



## Artisan Technology Group is your source for quality new and certified-used/pre-owned equipment

- FAST SHIPPING AND DELIVERY
- TENS OF THOUSANDS OF IN-STOCK ITEMS
- EQUIPMENT DEMOS
- HUNDREDS OF MANUFACTURERS SUPPORTED
- LEASING/MONTHLY RENTALS
- ITAR CERTIFIED SECURE ASSET SOLUTIONS

### SERVICE CENTER REPAIRS

Experienced engineers and technicians on staff at our full-service, in-house repair center

### *InstraView*<sup>SM</sup> REMOTE INSPECTION

Remotely inspect equipment before purchasing with our interactive website at [www.instraview.com](http://www.instraview.com) ↗

### WE BUY USED EQUIPMENT

Sell your excess, underutilized, and idle used equipment. We also offer credit for buy-backs and trade-ins. [www.artisanng.com/WeBuyEquipment](http://www.artisanng.com/WeBuyEquipment) ↗

### LOOKING FOR MORE INFORMATION?

Visit us on the web at [www.artisanng.com](http://www.artisanng.com) ↗ for more information on price quotations, drivers, technical specifications, manuals, and documentation

**Contact us:** (888) 88-SOURCE | [sales@artisanng.com](mailto:sales@artisanng.com) | [www.artisanng.com](http://www.artisanng.com)

## Thermo Scientific MaxQ™ Shakers

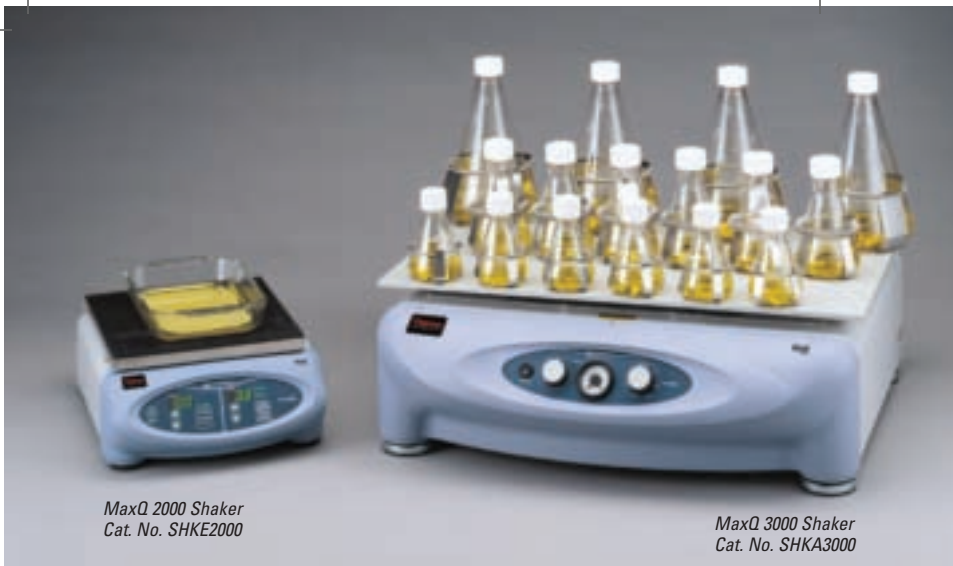


Increase your product yield with our  
MaxQ Shaker collection



Part of Thermo Fisher Scientific

**Thermo**  
SCIENTIFIC



MaxQ 2000 Shaker  
Cat. No. SHKE2000

MaxQ 3000 Shaker  
Cat. No. SHKA3000

## Thermo Scientific MaxQ 2000 & 3000 Open Air Platform Shakers

- Choice of analog or digital operating system.
- Choose from several platform sizes.
- Five year warranty on parts, one year labor and *LIFETIME* on drive mechanism.
- Triple eccentric drive handles heavy loads, provides uniform agitation and continuous 24-hour operation, even at high speeds.
- Units operate in temperature ranges of 0°C to 40°C and humidity conditions from 20 to 80% non-condensing enables them to be used in incubators, warm rooms, environmental chambers and refrigerators.

### Analog Operating System

- Variable speed from 40 to 400 rpm, controlled by a rotary dial.
- Guaranteed accurate settings, with integrated tachometer that monitors and displays speed in rpm.
- Operate shaker in continuous mode or set time from 1 to 60 minutes.

### Digital Operating System

- Variable speed control from 15 to 500 rpm.
- Continuous and timed operation from 0.1 hour to 999 hours or 0.1 minute to 999 minutes.
- Minimize errors by viewing speed and operating time simultaneously on two individual LED displays.
- Shaker shutdown and visual/audible alarms signal if unit operates  $\pm 10\%$  of set speed, preventing shaker from walking.

- User-adjustable speed calibration can be performed using a digital handheld tachometer, where verification is required and protocols can be standardized.
- Unbalanced load sensor stops platform motion when excess vibration is detected and visual/audible alarms signal until condition is corrected.
- Soft start feature eliminates sudden starts and stops, splashing of vessel contents or wetting of flask closure.
- Retains parameters during power failure and restarts unit automatically after power is restored.
- RS232 interface allows remote monitoring of speed and time.

### NEW CO<sub>2</sub> Resistant Digital Operating System

Contains all of the features and benefits of the digital operating system plus:

- Electrical and mechanical components have been treated to protect them from up to 10% CO<sub>2</sub> and 90% humidity conditions non-condensing.
- This treatment prevents humidity and CO<sub>2</sub> from reacting with electrical components and forming carbonic acid.
- The shakers will not malfunction and can be used continuously in a CO<sub>2</sub> incubator.

### Applications

- Cell culture
- Solubility studies
- Extraction procedures
- Diagnostic tests
- General mixing
- Bacterial suspensions
- Staining and destaining
- Washing procedures
- Hybridization



# Thermo Scientific MaxQ 2000 & 3000

## Ordering information

For a complete system order: 1. Shaker 2. Platform 3. Clamps

| Cat. No.  | Speed Range (rpm) | Orbit Diameter In. (cm) | Maximum Load Lb. (kg) | Overall Dimensions In. (cm) |             |            | Power          | Shipping Weight Lb. (kg) |
|---|-------------------|-------------------------|-----------------------|-----------------------------|-------------|------------|----------------|--------------------------|
|   |                   |                         |                       | Length                      | Width       | Height     |                |                          |
| <b>Small Capacity Open Air Shakers—Analog</b>                               |                   |                         |                       |                             |             |            |                |                          |
| SHKA2000 <sup>1,3</sup>   | 40–400            | 0.75 (1.9)              | 35 (15.9)             | 17.4 (44.2)                 | 13.5 (34.3) | 6.4 (16.3) | 120V, 50/60 Hz | 47 (21.3)                |
| SHKA2000-1CE <sup>1,2,3</sup>   | 40–400            | 0.75 (1.9)              | 35 (15.9)             | 17.4 (44.2)                 | 13.5 (34.3) | 6.4 (16.3) | 240V, 50/60 Hz | 47 (21.3)                |
| <b>Large Capacity Open Air Shakers—Analog</b>                               |                   |                         |                       |                             |             |            |                |                          |
| SHKA3000 <sup>1,3</sup>   | 40–400            | 1.0 (2.54)              | 50 (22.7)             | 25.8 (65.5)                 | 29.4 (74.7) | 9.7 (24.6) | 120V, 50/60 Hz | 207 (93.9)               |
| SHKA3000-1CE <sup>1,2,3</sup>   | 40–400            | 1.0 (2.54)              | 50 (22.7)             | 25.8 (65.5)                 | 29.4 (74.7) | 9.7 (24.6) | 240V, 50/60 Hz | 207 (93.9)               |
| <b>Small Capacity Open Air Shakers—Digital</b>                              |                   |                         |                       |                             |             |            |                |                          |
| SHKE2000 <sup>1,3</sup>   | 15–500<br>±1 rpm  | 0.75 (1.9)              | 35 (15.9)             | 17.4 (44.2)                 | 13.5 (34.3) | 6.4 (16.3) | 120V, 50/60 Hz | 47 (21.3)                |
| SHKE2000-1CE <sup>1,2,3</sup>   | 15–500<br>±1 rpm  | 0.75 (1.9)              | 35 (15.9)             | 17.4 (44.2)                 | 13.5 (34.3) | 6.4 (16.3) | 240V, 50/60 Hz | 47 (21.3)                |
| <b>Large Capacity Open Air Shakers—Digital</b>                              |                   |                         |                       |                             |             |            |                |                          |
| SHKE3000 <sup>1,3</sup>   | 15–500<br>±1 rpm  | 1.0 (2.54)              | 50 (22.7)             | 25.8 (65.5)                 | 29.4 (74.7) | 9.7 (24.6) | 120V, 50/60 Hz | 207 (93.9)               |
| SHKE3000-1CE <sup>1,2,3</sup>   | 15–500<br>±1 rpm  | 1.0 (2.54)              | 50 (22.7)             | 25.8 (65.5)                 | 29.4 (74.7) | 9.7 (24.6) | 240V, 50/60 Hz | 207 (93.9)               |
| <b>NEW Small Capacity CO<sub>2</sub> Resistant Open Air Shakers—Digital</b> |                   |                         |                       |                             |             |            |                |                          |
| SHKE2000CO2   | 15–500<br>±1 rpm  | 0.75 (1.9)              | 35 (15.9)             | 17.4 (44.2)                 | 13.5 (34.3) | 6.4 (16.3) | 120V, 50/60 HZ | 47 (21.3)                |
| SHKE2000CO2-1CE   | 15–500<br>±1 rpm  | 0.75 (1.9)              | 35 (15.9)             | 17.4 (44.2)                 | 13.5 (34.3) | 6.4 (16.3) | 240V, 50/60 Hz | 47 (21.3)                |

