 rpm,  $\pm 2$  rpm
- > All models except E1 are microprocessor controlled
- > Analog controlled E1 provides a low cost solution for basic needs
- > Calibrate speed using the microprocessor controlled keypad (except E1)
- > Analog controlled E1 is provided with reference calibrations to allow manual setting for reproducible results from one run to the next



## Temperature-controlled Excella® shakers

- > E24 series: flasks up to 2.8 liters
- > E25 series: flasks up to 6 liters
- > Agitation 50 - 400 rpm,  $\pm 2$  rpm (less with baffled flasks)
- > Uniform temperature control and rapid temperature recovery result from microprocessor feedback controls, air-tight chamber and high-velocity fans
- > Thermostat fail-safe device turns off heaters if the high temperature limit is exceeded
- > RS-232 provided for data logging
- > For operator safety, a cutoff switch immediately stops agitation when the lid is opened
- > Available datalogging via BioCommand® SFI
- > All New Brunswick shakers use same accessories
- > Certification: cETLus meets UL, CSA and CE standards

Technical specifications	E1	E2	E5	E10
Description				
Orbit	1.9 cm (0.75 in)	1.9 cm (0.75 in)	1.9 cm (0.75 in)	2.5 cm (1.0 in)
Dimensions (W x D x H)	40 x 45.5 x 21.6 cm (15.8 x 17.9 x 8.5 in)	40 x 45.5 x 21.6 cm (15.8 x 17.9 x 8.5 in)	52 x 45.5 x 21.6 cm (20.5 x 17.9 x 8.5 in)	76 x 68.6 x 21.6 cm (30 x 27 x 8.5 in)
Platform size	33 x 28 cm (13 x 11 in)	33 x 28 cm (13 x 11 in)	46 x 46 cm (18 x 18 in)	76 x 46 cm (30 x 18 in)
Weight	NET: 23 kg (51 lbs) SHIPPING: 27 kg (60 lbs)	NET: 24 kg (52 lbs) SHIPPING: 28 kg (61 lbs)	NET: 43 kg (95 lbs) SHIPPING: 45 kg (99 lbs)	NET: 42 kg (93 lbs) SHIPPING: 52 kg (115 lbs)
Alarm	—	AUDIBLE & VISIBLE: end of run and $\pm 5$ rpm deviation from speed setpoint	AUDIBLE & VISIBLE: end of run and $\pm 5$ rpm deviation from speed setpoint	AUDIBLE & VISIBLE: end of run and $\pm 5$ rpm deviation from speed setpoint
Speed (rpm)	50 to 400	50 to 400	50 to 400	50 to 400
Controls	Analog dial	Digital	Digital	Digital

Technical specifications	E24	E24R	E25	E25R
Description				
Orbit	1.9 cm (0.75 in)	1.9 cm (0.75 in)	2.5 cm (1.0 in)	2.5 cm (1.0 in)
Dimensions (W x D x H)	56 x 76.2 x 61 cm (22 x 30 x 24 in) open lid requires additional 53.3 cm (20.98 in) height	56 x 76.2 x 61 cm (22 x 30 x 24 in) open lid requires additional 53.3 cm (20.98 in) height	127 x 77 x 105.9 cm (50 x 30.5 x 41.7 in) open lid requires additional 59.1 cm (23.3 in) height	127 x 77 x 105.9 cm (50 x 30.5 x 41.7 in) open lid requires additional 59.1 cm (23.3 in) height
Platform size	46 x 46 cm (18 x 18 in)	46 x 46 cm (18 x 18 in)	76 x 46 cm (30 x 18 in)	76 x 46 cm (30 x 18 in)
Weight	NET: 60 kg (133 lbs) SHIPPING: 91 kg (200 lbs)	NET: 80 kg (175 lbs) SHIPPING: 111 kg (245 lbs)	NET: 171 kg (377 lbs) SHIPPING: 254 kg (560 lbs)	NET: 191 kg (421 lbs) SHIPPING: 263 kg (581 lbs)
Ambient conditions	10° C to 35° C HUMIDITY: 20 to 80 % (non-condensing)	10° C to 35° C HUMIDITY: 20 to 80 % (non-condensing)	10° C to 35° C HUMIDITY: 20 to 80 % (non-condensing)	10° C to 35° C HUMIDITY: 20 to 80 % (non-condensing)
Speed (rpm)	50 to 400	50 to 400	50 to 400	50 to 400
Temperature range	7° C above ambient to 60° C	15° C below ambient to 60° C	7° C above ambient to 60° C	15° C below ambient to 60° C
Temperature uniformity	$\pm 0.5^\circ$ C at 37° C	$\pm 0.5^\circ$ C at 37° C	$\pm 0.5^\circ$ C at 37° C	$\pm 0.5^\circ$ C at 37° C

