## Thermo Fisher



Lab shakers

# Stack. Set.

Thermo Scientific<sup>TM</sup> IntelliStack<sup>TM</sup> Incubator Shakers and  $CO_2$  Incubator Shakers





## Experience next-level shaking versatility and control

Count on IntelliStack Incubator Shakers and  $CO_2$  Incubator Shakers to provide accurate, adjustable and reproducible growth conditions for your mammalian, bacterial and yeast culture and other applications. Whether you need one unit or multiple, you can customize your setup according to your workflow requirements and processing volume as your needs evolve.



#### Easy-to-use design

Effortlessly load and unload consumables with the convenient slide-out platform and clearly view your samples with LED interior lighting. Bidirectional UV lighting, rounded corners and a mirror-finish stainless-steel interior chamber make for easy cleaning. The sealed access port on the left side of every unit enables the addition of equipment, sensors, tubing or cables.



#### Large capacity

The spacious interior chamber and large  $35 \times 22$  in. platform hold up to eight 5 L shaker flasks when using adhesive mats and are compatible with a variety of accessories.



#### Intuitive touchscreen display

With an intuitive touchscreen interface, precision, control and confidence are at your fingertips. Easily program customized protocols and experiments and monitor the incubation process in real time.



#### **Reliable sample protection**

A steam generator and carboy kit (sold separately) let you control humidity, while a calibration system, thermal protection switches and parameter alarms provide reliable sample protection. You may also store, retrieve and analyze run data through the touchscreen interface and control user access for enhanced security.



#### Efficient and quiet operation

Gentle shaking ramp up and ramp down helps minimize cell damage. An insulated chamber design with hydrocarbon refrigeration enables improved energy efficiency and quiet operation.

## Convenience, precision and programming at your fingertips

IntelliStack Incubator Shakers and  $CO_2$  Incubator Shakers will help streamline your workflow and provide peace of mind that your results are reliable and reproducible.

**Ease of use:** The 10-inch color touchscreen interface is intuitive and user-friendly, allowing for easy control and adjustment of parameters such as temperature, speed,  $CO_2$  and humidity. All parameters can be viewed, set, started and stopped from the main screen.

**Real-time monitoring:** The smart system shares information in real time, allowing users to see both the set value and current value for each parameter. This enables better monitoring and control of the incubation process to help ensure optimal conditions for experimentation and sample growth.

**Programmability:** From the home screen, you can create and program customized protocols with up to 12 steps. This flexibility allows for precise control over incubation time, temperature and speed, helping ensure reproducibility and accuracy. You can also operate in Manual mode for continuous or timed operation.

**Customizable programming:** Users can easily retrieve run data, alarm history and operation logs in PDF or CSV format.

**User access control:** With this feature, you can assign different levels of access for authorized personnel to enhance security and enable only authorized individuals to make changes to critical parameters.

### Operating Value: Norn 3 ·ò: 🗱 Temp 37.0 St °C 22 $\mathbf{C}$ Speed 225 St **RPM** CO2 5.0 % St Humidity **(**)<sup>4</sup> 8 85.0 % St Mode: Manual Time left: Timed mode: Set time: Change mode

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Stop

## Easy-to-use features

#### **Humidity control**

- Steam generator actively humidifies the shaking chamber with the addition of the carboy kit
- The platform and chamber feature an integrated drainage system that can be connected when the shakers are stacked

#### Access port

• Standard on the left side of every unit

#### Slide-out platform

• Load and unload with ease by using the handle to pull out the platform at the front of the unit; the locking handle helps ensure the platform will stay in place during operation

#### Connectivity

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• USB, ethernet or RS485

#### Easy cleaning

- Bidirectional UV light
- Rounded corners

#### **LED** interior lighting

• Enhance visibility so you can check on your shaking samples without opening the door

#### Quiet and efficient operation

- Gentle acceleration and deceleration to minimize damage to your cells
- Foamed insulation and inverter compressor help ensure temperature uniformity, improved energy efficiency and quiet operation





## Protect your hard work

Proper sample protection is vital in scientific and production settings to maintain sample integrity, viability and accuracy. By protecting samples from damage or loss, you can reduce the need for repeat experiments and save time and resources.

#### InteliStack sample protection features include:

- Parameter alarms: Speed, temperature, %RH, CO<sub>2</sub>, communication, no gas
- Parameter calibration: Temp, %RH, CO<sub>2</sub>
- Thermal protection switches: Protect from high power input
- Overheating shutdown: Prevents runaway heating element
- Door monitoring: Shaking stops automatically when the door is open





## Reliable, versatile units for enhanced cell growth

When your cell cultures depend on consistent and reliable results, count on IntelliStack Incubator Shakers. To meet your specific cell requirements, they're available in CO<sub>2</sub> and non-CO<sub>2</sub> gassing versions. By providing precise visibility into and control over environmental conditions, IntelliStack Shakers will enable your samples to thrive.

#### **Convenient operation**

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The advanced features of IntelliStack Incubator Shakers include intuitive touchscreen control, programmability, alarms and data logging capabilities, and precision monitoring and parameter management. Additionally, the user-friendly design with easy-to-clean surfaces enables convenient operation and maintenance.

#### Flexibility for your applications

You can purchase IntelliStack Incubator Shakers in various configurations including CO<sub>2</sub> or non-CO<sub>2</sub> control, 25 mm or 50 mm orbit, and upswing or downswing door orientations to meet your needs. IntelliStack Shakers can accommodate different vessel types and sizes and various applications, including cell culture, protein expression and enzyme reactions.

#### **Optimize cell growth**

By providing precise control over  $CO_2$  levels, IntelliStack  $CO_2$  Incubator Shakers create an environment that simulates physiological conditions to promote optimal cell growth and viability. If your work requires customized  $CO_2$  concentration profiles, you can rely on the unit's internal infrared (IR) sensors to maintain stable, uniform and consistent environmental parameters.