<sup>1</sup> CUL, <sup>2</sup> CE, <sup>3</sup> UL

## Accessories

### UNIVERSAL PLATFORMS

| Cat. No. | Description   | Maximum No. of Vessels per Platform (in.) |       |       |       |       |
|----------|---|---|-------|-------|-------|-------|
|          |   | 11x13                                     | 18x18 | 18x24 | 30x18 | 36x24 |
| 30100    | 11" x 13" (27.9 x 33 cm) for MaxQ 2000 Shaker                 |   |       |       |       |       |
| 30110    | 18" x 18" (45.7 x 45.7 cm) for MaxQ 2000 Shaker               |   |       |       |       |       |
| 30106    | 18" x 24" (45.7 x 60.9 cm) MaxQ 2000 Shaker                   |   |       |       |       |       |
| 30115BI  | 30" x 18" (76.2 x 45.7 cm) MaxQ 3000 Shaker                   |   |       |       |       |       |
| 30120BI  | 36" x 24" (91.4 x 60.9 cm) for MaxQ 3000 Shaker               |   |       |       |       |       |
| 30124    | 30" x 18" (76.2 x 45.7 cm) Dual Platform for MaxQ 3000 Shaker |   |       |       |       |       |

### CLAMPS FOR UNIVERSAL PLATFORM

| Cat. No. | Vessel Size                    | Maximum No. of Vessels per Platform (in.) |       |       |       |       |
|----------|--------------------------------|---|-------|-------|-------|-------|
|          |                                | 11x13                                     | 18x18 | 18x24 | 30x18 | 36x24 |
| 30175    | Microplate/Deep Well Plate     | 5   | 10    | 15    | 18    | 29    |
| 30150BI  | 10-ml Flask                    | 60  | 113   | 157   | 112   | 160   |
| 30151    | 25-ml Flask                    | 60  | 64    | 80    | 112   | 160   |
| 30152BI  | 50-ml Flask                    | 30  | 32    | 40    | 112   | 160   |
| 30153    | 125-ml Flask                   | 13  | 32    | 40    | 44    | 80    |
| 30154BI  | 250-ml Flask                   | 9   | 16    | 23    | 24    | 40    |
| 30155    | 300-ml Flask                   | 7   | 16    | 20    | 20    | 40    |
| 30156BI  | 500-ml Flask                   | 6   | 16    | 20    | 18    | 40    |
| 30157BI  | 1-L Flask                      | 4   | 9     | 10    | 12    | 21    |
| 30158    | 2-L Flask                      | 1   | 6     | 5     | 6     | 11    |
| 30159    | 4-L Flask                      | 1   | 4     | 4     | 6     | 11    |
| 30160    | 6-L Flask                      | 1   | 2     | 3     | 3     | 6     |
| 30161    | 2500-ml Low Form Culture Flask | 1   | 1     | 2     | 3     | 6     |
| 30162    | 2800-ml Fernbach Flask         | 1   | 4     | 4     | 5     | 8     |

### TEST-TUBE RACKS—FULL SIZE

| Cat. No.           | Vessel Size                                 | No. of Racks per Platform (in.) |       |       |       |       |
|--------------------|---|---------------------------------|-------|-------|-------|-------|
|                    |   | 11x13                           | 18x18 | 18x24 | 30x18 | 36x24 |
| 30180BI            | 10–13 mm, Red, 6 x 12 Array                 | 3                               | 6     | 8     | 13    | 16    |
| 30182 <sup>1</sup> | 14–16 mm, Orange, 6 x 12 Array              | 2                               | 4     | 6     | 7     | 10    |
| 30184              | 17–20 mm, White, 4 x 10 Array               | 3                               | 5     | 6     | 9     | 14    |
| 30186              | 21–25 mm, Blue, 4 x 10 Array                | 2                               | 3     | 4     | 7     | 7     |
| 30188 <sup>2</sup> | 26–30 mm, Green, 3 x 8 Array                | 2                               | 4     | 6     | 7     | 7     |
| 30190              | Microcentrifuge, 1.5-ml, Blue, 8 x 12 Array | 2                               | 5     | 6     | 8     | 10    |

<sup>1</sup> Fits 15-ml centrifuge tubes. <sup>2</sup> Fits 50-ml centrifuge tubes.

### TEST-TUBE RACKS—HALF SIZE

| Cat. No.           | Vessel Size                                 | No. of Racks per Platform (in.) |       |       |       |       |
|--------------------|---|---------------------------------|-------|-------|-------|-------|
|                    |   | 11x13                           | 18x18 | 18x24 | 30x18 | 36x24 |
| 30181              | 10–13 mm, Red, 6 x 6 Array                  | 6                               | 12    | 15    | 21    | 25    |
| 30183 <sup>1</sup> | 14–16 mm, Red, 6 x 6 Array                  | 4                               | 6     | 8     | 10    | 12    |
| 30185              | 17–20 mm, White, 4 x 5 Array                | 4                               | 8     | 13    | 18    | 20    |
| 30187              | 21–25 mm, Blue, 4 x 4 Array                 | 4                               | 6     | 9     | 10    | 15    |
| 30189 <sup>2</sup> | 26–30 mm, Green, 3 x 3 Array                | 6                               | 9     | 12    | 15    | 15    |
| 30191              | Microcentrifuge, 1.5-ml, White, 4 x 6 Array | 4                               | 8     | 10    | 14    | 20    |

<sup>1</sup> Fits 15-ml centrifuge tubes. <sup>2</sup> Fits 50-ml centrifuge tubes.



MaxQ 4450 Shaker  
Cat. No. SHKE4450

## Thermo Scientific MaxQ 4450 Compact Bench Top Incubated Shakers

### Small footprint that combines incubated/ refrigerated temperature with an orbital shaker

- Holds up to four one liter flasks.
- Requires minimal bench space.
- Affordably priced.
- Five year warranty on parts, one year labor and *LIFETIME* on drive mechanism.

### Product Description

- Choose between two temperature ranges, 5°C above ambient to 80°C or 5°C below ambient to 80°C.
- Clear lid lets you view samples without disturbing internal temperature.

### New Operating Chiller for Plasmid Purification and Protein Expression in Bacteria

- Achieve temperature ranges from 20°C to 30°C.
- Provides a refrigerated atmosphere.

### Operation

- Triple eccentric drive handles heavy loads, provides uniform agitation and continuous 24-hour operation, even at high speeds.
- Monitor and control chamber temperature range with  $\pm 0.1^\circ\text{C}$  accuracy and  $\pm 0.5^\circ\text{C}$  uniformity at 37°C.

### Analog Operating System

- Variable speed control from 40 to 400 rpm, controlled by a rotary dial.
- Integrated tachometer monitors and displays speed in rpm to guarantee an accurate setting.
- Easy-to-read LED digital temperature display.
- Operate shaker in continuous mode or set timer from 1 to 60 minutes.

### Digital Operating System

- Variable speed control from 15 to 500 rpm.
- Continuous/timed operation from 0.1 hour to 999 hours or 0.1 minute to 999 minutes.
- View speed, operating time and temperature simultaneously on three individual LED displays.
- Visual/audible alarms alert you to temperature deviations. Heat turns off if temperature deviates  $\pm 1^\circ\text{C}$  of set point.
- Shaker shuts down and visual/audible alarms signal if unit operates  $\pm 10\%$  of set speed, preventing shaker from walking.
- Soft start feature eliminates sudden starts and stops, splashing of vessel contents or wetting of flask closure.
- Retains parameters during power failure and restarts unit automatically after power is restored.

### Safety

- Over-temperature safety feature with independent thermostat provides additional backup by controlling heat if main temperature controller fails.
- Safety interlock stops platform motion when lid is opened.

