

Incubator Shakers



Model	Innova® S44i	Innova® 44/44R	Innova® 43/43R	Innova® 42/42R	Innova® 40/40R	New Brunswick S41i
Positioning	Most advanced stackable (2-3x) incubator shaker with highest capacity in our portfolio - ready for high yield plasmid/protein expression protocols	Stackable (2-3x) incubator shaker with high vessel capacity	Top-loading incubator shaker with large capacity for easy handling flasks with volume up to 6 L	Space-saving, stackable (2x) incubator shaker with high versatility regarding lab positioning and options	Benchtop orbital shaker with compact design and capacity for flasks with a volume up to 3 L	Large (170 L) CO ₂ incubator shaker with integrated high temperature disinfection and shaker inside
Capacity	extra large	large	large	medium	medium	medium
Platform size (cm/in)	76 × 62 cm (30 × 24 in)	76 × 46 cm (30 × 18 in)	76 × 46 cm (30 × 18 in)	46 × 46 cm (18 × 18 in)	46 × 46 cm (18 × 18 in)	36 × 61 cm (14 × 24 in)
Max. vessel volume (without static shelf, depending on flask format)	5 L	5 L	6 L	6 L	3 L	4 L
Application-related features						
Bacteria, Yeast, Fungi, Insect cells	■	■	■	■	■	–
Algae/plant cells	■ (LED-light, tunable intensity to simulate day/night-cycles)	■ (fluorescent bulbs, no intensity modulation)	■ (fluorescent bulbs, no intensity modulation)	■ (fluorescent bulbs, no intensity modulation)	–	–
Mammalian cells (CO₂ control & humidification)	–	–	–	–	–	■
Parallel static cultivation	■ (static shelves optional)	–	–	■ (one static shelf included, culture drawer for Agar plates optional)	–	■ (one static shelf included, second shelf optional)
Orbit	2.5/5.1 cm (1/2 in)	2.5/5.1 cm (1/2 in)	2.5/5.1 cm (1/2 in)	1.9/2.5 cm (0.75/1 in)	1.9/2.5 cm (0.75/1 in)	2.5 cm (1 in)
Temperature range	Incubated: 10 °C above ambient to 80 °C; Refrigerated: 20 °C below ambient (min. 4 °C) to 80 °C.	Incubated: 10 °C above ambient to 80 °C; Refrigerated: 20 °C below ambient (min. 4 °C) to 80 °C (max. 70 °C with PS-light, 60 °C with rH-monitoring).	Incubated: 10 °C above ambient to 80 °C; Refrigerated: 20 °C below ambient (min. 4 °C) to 80 °C (max. 70 °C with PS-light, 60 °C with rH-monitoring).	Incubated: 10 °C above ambient to 80 °C; Refrigerated: 20 °C below ambient (min. 4 °C) to 80 °C (max. 70 °C with PS-light, 60 °C with rH-monitoring).	Incubated: 10 °C above ambient to 80 °C; Refrigerated: 15 °C below ambient (min. 4 °C) to 80 °C.	Ambient +4 °C to 50 °C
Speed range	2.5 cm orbit: 20 – 400 rpm, 5.1 cm orbit: 20 – 300 rpm	25 – 400 rpm with 2.5 cm orbit; 25 – 300 rpm with 5.1 cm orbit or 2 stacked units; 25 – 250 rpm with 3 stacked units	25 – 500 rpm with 2.5 cm orbit; 25 – 300 rpm with 5.1 cm orbit	25 – 400 rpm; 25 – 300 rpm when using flasks > 500 mL in stacked devices	50 – 400 rpm	25 – 400 rpm (25 – 250 rpm if stacked)
Ergonomics, programming, VisioNize connectivity						
Door opening	glide up	glide up	console style	opening to front	top opening hood	opening to front
Platform type	slide out	slide out	fixed	fixed	fixed	fixed
Programming steps / storable programs	unlimited/unlimited	15/4	15/4	15/4	15/4	–
VisioNize connectivity	VisioNize touch enabled	VisioNize box enabled	VisioNize box enabled	VisioNize box enabled	VisioNize box enabled	VisioNize box enabled
Additional information						
Drive mechanism	Eppendorf X-Drive	triple-eccentric counterbalanced drive	triple-eccentric counterbalanced drive	triple-eccentric counterbalanced drive	triple-eccentric counterbalanced drive	triple-eccentric counterbalanced drive
Dimensions (W × D × H)	118.2 × 86.9 × 63 cm / 46.5 × 34.2 × 24.8 in	134.9 × 84.3 × 66 cm / 53.1 × 33.2 × 26 in	115.6 × 81.3 × 103.1 cm / 45.5 × 20 × 40.6 in	63.5 × 74.5 × 81.8 cm / 25 × 29.3 × 32.8 in	55.9 × 76.2 × 61 cm / 22 × 30 × 24 in	87.5 × 73 × 85 cm / 34.4 × 28.7 × 33.5 in
Device weight without accessories (non-refrigerated / refrigerated)	181g (400 lbs) / 188g (415 lbs)	238g (525 lbs) / 259g (570 lbs)	209g (460 lbs) / 231g (510 lbs)	98g (217 lbs) / 121g (266 lbs)	60g (133 lbs) / 79g (175 lbs)	154g (340 lbs)