#### Ordering information

Excella® shakers	Order no.	
E1	M1354-0001 (230 V, 50/60 Hz)	M1354-0000 (120 V, 50/60 Hz)
E2	M1350-0001 (230 V, 50/60 Hz)	M1350-0000 (120 V, 50/60 Hz)
E5	M1355-0001 (230 V, 50/60 Hz)	M1355-0000 (120 V, 50/60 Hz)
E10	M1351-0001 (230 V, 50/60 Hz)	M1351-0000 (120 V, 50/60 Hz)
E24	M1352-0002 (230 V, 50 Hz)	M1352-0000 (120 V, 60 Hz)
E24R	M1352-0006 (230 V, 50 Hz)	M1352-0004 (120 V, 60 Hz)
E25	M1353-0002 (230 V, 50 Hz)	M1353-0000 (120 V, 60 Hz)
E25R	M1353-0006 (230 V, 50 Hz)	M1353-0004 (120 V, 60 Hz)

## Accessories

Platforms & clamps	Universal platform (clamp capacities)			Dedicated platforms (clamps included)		
Volume	E1,E2	E5,E24/E24R	E10,E25/E25R	E1,E2	E5,E24/E24R	E10,E25/E25R
10 ml	60	109	-	60	-	-
25 ml	20	64	-	32	-	-
50 ml	15	45	92	20	64	108
125 ml	11	21	39	12	34	60
250 ml	6	18	30	8	25	40
500 ml	4	14	18	6	16	24
1 L	-	8	12	-	9	15
2 L	-	5	8	-	5	12
2.8 L	-	4	6	-	4	6
4 L	-	4	6	-	-	6
6 L	-	2	4	-	-	4
Microplate single layer	-	2	4	-	-	-
Microplate holder stack	3	8	16	-	-	-

### Accessories : Racks & clamps

- > Test tube racks mount to Universal Platforms; thumb screws let you easily adjust the angle of the rack to increase media oxygenation as well as quickly remove the rack holder for transporting tubes from shaker to bench; available in a variety of sizes
- > Microplate racks mount to any universal platform for shaking microplates
- > Flask clamps made of single-piece stainless steel, fitted with springs for stability at elevated speeds; Include mounting screws

### Accessories : Sticky tape & pad

- > Sticky tape: 41.7 x 4.1 cm (16.4 ft x 1.6 in) roll, ideal for small flasks and speeds up to 250 rpm
- > Sticky pad: 20 x 20 cm (8 x 8 in) pad uses adhesive to secure flasks or racks in place; simply wash to regenerate; speeds up to 250 rpm; requires adapter kit

### Accessories : Platforms

- > Universal platforms provide flexibility for mixing different sizes of glassware on a single platform
- > Dedicated platforms provide maximum capacity when using a single flask size, and comes with clamps installed
- > Utility carriers secure vessels between adjustable, cushioned rods
- > Utility trays provide a non-slip surface for low speed applications
- > Microplate platforms for shaking microplates
- > Sticky pad platforms for use with Sticky pad

Please see our product catalog or ask your local distributor for accessories ordering information:

[www.eppendorf.com/worldwide](http://www.eppendorf.com/worldwide)



24 Norman Way Industrial Estate, Over, Camb, CB24 5WE

Tel: +44(0)1954 233100 Fax: +44(0)1954 233101  
Email: [sales@camlab.co.uk](mailto:sales@camlab.co.uk) Web: [www.camlab.co.uk](http://www.camlab.co.uk)