### Applications

- Cell culture
- Extraction procedures
- General mixing
- Staining and destaining
- Hybridizations
- Solubility studies
- Plasmid purification
- Bacterial suspensions
- Washing procedures
- Protein expression in bacteria

# Thermo Scientific MaxQ 4450

## Ordering information

For a complete system order: 1. Shaker 2. Platform 3. Clamps

| Cat. No.  | Speed Range (rpm) | Orbit Diameter In. (cm) | Maximum Load Lb. (kg) | Temperature Range and Accuracy             | Overall Dimensions In. (cm) |             |             | Power          | Shipping Weight Lb. (kg) |
|---|-------------------|-------------------------|-----------------------|--|-----------------------------|-------------|-------------|----------------|--------------------------|
|   |                   |                         |                       |  | Length                      | Width       | Height      |                |                          |
| <b>Bench Top Incubated Shaker—Analog</b>          |                   |                         |                       |  |                             |             |             |                |                          |
| SHKA4450 <sup>1,3</sup>                           | 40–400            | 0.75 (1.9)              | 35 (15.9)             | 5°C Above Ambient to 80°C; ±0.1°C in Flask | 27.2 (69.1)                 | 14.1 (35.8) | 15.8 (40.1) | 120V, 50/60 Hz | 77 (35)                  |
| SHKA4450-1CE <sup>1,2,3</sup>                     | 40–400            | 0.75 (1.9)              | 35 (15.9)             | 5°C Above Ambient to 80°C; ±0.1°C in Flask | 27.2 (69.1)                 | 14.1 (35.8) | 15.8 (40.1) | 240V, 50/60 Hz | 77 (35)                  |
| <b>Bench Top Incubated Shaker—Digital</b>         |                   |                         |                       |  |                             |             |             |                |                          |
| SHKE4450 <sup>1,3</sup>                           | 15–500 ±1 rpm     | 0.75 (1.9)              | 35 (15.9)             | 5°C Above Ambient to 80°C; ±0.1°C in Flask | 27.2 (69.1)                 | 14.1 (35.8) | 15.8 (40.1) | 120V, 50/60 Hz | 77 (35)                  |
| SHKE4450-1CE <sup>1,2,3</sup>                     | 15–500 ±1 rpm     | 0.75 (1.9)              | 35 (15.9)             | 5°C Above Ambient to 80°C; ±0.1°C in Flask | 27.2 (69.1)                 | 14.1 (35.8) | 15.8 (40.1) | 240V, 50/60 Hz | 77 (35)                  |
| <b>Bench Top Shaker with Cooling Coil—Analog</b>  |                   |                         |                       |  |                             |             |             |                |                          |
| SHKA4450CC <sup>1,3</sup>                         | 40–400            | 0.75 (1.9)              | 35 (15.9)             | 5°C Below Ambient to 80°C; ±0.1°C in Flask | 27.2 (69.1)                 | 14.1 (35.8) | 15.8 (40.1) | 120V, 50/60 Hz | 77 (35)                  |
| SHKA4450CC-1CE <sup>1,2,3</sup>                   | 40–400            | 0.75 (1.9)              | 35 (15.9)             | 5°C Below Ambient to 80°C; ±0.1°C in Flask | 27.2 (69.1)                 | 14.1 (35.8) | 15.8 (40.1) | 240V, 50/60 Hz | 77 (35)                  |
| <b>Bench Top Shaker with Cooling Coil—Digital</b> |                   |                         |                       |  |                             |             |             |                |                          |
| SHKE4450CC <sup>1,3</sup>                         | 15–500 ±1 rpm     | 0.75 (1.9)              | 35 (15.9)             | 5°C Below Ambient to 80°C; ±0.1°C in Flask | 27.2 (69.1)                 | 14.1 (35.8) | 15.8 (40.1) | 120V, 50/60 Hz | 77 (35)                  |
| SHKE4450CC-1CE <sup>1,2,3</sup>                   | 15–500 ±1 rpm     | 0.75 (1.9)              | 35 (15.9)             | 5°C Below Ambient to 80°C; ±0.1°C in Flask | 27.2 (69.1)                 | 14.1 (35.8) | 15.8 (40.1) | 240V, 50/60 Hz | 77 (35)                  |

<sup>1</sup> CUL, <sup>2</sup> CE, <sup>3</sup> UL

## Accessories

| Cat. No.      | Description   |
|---------------|---|
| 30100         | Universal 11" x 13" (27.9 x 33 cm) Platform with Handles                              |
| SHK4450CH     | Upright Chiller, 6-L Reservoir, Required to Achieve Temperatures from 20°C–30°C, 120V |
| SHK4450CH-1CE | Upright Chiller, 6-L Reservoir, Required to Achieve Temperatures from 20°C–30°C, 240V |

Note: Optional gassing manifold enables direct gassing into flasks for anaerobic cultures. Contact customer service at 800-553-0039 for more information.

### CLAMPS FOR UNIVERSAL PLATFORM

| Cat. No. | Vessel Size                    | Maximum No. of Vessels per Platform 11 x 13 in. (27.9 x 33 cm) |
|----------|--------------------------------|--|
| 30175    | Microplate/Deep Well Plate     | 5  |
| 30150BI  | 10-ml Flask                    | 60   |
| 30151    | 25-ml Flask                    | 60   |
| 30152BI  | 50-ml Flask                    | 30   |
| 30153    | 125-ml Flask                   | 13   |
| 30154BI  | 250-ml Flask                   | 9  |
| 30155    | 300-ml Flask                   | 7  |
| 30156BI  | 500-ml Flask                   | 6  |
| 30157BI  | 1-L Flask                      | 4  |
| 30161    | 2500-ml Low Form Culture Flask | 1  |

### TEST-TUBE RACKS—FULL SIZE

| Cat. No.           | Vessel Size                                 | No. of Racks per Platform 11 x 13 in. (27.9 x 33 cm) |
|--------------------|---|--|
| 30180BI            | 10–13 mm, Red, 6 x 12 Array                 | 3  |
| 30182 <sup>1</sup> | 14–16 mm, Orange, 6 x 12 Array              | 2  |
| 30184              | 17–20 mm, White, 4 x 10 Array               | 3  |
| 30186              | 21–25 mm, Blue, 4 x 10 Array                | 2  |
| 30188 <sup>2</sup> | 26–30 mm Green, 3 x 8 Array                 | 2  |
| 30190              | Microcentrifuge, 1.5 ml, Blue, 8 x 12 Array | 2  |

<sup>1</sup> Fits 15-ml centrifuge tubes. <sup>2</sup> Fits 50-ml centrifuge tubes

### TEST-TUBE RACKS—HALF SIZE

| Cat. No.           | Vessel Size                                 | No. of Racks per Platform 11 x 13 in. (27.9 x 33 cm) |
|--------------------|---|--|
| 30181              | 10–13 mm, Red, 6 x 6 Array                  | 6  |
| 30183 <sup>1</sup> | 14–16 mm, Red, 6 x 6 Array                  | 4  |
| 30185              | 17–20 mm, White, 4 x 5 Array                | 4  |
| 30187              | 21–25 mm, Blue 4 x 4 Array                  | 4  |
| 30189 <sup>2</sup> | 26–30 mm, Green, 3 x 3 Array                | 6  |
| 30191              | Microcentrifuge, 1.5 ml, White, 4 x 6 Array | 4  |

<sup>1</sup> Fits 15-ml centrifuge tubes. <sup>2</sup> Fits 50-ml centrifuge tubes.



MaxQ 4000 Shaker  
Cat. No. SHKE4000



## Thermo Scientific MaxQ 4000 Incubated and Refrigerated Shakers

### Combines Incubated/Refrigerated Temperatures with Orbital Shaker

- View speed, time and temperature simultaneously.
- Choose from three temperature ranges.
- Spacious chamber holds six two-liter flasks.
- Clear lid allows sample viewing without disturbing chamber atmosphere.
- Choice of analog or digital operating systems.
- Five year warranty on parts, one year labor and *LIFETIME* on mechanism.

### Operation

- Triple eccentric drive handles heavy loads, provides uniform agitation and continuous 24-hour operation, even at high speeds.
- Monitor and control chamber temperature range with  $\pm 0.1^\circ\text{C}$  accuracy at  $37^\circ\text{C}$ .

### Analog Operating System

- Variable speed control from 40 to 400 rpm, controlled by a rotary dial.
- Integrated tachometer monitors and displays speed in rpm to guarantee an accurate setting.
- Easy-to-read LED digital temperature display.
- Operate shaker in continuous mode or set timer from 1 to 60 minutes.

### Digital Operating System

- Variable speed control from 15 to 500 rpm.
- Continuous/timed operation from 0.1 hour to 999 hours or 0.1 minute to 999 minutes.

- View speed, operating time and temperature simultaneously on three individual LED displays.
- Visual/audible alarms alert you to temperature deviations. Heat turns off if temperature deviates  $\pm 1^\circ\text{C}$  of set point.
- Shaker shuts down and visual/audible alarms signal if unit operates  $\pm 10\%$  of set speed, preventing shaker from walking.
- User-adjustable speed calibration can be performed using a digital handheld tachometer, where verification is required and protocols can be standardized.
- Unbalanced load sensor stops platform motion when excess vibration is detected and visual/audible alarms signal until condition is corrected.
- Soft start feature eliminates sudden starts and stops, splashing of vessel contents or wetting of flask closure.
- Retains parameters during power failure and restarts automatically after power is restored.

### Safety

- Over-temperature safety feature with independent thermostat provides additional backup by controlling heat if main temperature controller fails.
- Safety interlock stops platform motion when lid is opened.