Incubator Shakers



Model	CellIXpert® CS220	Innova® S44i	Innova® 44/44R	Innova® 42/42R	Innova® 40/40R	New Brunswick S41i
Positioning	High-capacity, stackable (2–3x) CO ₂ shaker with 180 °C sterilization routine	High-capacity, stackable (2–3x) shaker ready for high yield plasmid/microbial protein expression protocols	Stackable (2–3x) incubator shaker with high vessel capacity	Space-saving, stackable (2x) incubator shaker with high versatility regarding lab positioning and options	Benchtop orbital shaker with compact design and capacity for flasks with a volume up to 3 L	Medium size, versatile and 2x stackable CO ₂ shaker, ideal for growing labs
Capacity	extra large	extra large	large	medium	medium	medium
Platform size (cm/in)	93 x 51 cm (37 x 20 in)	76 x 62 cm (30 x 24 in)	76 x 46 cm (30 x 18 in)	46 x 46 cm (18 x 18 in)	46 x 46 cm (18 x 18 in)	36 x 61 cm (14 x 24 in)
Max. vessel volume (without static shelf, depending on flask format)	5 L	5 L	5 L	6 L	3 L	4 L
Application-related features						
Bacteria, Yeast, Fungi, Insect cells	■ Insect culture, depending on application	■	■	■	■	■ Insect culture, depending on application
Algae/plant cells	–	■ (LED-light, tunable intensity to simulate day/night-cycles)	■ (fluorescent bulbs, no intensity modulation)	■ (fluorescent bulbs, no intensity modulation)	–	–
Mammalian cells (CO₂ control & humidification)	■	–	–	–	–	■
Parallel static cultivation	–	■ (static shelf optional)	–	■ (one static shelf included, culture drawer for Agar plates optional)	–	■ (one static shelf included, second shelf optional)
Orbit	2.5/5.1 cm (1/2 in)	2.5/5.1 cm (1/2 in)	2.5/5.1 cm (1/2 in)	1.9/2.5 cm (0.75/1 in)	1.9/2.5 cm (0.75/1 in)	2.5 cm (1 in)
Temperature range	Ambient +8 °C to 60 °C	Incubated: 10 °C above ambient to 80 °C; Refrigerated: 20 °C below ambient (min. 4 °C) to 80 °C.	Incubated: 10 °C above ambient to 80 °C; Refrigerated: 20 °C below ambient (min. 4 °C) to 80 °C (max. 70 °C with PS-light, 60 °C with rH-monitoring).	Incubated: 10 °C above ambient to 80 °C; Refrigerated: 20 °C below ambient (min. 4 °C) to 80 °C (max. 70 °C with PS-light, 60 °C with rH-monitoring).	Incubated: 10 °C above ambient to 80 °C; Refrigerated: 15 °C below ambient (min. 4 °C) to 80 °C.	Ambient +4 °C to 50 °C
Speed range	2.54 cm (1 in) orbit: 20 – 300 rpm 5.1 cm (2 in) orbit: 20 – 250 rpm	2.5 cm orbit: 20 – 400 rpm 5.1 cm orbit: 20 – 300 rpm	25 – 400 rpm with 2.5 cm orbit; 25 – 300 rpm with 5.1 cm orbit or 2 stacked units; 25 – 250 rpm with 3 stacked units	25 – 400 rpm; 25 – 300 rpm when using flasks > 500 mL in stacked devices	25 – 500 rpm (depending on load)	25 – 400 rpm (25 – 250 rpm if stacked)
Ergonomics, programming, VisioNize connectivity						
Door opening	glide up	glide up	glide up	opening to front	top opening hood	opening to front
Platform type	slide out	slide out	slide out	fixed	fixed	fixed
Programming steps / storable programs	unlimited/unlimited	unlimited/unlimited	15/4	15/4	15/4	–
VisioNize connectivity	VisioNize touch enabled	VisioNize touch enabled	VisioNize box enabled	VisioNize box enabled	VisioNize box enabled	VisioNize box enabled
Additional information						
Drive mechanism	Eppendorf X-Drive	Eppendorf X-Drive	triple-eccentric counterbalanced drive	triple-eccentric counterbalanced drive	triple-eccentric counterbalanced drive	triple-eccentric counterbalanced drive
Dimensions (W x D x H)	131.8 x 80.5 x 66.1 cm / 51.9 x 31.7 x 26.0 in	118.2 x 86.9 x 63 cm / 46.5 x 34.2 x 24.8 in	134.9 x 84.3 x 66 cm / 53.1 x 33.2 x 26 in	63.5 x 74.5 x 81.8 cm / 25 x 29.3 x 32.8 in	55.9 x 76.2 x 61 cm / 22 x 30 x 24 in	87.5 x 73 x 85 cm / 34.4 x 28.7 x 33.5 in
Device weight without accessories (non-refrigerated / refrigerated)	237 kg (522.5 lbs)	181 kg (400 lbs) / 188 kg (415 lbs)	238 kg (525 lbs) / 259 kg (570 lbs)	98 kg (217 lbs) / 121 kg (266 lbs)	60 kg (133 lbs) / 79 kg (175 lbs)	154 kg (340 lbs)