### Applications

- Cell culture
- Extraction procedures
- General mixing
- Staining and destaining
- Hybridizations
- Solubility studies
- Plasmid purification
- Bacterial suspensions
- Washing procedures
- Protein expression

# Thermo Scientific MaxQ 4000

## Ordering information

For a complete system order: 1. Shaker 2. Platform 3. Clamps

| Cat. No.   | Speed Range (rpm) | Orbit Diameter In. (cm) | Maximum Load Lb. (kg) | Temperature Range and Accuracy                      | Overall Dimensions In. (cm) |             |           | Power          | Shipping Weight Lb. (kg) |
|--|-------------------|-------------------------|-----------------------|---|-----------------------------|-------------|-----------|----------------|--------------------------|
|  |                   |                         |                       |   | Length                      | Width       | Height    |                |                          |
| <b>Bench Top Incubated Shaker—Analog</b>                   |                   |                         |                       |   |                             |             |           |                |                          |
| SHKA4000 <sup>1,3</sup>                                    | 40–400            | 0.75 (1.9)              | 50 (22.7)             | 10°C Above Ambient to 60°C; ±0.1°C at 37°C in Flask | 32 (81.3)                   | 22.5 (57.2) | 22 (55.9) | 120V, 50/60 Hz | 167 (75.8)               |
| SHKA4000-1CE <sup>1,2,3</sup>                              | 40–400            | 0.75 (1.9)              | 50 (22.7)             | 10°C above Ambient to 60°C; ±0.1°C at 37°C in Flask | 32 (81.3)                   | 22.5 (57.2) | 22 (55.9) | 240V, 50/60 Hz | 167 (75.8)               |
| <b>Bench Top High Temperature Incubated Shaker—Analog</b>  |                   |                         |                       |   |                             |             |           |                |                          |
| SHKA4000-5 <sup>1,3</sup>                                  | 40–400            | 0.75 (1.9)              | 50 (22.7)             | 10°C Above Ambient to 80°C; ±0.1°C at 37°C in Flask | 32 (81.3)                   | 22.5 (57.2) | 22 (55.9) | 120V, 50/60 Hz | 167 (75.8)               |
| SHKA4000-6CE <sup>1,2,3</sup>                              | 40–400            | 0.75 (1.9)              | 50 (22.7)             | 10°C Above Ambient to 80°C; ±0.1°C at 37°C in Flask | 32 (81.3)                   | 22.5 (57.2) | 22 (55.9) | 240V, 50/60 Hz | 167 (75.8)               |
| <b>Bench Top Refrigerated Shaker—Analog</b>                |                   |                         |                       |   |                             |             |           |                |                          |
| SHKA4000-7 <sup>1,3</sup>                                  | 40–400            | 0.75 (1.9)              | 50 (22.7)             | 15°C Below Ambient to 60°C; ±0.1°C at 37°C in Flask | 34 (86.4)                   | 22.5 (57.2) | 22 (55.9) | 120V, 50/60 Hz | 212 (96.2)               |
| SHKA4000-8CE <sup>2</sup>                                  | 40–400            | 0.75 (1.9)              | 50 (22.7)             | 15°C Below Ambient to 60°C; ±0.1°C at 37°C in Flask | 34(86.4)                    | 22.5 (57.2) | 22 (55.9) | 240V, 50/60 Hz | 212 (96.2)               |
| <b>Bench Top Incubated Shaker—Digital</b>                  |                   |                         |                       |   |                             |             |           |                |                          |
| SHKE4000 <sup>1,3</sup>                                    | 15–500 ±1 rpm     | 0.75 (1.9)              | 50 (22.7)             | 10°C Above Ambient to 60°C; ±0.1°C at 37°C in Flask | 32 (81.3)                   | 22.5 (57.2) | 22 (55.9) | 120V, 50/60 Hz | 167 (75.8)               |
| SHKE4000-1CE <sup>1,2,3</sup>                              | 15–500 ±1 rpm     | 0.75 (1.9)              | 50 (22.7)             | 10°C Above Ambient to 60°C; ±0.1°C at 37°C in Flask | 32 (81.3)                   | 22.5 (57.2) | 22 (55.9) | 240V, 50/60 Hz | 167 (75.8)               |
| <b>Bench Top High Temperature Incubated Shaker—Digital</b> |                   |                         |                       |   |                             |             |           |                |                          |
| SHKE4000-5 <sup>1,3</sup>                                  | 15–500 ±1 rpm     | 0.75 (1.9)              | 50 (22.7)             | 10°C Above Ambient to 80°C; ±0.1°C at 37°C in Flask | 32 (81.3)                   | 22.5 (57.2) | 22 (55.9) | 120V, 50/60 Hz | 167 (75.8)               |
| SHKE4000-6CE <sup>1,2,3</sup>                              | 15–500 ±1 rpm     | 0.75 (1.9)              | 50 (22.7)             | 10°C Above Ambient to 80°C; ±0.1°C at 37°C in Flask | 32 (81.3)                   | 22.5 (57.2) | 22 (55.9) | 240V, 50/60 Hz | 167 (75.8)               |
| <b>Bench Top Refrigerated Shaker—Digital</b>               |                   |                         |                       |   |                             |             |           |                |                          |
| SHKE4000-7 <sup>1,3</sup>                                  | 15–500 ±1 rpm     | 0.75 (1.9)              | 50 (22.7)             | 15°C Below Ambient to 60°C; ±0.1°C at 37°C in Flask | 34 (86.4)                   | 22.5 (57.2) | 22 (55.9) | 120V, 50/60 Hz | 212 (96.2)               |
| SHKE4000-8CE <sup>2</sup>                                  | 15–500 ±1 rpm     | 0.75 (1.9)              | 50 (22.7)             | 15°C Below Ambient to 60°C; ±0.1°C at 37°C in Flask | 34 (86.4)                   | 22.5 (57.2) | 22 (55.9) | 240V, 50/60 Hz | 212 (96.2)               |

<sup>1</sup> CUL, <sup>2</sup> CE, <sup>3</sup> UL

## Accessories

### UNIVERSAL PLATFORM

| Cat. No. | Description                |
|----------|----------------------------|
| 30110    | 18" x 18" (45.7 x 45.7 cm) |

Note: Optional gassing manifold enables direct gassing into flasks for anaerobic cultures. Contact customer service at 800-553-0039 for more information.

### CLAMPS FOR UNIVERSAL PLATFORM

| Cat. No. | Vessel Size                | Maximum No. of Vessels per Platform 18 x 18 in. (45.7 x 45.7 cm) |
|----------|----------------------------|--|
| 30175    | Microplate/Deep Well Plate | 10   |
| 30150BI  | 10-ml Flask                | 113  |
| 30151    | 25-ml Flask                | 64   |
| 30152BI  | 50-ml Flask                | 32   |
| 30153    | 125-ml Flask               | 32   |
| 30154BI  | 250-ml Flask               | 16   |
| 30155    | 300-ml Flask               | 16   |
| 30156BI  | 500-ml Flask               | 16   |
| 30157BI  | 1-L Flask                  | 9  |
| 30158    | 2-L Flask                  | 6  |

### TEST-TUBE RACKS—FULL SIZE

| Cat. No.           | Vessel Size                                 | No. of Racks per Platform 18x18 in. (45.7 x 45.7 cm) |
|--------------------|---|--|
| 30180BI            | 10–13 mm, Red, 6 x 12 Array                 | 6  |
| 30182 <sup>1</sup> | 14–16 mm, Orange, 6 x 12 Array              | 4  |
| 30184              | 17–20 mm, White, 4 x 10 Array               | 5  |
| 30186              | 21–25 mm, Blue, 4 x 10 Array                | 3  |
| 30188 <sup>2</sup> | 26–30 mm, Green, 3 x 8 Array                | 4  |
| 30190              | Microcentrifuge, 1.5-ml, Blue, 8 x 12 Array | 5  |

<sup>1</sup> Fits 15-ml centrifuge tubes. <sup>2</sup> Fits 50-ml centrifuge tubes.

### TEST-TUBE RACKS—HALF SIZE

| Cat. No.           | Vessel Size                                 | No. of Racks per Platform 18x18 in. (45.7 x 45.7 cm) |
|--------------------|---|--|
| 30181              | 10–13 mm, Red, 6 x 6 Array                  | 12   |
| 30183 <sup>1</sup> | 14–16 mm, Red, 6 x 6 Array                  | 6  |
| 30185              | 17–20 mm, White, 4 x 5 Array                | 8  |
| 30187              | 21–25 mm, Blue, 4 x 4 Array                 | 6  |
| 30189 <sup>2</sup> | 26–30 mm, Green, 3 x 3 Array                | 9  |
| 30191              | Microcentrifuge, 1.5-ml, White, 4 x 6 Array | 8  |

<sup>1</sup> Fits 15-ml centrifuge tubes. <sup>2</sup> Fits 50-ml centrifuge tubes.





MaxQ 6000 Shaker  
Cat. No. SHKE6000



## Thermo Scientific MaxQ 6000 Incubated and Refrigerated Stackable Shakers

### Large Chamber Will Accommodate Flasks Up To Six Liters

- Available in incubated or refrigerated models.
- Units can be stacked two high on the floor.
- Two adjustable-height shelves provide added storage.
- Large viewing window and internal light offer sample visibility.
- View temperature, speed and time simultaneously on three individual displays.
- Five year warranty on parts, one year labor and *LIFETIME* on mechanism.

### Product Description

- Choose between two temperature ranges.
- Corrosion-resistant stainless-steel chamber accommodates a variety of 18 x 18 in. (45.7 x 45.7 cm) universal and dedicated platforms.
- Durable powder-coated, cold-rolled steel exterior construction.
- Electrical outlet inside chamber provides power for safe operation of shakers, stirrers or rotators.

### Digital Operating System

- Triple eccentric drive handles heavy loads, provides uniform agitation and continuous 24-hour operation, even at high speeds.
- Monitor and control chamber temperature over complete range with  $\pm 0.1^\circ\text{C}$  accuracy at  $37^\circ\text{C}$ .
- Variable speed control from 15 to 500 rpm.
- Continuous/timed operation from 0.1 hour to 999 hours or 0.1 minute to 999 minutes.
- View speed, operating time and temperature simultaneously on three individual LED displays.

- Visual/audible alarms alert you to temperature deviations. Heat turns off if temperature deviates  $\pm 1^\circ\text{C}$  of set point.
- Shaker shut down and visual/audible alarms signal if unit operates  $\pm 10\%$  of set speed, preventing shaker from walking.
- User-adjustable speed calibration can be performed using a digital handheld tachometer, where verification is required and protocols can be standardized.
- Unbalanced load sensor stops platform motion when excess vibration is detected visual/audible alarms signal until condition is corrected.
- Soft start feature eliminates sudden starts and stops, splashing of vessel contents or wetting of flask closure.
- Retains parameters during power failure and restarts unit automatically after power is restored.

### Safety

- Over-temperature safety feature with independent thermostat provides additional backup by controlling heat if main temperature controller fails.
- Safety interlock stops shaking motion when the door is open.

### Applications

- Bacterial suspensions
- Solubility studies
- Extraction procedures
- General mixing
- Staining and destaining
- Hybridizations
- Diagnostic test
- Washing procedures
- Protein expression
- Plasmid purification

# Thermo Scientific MaxQ 6000

## Ordering information

For a complete system order: 1. Shaker 2. Platform 3. Clamps

| Cat. No.                           | Speed Range (rpm)                                      | Orbit Diameter In. (cm) | Maximum Load Lb. (kg) | Temperature Range and Accuracy  | Temperature Uniformity  | Overall Dimensions In. (cm) |             |              | Power             | Shipping Weight Lb. (kg) |
|------------------------------------|--|-------------------------|-----------------------|---|-------------------------|-----------------------------|-------------|--------------|-------------------|--------------------------|
|                                    |  |                         |                       |   |                         | Length                      | Width       | Height       |                   |                          |
| <b>Incubated Shaker—Digital</b>    |  |                         |                       |   |                         |                             |             |              |                   |                          |
| SHKE6000 <sup>1,3</sup>            | 15–500; ±1 rpm (unstacked)<br>15–300; ±1 rpm (stacked) | 0.75 (1.9)              | 35 (15.9)             | 10°C Above Ambient to 80°C; ±0.1°C at 37°C in Flask   | ±0.5°C at 37°C in Flask | 33 (83.8)                   | 27.5 (69.9) | 40.5 (102.9) | 120V 60 Hz        | 330 (150)                |
| SHKE6000-1CE <sup>1,2,3</sup>      | 15–500; ±1 rpm (unstacked)<br>15–300; ±1 rpm (stacked) | 0.75 (1.9)              | 35 (15.9)             | 10°C Above Ambient to 80°C; ±0.1°C at 37°C in Flask   | ±0.5°C at 37°C in Flask | 33 (83.8)                   | 27.5 (69.9) | 40.5 (102.9) | 220/240V 50/60 Hz | 330 (150)                |
| <b>Refrigerated Shaker—Digital</b> |  |                         |                       |   |                         |                             |             |              |                   |                          |
| SHKE6000-7 <sup>1,3</sup>          | 15–500; ±1 rpm (unstacked)<br>15–300; ±1 rpm (stacked) | 0.75 (1.9)              | 35 (15.9)             | 15°C Below Ambient to 80°C; ±0.1°C at 37°C in Flask (minimum set point needs to be 4°C on refrigerated model) | ±0.5°C at 37°C in Flask | 33 (83.8)                   | 27.5 (69.9) | 40.5 (102.9) | 120V 60 Hz        | 430 (195)                |
| SHKE6000-8CE <sup>2</sup>          | 15–500; ±1 rpm (unstacked)<br>15–300; ±1 rpm (stacked) | 0.75 (1.9)              | 35 (15.9)             | 15°C Below Ambient to 80°C; ±0.1°C at 37°C in Flask (minimum set point needs to be 4°C on refrigerated model) | ±0.5°C at 37°C in Flask | 33 (83.8)                   | 27.5 (69.9) | 40.5 (102.9) | 220/240V 50 Hz    | 430 (195)                |

<sup>1</sup>CUL, <sup>2</sup>CE, <sup>3</sup>UL

## Accessories

| Cat. No.   | Description                                   |
|------------|---|
| 30110      | Universal 18" x 18" (45.7 x 45.7 cm) Platform |
| 3522-3     | Adapter Set for Tiering 2 Platforms           |
| SHK6000-10 | Stacking Kit for Additional MaxQ 6000         |
| SHK6000-15 | Alternate Stacking Kit                        |
| SHK6000-20 | Seismic Restraint                             |

### CLAMPS FOR UNIVERSAL PLATFORM

| Cat. No. | Vessel Size                | Maximum No. of Vessels per Platform 18 x 18 in. (45.7 x 45.7 cm) |
|----------|----------------------------|--|
| 30175    | Microplate/Deep Well Plate | 10   |
| 30150BI  | 10-ml Flask                | 113  |
| 30151    | 25-ml Flask                | 64   |
| 30152BI  | 50-ml Flask                | 32   |
| 30153    | 125-ml Flask               | 32   |
| 30154BI  | 250-ml Flask               | 16   |
| 30155    | 300-ml Flask               | 16   |
| 30156BI  | 500-ml Flask               | 16   |
| 30157BI  | 1-L Flask                  | 9  |
| 30158    | 2-L Flask                  | 6  |
| 30160    | 6-L Flask                  | 2  |

### TEST-TUBE RACKS—FULL SIZE

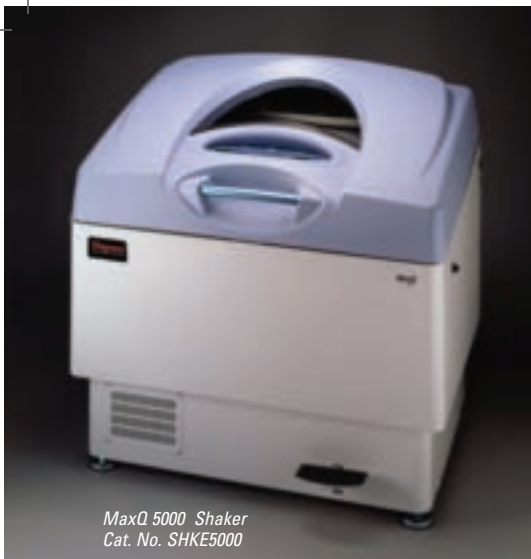
| Cat. No.           | Vessel Size   | No. of Racks per Platform 18x18 in. (45.7 x 45.7 cm) |
|--------------------|---|--|
| 30180BI            | 10–13 mm, Red, 6 x 12 Array                         | 6  |
| 30182 <sup>1</sup> | 14–16 mm, Orange, 6 x 12 Array                      | 4  |
| 30184              | 17–20 mm, White, 4 x 10 Array                       | 5  |
| 30186              | 21–25 mm, Blue, 4 x 10 Array                        | 3  |
| 30188 <sup>2</sup> | 26–30 mm, Green, 3 x 8 Array                        | 4  |
| 30190              | Microcentrifuge tubes<br>1.5 ml, Blue, 8 x 12 Array | 5  |

<sup>1</sup> Fits 15-ml centrifuge tubes. <sup>2</sup> Fits 50-ml centrifuge tubes

### TEST-TUBE RACKS—HALF SIZE

| Cat. No.           | Vessel Size   | No. of Racks per Platform 18x18 in. (45.7 x 45.7 cm) |
|--------------------|---|--|
| 30181              | 10–13 mm, Red, 6 x 6 Array                          | 12   |
| 30183 <sup>1</sup> | 14–16 mm, Red, 6 x 6 Array                          | 6  |
| 30185              | 17–20 mm, White, 4 x 5 Array                        | 8  |
| 30187              | 21–25 mm, Blue, 4 x 4 Array                         | 6  |
| 30189 <sup>2</sup> | 26–30 mm, Green, 3 x 3 Array                        | 9  |
| 30191              | Microcentrifuge tubes<br>1.5 ml, White, 4 x 6 Array | 8  |

<sup>1</sup> Fits 15-ml centrifuge tubes. <sup>2</sup> Fits 50-ml centrifuge tubes.



MaxQ 5000 Shaker  
Cat. No. SHKE5000



Retractable foot casters  
allow easy manipulation  
in lab.

## Thermo Scientific MaxQ 5000 Incubated and Refrigerated Floor Shakers

- Easy-access side drain system permits easy clean up of spills.
- Drip pan under platform contains spills.
- Retractable foot casters allow easy positioning in lab.
- Foot pedal opens lid for hands free operation.
- Choice of analog or digital operating systems.
- Five year warranty on parts, one year labor and *LIFETIME* on drive mechanism.

### Product Description

- Wide temperature range, 10°C above ambient to 60°C on incubated models and 15°C below ambient to 60°C on refrigerated models.
- Large viewing window.
- Optional access ports for probes, thermocouple or sensors.

### Operation

- Triple eccentric drive handles heavy loads, provides uniform agitation and continuous 24-hour operation, even at high speeds.
- Monitor and control chamber temperature range with  $\pm 0.1^\circ\text{C}$  accuracy at 37°C.

### Analog Operating Systems

- Variable speed control from 40 to 400 rpm, controlled by a rotary dial.
- Integrated tachometer monitors and displays speed in rpm to guarantee an accurate setting.
- Easy-to-read LED digital temperature display.
- Operates in continuous mode or set timer from 1 to 60 minutes.

### Digital Operating Systems

- Variable speed control from 15 to 500 rpm.
- Continuous/timed operation from 0.1 hour to 999 hours or 0.1 minute to 999 minutes.
- View speed, operating time and temperature simultaneously on three individual LED displays.
- Visual/audible alarms alert you to temperature deviations. Heat turns off if temperature deviates  $\pm 1^\circ\text{C}$  of set point.
- Shaker shuts down and visual/audible alarms signal if unit operates  $\pm 10\%$  of set speed, preventing shaker from walking.
- User-adjustable speed calibration can be performed using a digital handheld tachometer, where verification is required and protocols can be standardized.
- Unbalanced load sensor stops platform motion when excess vibration is detected and visual/audible alarms signal until condition is corrected.
- Soft start feature eliminates sudden starts and stops, splashing of vessel contents or wetting of flask closure.
- Retains parameters during power failure and restarts unit automatically after power is restored.

### Safety

- Over-temperature safety feature with independent thermostat provides additional backup by controlling heat if main temperature controller fails.

### Applications

- Cell culture
- Solubility studies
- Extraction procedures
- Plant growth
- General mixing
- Protein expression
- Bacterial suspensions
- Staining and destaining
- Washing procedures
- Hybridizations
- Plasmid purification

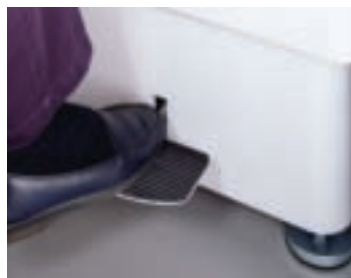
# Thermo Scientific MaxQ 5000

## Ordering information

For a complete system order: 1. Shaker 2. Platform 3. Clamps



Easy-access drain system offers convenience in draining and disinfecting the system.



Using the built-in foot pedal, you can open the door to transfer vessels, hands free.

| Cat. No.                                 | Speed Range (rpm) | Orbit Diameter In. (cm) | Maximum Load Lb. (kg) | Temperature Range and Accuracy                      | Overall Dimensions |            |            | Power          | Shipping Weight Lb. (kg) |
|--|-------------------|-------------------------|-----------------------|---|--------------------|------------|------------|----------------|--------------------------|
|  |                   |                         |                       |   | In. (cm) Length    | Width      | Height     |                |                          |
| <b>Incubated Floor Shaker—Analog</b>     |                   |                         |                       |   |                    |            |            |                |                          |
| SHKA5000 <sup>1,3</sup>                  | 40–400            | 1 (2.54)                | 75 (34)               | 10°C Above Ambient to 60°C; ±0.1°C at 37°C in Flask | 32 (81.3)          | 41 (104.1) | 41 (104.1) | 120V, 50/60 Hz | 476 (215.9)              |
| SHKA5000-1CE <sup>1,2,3</sup>            | 40–400            | 1 (2.54)                | 75 (34)               | 10°C Above Ambient to 60°C; ±0.1°C at 37°C in Flask | 32 (81.3)          | 41 (104.1) | 41 (104.1) | 240V, 50/60 Hz | 476 (215.9)              |
| <b>Refrigerated Floor Shaker—Analog</b>  |                   |                         |                       |   |                    |            |            |                |                          |
| SHKA5000-7 <sup>1,3</sup>                | 40–400            | 1 (2.54)                | 75 (34)               | 15°C Below Ambient to 60°C; ±0.1°C at 37°C in Flask | 32 (81.3)          | 41 (104.1) | 41 (104.1) | 120V, 50/60 Hz | 512 (232.2)              |
| SHKA5000-8CE <sup>2</sup>                | 40–400            | 1 (2.54)                | 75 (34)               | 15°C Below Ambient to 60°C; ±0.1°C at 37°C in Flask | 32 (81.3)          | 41 (104.1) | 41 (104.1) | 240V, 50/60 Hz | 512 (232.2)              |
| <b>Incubated Floor Shaker—Digital</b>    |                   |                         |                       |   |                    |            |            |                |                          |
| SHKE5000 <sup>1,3</sup>                  | 15–500<br>±1 rpm  | 1 (2.54)                | 75 (34)               | 10°C Above Ambient to 60°C; ±0.1°C at 37°C in Flask | 32 (81.3)          | 41 (104.1) | 41 (104.1) | 120V, 50/60 Hz | 476 (215.9)              |
| SHKE5000-1CE <sup>1,2,3</sup>            | 15–500<br>±1 rpm  | 1 (2.54)                | 75 (34)               | 10°C Above Ambient to 60°C; ±0.1°C at 37°C in Flask | 32 (81.3)          | 41 (104.1) | 41 (104.1) | 240V, 50/60 Hz | 476 (215.9)              |
| <b>Refrigerated Floor Shaker—Digital</b> |                   |                         |                       |   |                    |            |            |                |                          |
| SHKE5000-7 <sup>1,3</sup>                | 15–500<br>±1 rpm  | 1 (2.54)                | 75 (34)               | 15°C Below Ambient to 60°C; ±0.1°C at 37°C in Flask | 32 (81.3)          | 41 (104.1) | 41 (104.1) | 120V, 50/60 Hz | 512 (232.2)              |
| SHKE5000-8CE <sup>2</sup>                | 15–500<br>±1 rpm  | 1 (2.54)                | 75 (34)               | 15°C Below Ambient to 60°C; ±0.1°C at 37°C in Flask | 32 (81.3)          | 41 (104.1) | 41 (104.1) | 240V, 50/60 Hz | 512 (232.2)              |

<sup>1</sup> CUL, <sup>2</sup> CE, <sup>3</sup> UL

## Accessories

| Cat. No.  | Description  |
|-----------|--|
| 30115BI   | Universal 30" x 18" (76.2 x 45.7 cm) Platform                                |
| SHK5000-6 | Stainless-Steel Shelf for Chamber<br>L – 33.25" (84.5 cm) W – 4.0" (10.2 cm) |

*Note: Optional gassing manifold enables direct gassing into flasks for anaerobic cultures. Contact customer service at 800-553-0039 for more information.*

*Test tube rack clamps, see Accessories on page 13*

### CLAMPS FOR UNIVERSAL PLATFORM

| Cat. No. | Vessel Size                    | Maximum No. of Vessels per Platform<br>30 x 18 in. (76.2 x 45.7 cm) |
|----------|--------------------------------|---|
| 30175    | Microplate/Deep Well Plate     | 18  |
| 30154BI  | 250-ml Flask                   | 24  |
| 30155    | 300-ml Flask                   | 20  |
| 30156BI  | 500-ml Flask                   | 18  |
| 30157BI  | 1-L Flask                      | 12  |
| 30158    | 2-L Flask                      | 6   |
| 30159    | 4-L Flask                      | 6   |
| 30160    | 6-L Flask                      | 3   |
| 30161    | 2500-ml Low Form Culture Flask | 3   |
| 30162    | 2800-ml Fernbach Flask         | 5   |



MaxQ 7000 Shaker  
Cat. No. SHKE7000



## Thermo Scientific MaxQ 7000 Bench Top Water Bath Shakers

### Product Description

- Exceptionally precise temperature control.
- Alarm alerts operator in case of low water level.
- Temperature range of 5°C above ambient to 65°C.
- Prevent heat loss and minimize evaporation with use of optional covers.
- Choice of analog or digital operating systems.
- Five year warranty on parts, one year labor and *LIFETIME* on drive mechanism.

### Operation

- Triple eccentric drive that handles heavy loads, provides uniform agitation and enables continuous 24-hour operation, even at high speeds.
- Monitored and controlled temperature with accuracy of  $\pm 0.2^\circ\text{C}$  at  $37^\circ\text{C}$  in flask.

### Analog Operating System

- Variable speed control from 40 to 400 rpm, controlled by a rotary dial.
- Integrated tachometer monitors and displays speed in rpm to guarantee an accurate setting.
- Easy-to-read LED digital temperature display.
- Operate shaker in continuous mode or set timer from 1 to 60 minutes.

### Digital Operating System

- Variable speed control from 15 to 500 rpm.
- Continuous and timed operation from 0.1 hour up to 999 hours or 0.1 minute to 999 minutes.

- View speed, operating time and temperature simultaneously on three individual LED displays.
- Visual/audible alarms alert you to temperature deviations and low water levels. Heat turns off if temperature deviates  $\pm 1^\circ\text{C}$  of setpoint.
- Shaker shutdown and visual/audible alarms signal if unit operates  $\pm 10\%$  of set speed, preventing shaker from walking.
- User-adjustable speed calibration can be performed using a digital handheld tachometer, where verification is required and protocols can be standardized.
- Unbalanced load sensor stops platform motion when excess vibration is detected and visual/audible alarms signal until condition is corrected.
- Soft start feature eliminates sudden starts and stops, splashing of vessel contents or wetting of flask closure.
- Retains parameters during power failure and restarts automatically after power is restored.

### Safety

- Over-temperature safety feature with independent thermostat provides additional backup by controlling heat if main temperature controller fails.

### Applications

- Cell culture
- Solubility studies
- Extraction procedures
- Diagnostic tests
- General mixing
- Bacterial suspensions
- Staining and destaining
- Washing procedures
- Hybridization

# Thermo Scientific MaxQ 7000

## Ordering information

For a complete system order: 1. Shaker 2. Platform 3. Clamps

| Cat. No.                         | Orbit Speed Range (rpm) | Diameter In. (cm) | Maximum Load Lb. (kg) | Temperature Range and Accuracy*                    | Overall Dimensions |             |           | Power          | Shipping Weight Lb. (kg) |
|----------------------------------|-------------------------|-------------------|-----------------------|--|--------------------|-------------|-----------|----------------|--------------------------|
|                                  |                         |                   |                       |  | In. (cm) Length    | Width       | Height    |                |                          |
| <b>Water-Bath Shaker—Analog</b>  |                         |                   |                       |  |                    |             |           |                |                          |
| SHKA7000 <sup>1,3</sup>          | 40–400                  | 0.50 (1.27)       | 35 (15.9)             | 5°C Above Ambient to 65°C; ±0.2°C at 37°C in Flask | 25 (63.5)          | 21.5 (54.6) | 18 (45.7) | 120V, 50/60 Hz | 107 (48.5)               |
| SHKA7000-1CE <sup>1,2,3</sup>    | 40–400                  | 0.50 (1.27)       | 35 (15.9)             | 5°C Above Ambient to 65°C; ±0.2°C at 37°C in Flask | 25 (63.5)          | 21.5 (54.6) | 18 (45.7) | 240V, 50/60 Hz | 107 (48.5)               |
| <b>Water-Bath Shaker—Digital</b> |                         |                   |                       |  |                    |             |           |                |                          |
| SHKE7000 <sup>1,3</sup>          | 15–500 ±1 rpm           | 0.50 (1.27)       | 35 (15.9)             | 5°C Above Ambient to 65°C; ±0.2°C at 37°C in Flask | 25 (63.5)          | 21.5 (54.6) | 18 (45.7) | 120V, 50/60 Hz | 107 (48.5)               |
| SHKE7000-1CE <sup>1,2,3</sup>    | 15–500 ±1 rpm           | 0.50 (1.27)       | 35 (15.9)             | 5°C Above Ambient to 65°C; ±0.2°C at 37°C in Flask | 25 (63.5)          | 21.5 (54.6) | 18 (45.7) | 240V, 50/60 Hz | 107 (48.5)               |

<sup>1</sup> CUL, <sup>2</sup> CE, <sup>3</sup> UL

\*Stainless-steel cover required to obtain higher temperatures of 90°C.

## Accessories

### UNIVERSAL PLATFORM

| Cat. No. | Description              |
|----------|--------------------------|
| 30105    | 11" x 13" (27.9 x 33 cm) |

### ACCESSORIES

| Cat. No.   | Description  |
|------------|--|
| SHK7000-37 | Cooling Coil for Near-Ambient Temperature and Below                      |
| SHK7000-30 | Stainless-Steel Gable Cover for Temperatures up to 90°C                  |
| SHK7000-32 | Plexiglas™ Gable Cover for Temperatures up to 65°C                       |
| SHK7000-35 | Plexiglas™ Gassing Hood for Addition of CO <sub>2</sub> into the Chamber |
| SHK7000-40 | Four Auxiliary Platform Suspension Arms for Rapid Platform Changes       |
| SHK7000-45 | Movable Dolly for Under Lab Bench Operation                              |
| SHK7000-48 | Mobile Cart  |

### CLAMPS FOR UNIVERSAL PLATFORM

| Cat. No. | Vessel Size                    | Maximum No. of Vessels per Platform 11 x 13 in. (27.9 x 33 cm) |
|----------|--------------------------------|--|
| 30175    | Microplate/Deep Well Plate     | 5  |
| 30150BI  | 10-ml Flask                    | 60   |
| 30151    | 25-ml Flask                    | 60   |
| 30152BI  | 50-ml Flask                    | 30   |
| 30153    | 125-ml Flask                   | 13   |
| 30154BI  | 250-ml Flask                   | 9  |
| 30155    | 300-ml Flask                   | 7  |
| 30156BI  | 500-ml Flask                   | 6  |
| 30157BI  | 1-L Flask                      | 4  |
| 30158    | 2-L Flask                      | 1  |
| 30159    | 4-L Flask                      | 1  |
| 30160    | 6-L Flask                      | 1  |
| 30161    | 2500-ml Low Form Culture Flask | 1  |
| 30162    | 2800-ml Fernbach Flask         | 1  |

### TEST-TUBE RACKS—FULL SIZE

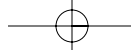
| Cat. No.           | Vessel Size                                 | No. of Racks per Platform 11 x 13 in. (27.9 x 33 cm) |
|--------------------|---|--|
| 30180BI            | 10–13 mm, Red, 6 x 12 Array                 | 3  |
| 30182 <sup>1</sup> | 14–16 mm, Orange, 6 x 12 Array              | 2  |
| 30184              | 17–20 mm, White, 4 x 10 Array               | 3  |
| 30186              | 21–25 mm, Blue 4 x 10 Array                 | 2  |
| 30188 <sup>2</sup> | 26–30 mm, Green, 3 x 8 Array                | 2  |
| 30190              | Microcentrifuge, 1.5 ml, Blue, 8 x 12 Array | 2  |

<sup>1</sup> Fits 15-ml centrifuge tubes. <sup>2</sup> Fits 50-ml centrifuge tubes.

### TEST-TUBE RACKS—HALF SIZE

| Cat. No.           | Vessel Size                                 | No. of Racks per Platform 11 x 13 in. (27.9 x 33 cm) |
|--------------------|---|--|
| 30181              | 10–13 mm, Red, 6 x 6 Array                  | 6  |
| 30183 <sup>1</sup> | 14–16 mm, Red, 6 x 6 Array                  | 4  |
| 30185              | 17–20 mm, White, 4 x 5 Array                | 4  |
| 30187              | 21–25 mm, Blue 4 x 4 Array                  | 4  |
| 30189 <sup>2</sup> | 26–30 mm, Green, 3 x 3 Array                | 6  |
| 30191              | Microcentrifuge, 1.5 ml, White, 4 x 6 Array | 4  |

<sup>1</sup> Fits 15-ml centrifuge tubes. <sup>2</sup> Fits 50-ml centrifuge tubes.



MaxQ 2508 Shaker  
Cat. No. SHKA2508



MaxQ 2506 Shaker  
Cat. No. SHKA2506



Note: MaxQ 2506 is not CE certified

## Thermo Scientific Dual Action Orbital and Reciprocating Shakers

### Choose Between Single Action Reciprocating or Dual Action Orbital/Reciprocating Shakers

#### Dual-Action Orbital/Reciprocating and Reciprocating Features

- Choice of three platforms increases capacity.
- Affordably priced.
- Variable speed control.
- Built-in timer for repeatable results.
- 24-month warranty.

#### Dual-Action Orbital/Reciprocating Features

- Ideal for growing bacteria, dissolution studies, staining of electrophoresis gels and extractions.
- Provides "back-and-forth" motion or circular orbital motion for versatility to cover a wide range of applications.
  - Fixed stroke length of 0.4 in. (1.2 cm).
  - Fixed circular orbit of 0.4 in. (1.2 cm).

#### Reciprocating Features

- Ideal for extractions, mixing blood samples and silver staining of polyacrylamide gels.
- Provides "back-and-forth" motion with an adjustable stroke length of 0.5 to 1.5 in. (1.2 to 3.8 cm).

#### Operation

- Operates in temperature ranges of 4 to 40°C and humidity conditions of 20 to 80% non-condensing, enabling them to be used in incubators, warm rooms, environmental chambers and refrigerators.

- Interchangeable 11 x 13 in. (27.9 x 33 cm); 18 x 18 in. (45.7 x 45.7 cm) or 18 x 24 in. (45.7 x 60.1 cm) shaking platforms are available to accommodate a variety of labware. (See Accessories.)
- On dual-action models, control lever changes shaking motion while unit is stationary or in operation.

#### Analog Operating System

- Variable speed control from 40 to 400 rpm (for dual action) and from 10 to 250 rpm (for reciprocating).
- Operate in continuous mode or set timer from 1 to 60 minutes.
- Metal-locking tab on the speed-control knob prevents speed from increasing or decreasing if control knob is mistakenly bumped.
- Load capacity is 15 lb. (6.8 kg).

#### Tiered Blood Bag Platform

- A five-tier aluminum platform assembly measuring 13L x 11W x 14H in. (33 x 27.9 x 35.6 cm).
- Distance between platforms is 3.25 in. (8.26 cm.)
- Each of the five platforms is equipped with a white ribbed vinyl mat.
- Mix contents of 10 x 10 in (25.4 x 25.4 cm) bags of platelets used in platelet phoresis applications.



Five-Tier Blood Bag Platform  
Cat. No. 3523-51



# Thermo Scientific Dual-Action Orbital and Reciprocating Shakers

## Ordering information

For a complete system order: 1. Shaker 2. Platform 3. Clamps

| Cat. No.                      | Description                                | Speed Range (rpm) | Orbit Diameter In. (cm)           | Maximum Load Lb. (kg) | Overall Dimensions In. (cm) |             |          | Power            | Shipping Weight Lb. (kg) |
|-------------------------------|--|-------------------|-----------------------------------|-----------------------|-----------------------------|-------------|----------|------------------|--------------------------|
|                               |  |                   |                                   |                       | Length                      | Width       | Height   |                  |                          |
| SHKA2508 <sup>1,3</sup>       | Dual-Action Orbital & Reciprocating Shaker | 40–400            | 0.4 (1.2)                         | 15 (6.8)              | 17.4 (44.2)                 | 13.5 (34.3) | 7 (17.8) | 120V<br>50/60 Hz | 38 (17.2)                |
| SHKA2508-1CE <sup>1,2,3</sup> | Dual-Action Orbital & Reciprocating Shaker | 40–400            | 0.4 (1.2)                         | 15 (6.8)              | 17.4 (44.2)                 | 13.5 (34.3) | 7 (17.8) | 240V<br>50/60 Hz | 38 (17.2)                |
| SHKA2506 <sup>1,3</sup>       | Reciprocating Shaker                       | 10–250            | Adjustable from 0.5–1.5 (1.2–3.8) | 15 (6.8)              | 17.4 (44.2)                 | 13.5 (34.3) | 7 (17.8) | 120V<br>50/60 Hz | 27 (12.3)                |
| SHKA2506-1 <sup>1,3</sup>     | Reciprocating Shaker                       | 10–250            | Adjustable from 0.5–1.5 (1.2–3.8) | 15 (6.8)              | 17.4 (44.2)                 | 13.5 (34.3) | 7 (17.8) | 240V<br>50/60 Hz | 27 (12.3)                |

<sup>1</sup> CUL, <sup>2</sup> CE, <sup>3</sup> UL

## Accessories

### DEDICATED PLATFORMS

| Cat. No. | Description  | Platform Size In. (cm)             |
|----------|--|------------------------------------|
| 3523-39  | Dedicated Separatory Funnel Platform 500 ml to 2 L (holds 2 funnels) | 11 x 13 (27.9 x 33)                |
| 3524-49  | Dedicated Separatory Funnel Platform 500 ml to 2 L (holds 3 funnels) | 18 x 18 (45.7 x 45.7)              |
| 3523-51  | Five-Tier Blood Bag Platform   | 13L x 11W x 14H (33 x 27.9 x 35.6) |

### UNIVERSAL PLATFORMS

| Cat. No. | Description                |
|----------|----------------------------|
| 30100    | 11" x 13" (27.9 x 33 cm)   |
| 30110    | 18" x 18" (45.7 x 45.7 cm) |
| 30106    | 18" x 24" (45.7 x 60.9 cm) |

### CLAMPS FOR UNIVERSAL PLATFORMS

| Cat. No. | Vessel Size                    | Maximum No. of Vessels per Platform (in.) |         |         |
|----------|--------------------------------|---|---------|---------|
|          |                                | 11 x 13                                   | 18 x 18 | 18 x 24 |
| 30175    | Microplate/ Deep Well Plate    | 5   | 10      | 15      |
| 30150BI  | 10-ml Flask                    | 60  | 113     | 157     |
| 30151    | 25-ml Flask                    | 60  | 64      | 80      |
| 30152BI  | 50-ml Flask                    | 30  | 32      | 40      |
| 30153    | 125-ml Flask                   | 13  | 32      | 40      |
| 30154BI  | 250-ml Flask                   | 9   | 16      | 23      |
| 30155    | 300-ml Flask                   | 7   | 16      | 20      |
| 30156BI  | 500-ml Flask                   | 6   | 16      | 20      |
| 30157BI  | 1-L Flask                      | 4   | 9       | 10      |
| 30158    | 2-L Flask                      | 1   | 6       | 4       |
| 30161    | 2500-ml Low Form Culture Flask | 1   | 1       | 2       |
| 30162    | 2800-ml Fernbach Flask         | 1   | 4       | 4       |

### TEST-TUBE RACKS—FULL SIZE

| Cat. No.           | Vessel Size                                 | No. of Racks per Platform (in.) |       |       |
|--------------------|---|---------------------------------|-------|-------|
|                    |   | 11x13                           | 18x18 | 18x24 |
| 30180BI            | 10–13 mm, Red, 6 x 12 Array                 | 3                               | 6     | 8     |
| 30182 <sup>1</sup> | 14–16 mm, Orange, 6 x 12 Array              | 2                               | 4     | 6     |
| 30184              | 17–20 mm, White, 4 x 10 Array               | 3                               | 5     | 6     |
| 30186              | 21–25 mm, Blue, 4 x 10 Array                | 2                               | 3     | 4     |
| 30188 <sup>2</sup> | 26–30 mm, Green, 3 x 8 Array                | 2                               | 4     | 6     |
| 30190              | Microcentrifuge, 1.5-ml, Blue, 8 x 12 Array | 2                               | 5     | 6     |

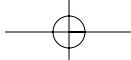
<sup>1</sup> Fits 15-ml centrifuge tubes. <sup>2</sup> Fits 50-ml centrifuge tubes.

### TEST-TUBE RACKS—HALF SIZE

| Cat. No.           | Vessel Size                                 | No. of Racks per Platform (in.) |       |       |
|--------------------|---|---------------------------------|-------|-------|
|                    |   | 11x13                           | 18x18 | 18x24 |
| 30181              | 10–13 mm, Red, 6 x 6 Array                  | 6                               | 12    | 15    |
| 30183 <sup>1</sup> | 14–16 mm, Red, 6 x 6 Array                  | 4                               | 6     | 8     |
| 30185              | 17–20 mm, White, 4 x 5 Array                | 4                               | 8     | 13    |
| 30187              | 21–25 mm, Blue, 4 x 4 Array                 | 4                               | 6     | 9     |
| 30189 <sup>2</sup> | 26–30 mm, Green, 3 x 3 Array                | 6                               | 9     | 12    |
| 30191              | Microcentrifuge, 1.5-ml, White, 4 x 6 Array | 4                               | 8     | 10    |

<sup>1</sup> Fits 15-ml centrifuge tubes. <sup>2</sup> Fits 50-ml centrifuge tubes.





### About Thermo Fisher Scientific, Inc.

Thermo Fisher Scientific, Inc. (NYSE: TMO) is the world leader in serving science, enabling our customers to make the world healthier, cleaner and safer. With an annual revenue rate of more than \$9 billion, we employ 30,000 people and serve over 350,000 customers within pharmaceutical and biotech companies, hospitals and clinical diagnostic labs, universities, research institutions and government agencies as well as environmental and industrial process control settings. Serving customers through two premier brands, Thermo Scientific and Fisher Scientific, we help solve analytical challenges from routine testing to complex research and discovery. Thermo Scientific offers customers a complete range of high-end analytical instruments as well as laboratory equipment, software, services, consumables and reagents to enable integrated laboratory workflow solutions. Fisher Scientific provides a complete portfolio of laboratory equipment, chemicals, supplies and services used in healthcare, scientific research, safety and education. Together, we offer the most convenient purchasing options to customers and continuously advance our technologies to accelerate the pace of scientific discovery, enhance value for customers and fuel growth for shareholders and employees alike. Visit [www.thermofisher.com](http://www.thermofisher.com)

Phone: 1-563-556-2241 or 1-800-553-0039

[www.thermo.com/maxq](http://www.thermo.com/maxq)

© 2007 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific Inc. and its subsidiaries. Specifications, terms and pricing are subject to change. Not all products are available in all countries. Please consult your local sales representative for details.

BRO-CEMAXQ-1008

0607 Lit. No. BRC1200

**Thermo**  
SCIENTIFIC





## Artisan Technology Group is your source for quality new and certified-used/pre-owned equipment

- FAST SHIPPING AND DELIVERY
- TENS OF THOUSANDS OF IN-STOCK ITEMS
- EQUIPMENT DEMOS
- HUNDREDS OF MANUFACTURERS SUPPORTED
- LEASING/MONTHLY RENTALS
- ITAR CERTIFIED SECURE ASSET SOLUTIONS

### SERVICE CENTER REPAIRS

Experienced engineers and technicians on staff at our full-service, in-house repair center

### *InstraView*<sup>SM</sup> REMOTE INSPECTION

Remotely inspect equipment before purchasing with our interactive website at [www.instraview.com](http://www.instraview.com) ↗

### WE BUY USED EQUIPMENT

Sell your excess, underutilized, and idle used equipment. We also offer credit for buy-backs and trade-ins. [www.artisanng.com/WeBuyEquipment](http://www.artisanng.com/WeBuyEquipment) ↗

### LOOKING FOR MORE INFORMATION?

Visit us on the web at [www.artisanng.com](http://www.artisanng.com) ↗ for more information on price quotations, drivers, technical specifications, manuals, and documentation

**Contact us:** (888) 88-SOURCE | [sales@artisanng.com](mailto:sales@artisanng.com) | [www.artisanng.com](http://www.artisanng.com)