## IntelliStack Incubator and CO<sub>2</sub> Incubator Shaker specifications

#### **Product details**

Orbit (mm)	25	50
Speed range	30 to 350 ±1 rpm	30 to 300 ±1 rpm
Temperature range	4 to 60°C	
Temperature accuracy	0.1°C	
Temperature uniformity at 37°C	±0.3°C	
Temperature recovery time at 37°C	≤6 min	
CO <sub>2</sub> control range*	0 to 20%	
CO <sub>2</sub> display accuracy*	0.1%	
CO <sub>2</sub> control accuracy*	±0.2%	
CO <sub>2</sub> recovery time*	≤6 min	
$\mathrm{CO}_{_2}^{*}$ and humidity sensor	IR	
Humidity range	Ambient RH + 10% to 90% RH	l
Platform dimensions	35.4 x 22.0 in. (900 x 560 m	m)
Max load	20 kg	
Noise level	≤60 dB	
Internal dimensions (W $\times$ D $\times$ H)	39.6 x 27.2 x 13.7 in. (1005 x	: 690 x 347 mm)
External dimensions (W $\times$ D $\times$ H)	55.1 x 34.9 x 26.8 in. (1400 x	x 886 x 680 mm)
Net weight	683.4 lb. or 310 kg	
Interior lighting	Bidirectional UV and LED	

\*Only applicable with IntelliStack CO<sub>2</sub> Incubataor Shaker Models

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## IntelliStack Incubator Ordering information

#### IntelliStack Incubator Shaker

Orbit (mm)	25	25	50	50
Voltage	120V, 50/60 Hz	220V, 50/60 Hz	120V, 50/60 Hz	220V, 50/60 Hz
Catalog number, downswing door	8882610D	8882620D	8885010D	8885020D
Catalog number, upswing door	8882610U	8882620U	8885010U	8885020U

#### IntelliStack CO<sub>2</sub> Incubator Shaker

Orbit (mm)	25	25	50	50
Voltage	120V, 50/60 Hz	220V, 50/60 Hz	120V, 50/60 Hz	220V, 50/60 Hz
Catalog number, downswing door	8892610D	8892620D	8895010D	8895020D
Catalog number, upswing door	8892610U	8892620U	8895010U	8895020U



## Mix and match your stack for success

You can maximize your laboratory space and footprint by stacking up to **three IntelliStack units**, regardless of their type or orbit. The versatility of IntelliStack allows for different combinations based on your specific application needs.

#### Add units at your convenience

You have the flexibility of adding new IntelliStack units at your convenience. You can start by purchasing one unit now and easily adding one or two more later.

#### Fit high liquid volumes in the spacious interior

Each IntelliStack unit has a spacious loading platform and interior chamber. When three units are stacked together,

you can accommodate up to 120 500 mL shaker flasks, 45 2 L shaker flasks, or 24 5 L shaker flasks when used with adhesive mats.

#### Only need one or two units?

If you only require one or two units, you can use the optional 34 cm stand (sold separately). The IntelliStack stand allows for operation at a more ergonomic height. Stands come with either open or closed frame options.



## Accessories for maximizing performance

IntelliStack Incubator Shakers and IntelliStack CO<sub>2</sub> Incubator Shakers are compatible with a wide variety of clamps, racks, mats and more. All accessories are sold separately.

Visit thermofisher.com/intellistack to view the most current list of options.

#### Flask clamp

Size	Max quantity	Cat. no.
25 mL	134	88881135
50 mL	134	88881105
100 mL	60	88881106
150 mL	60	88881107
200 mL	60	88881108
250 mL	60	88881109
500 mL	32	88881110
1,000 mL	22	88881111
2,000 mL	15	88881112
3,000 mL	12	88881113
5,000 mL	6	88881114

#### Microplate holder

Size	Max quantity	Cat. no.
96 well	30	88881124

#### Adjustable tube rack

Size	Max quantity	Cat. no.
40 x 14 mm	9	88881120
40 x 16 mm	9	88881137
40 x 18 mm*	9	88881138
27 x 22 mm	9	88881139
24 x 30 mm**	6	88881141
21 x 30 mm**	9	88881140

#### Infusion media bottle clamp

Size	Max quantity	Cat. no.
500 mL	40	88881115
1,000 mL	28	88881116

#### Separatory funnel clamp

Size	Max quantity	Cat. no.
NA	4	88881117

#### **Fixed tube rack**

Size	Max quantity	Cat. no.
40 x 14 mm	9	88881118
40 x 16 mm	9	88881119
40 x 18 mm*	9	88882118
27 x 22 mm	9	88881136
21 x 30 mm**	9	88882119

#### Spring platform

Size	Max quantity	Cat. no.
900 x 540 x 80 mm	1	88881142
720 x 440 x 80 mm	1	88881143
350 x 240 x 80 mm	4	88881144
450 x 400 x 80 mm	1	88881145
428 x 295 x 80 mm	2	88881146

#### Adhesive mat

Size	Adhesion	Max speed	Cat. no.
140 x 140 mm	Normal	225 rpm	88881126
200 x 200 mm	High	400 rpm	75004126
280 x 170 mm	High	400 rpm	75004127
200 x 200 mm	Low	200 rpm	75004111
280 x 170 mm	Low	200 rpm	75004117
230 x 230 mm	Normal	250 rpm	300349

#### Stand, humidity kit and window cover

Accessory	Description	Cat. no.
Stand, open frame	Stand for use with single or double IntelliStack Shakers with open frame	88900000
Stand, closed frame	Stand for use with single or double IntelliStack Shakers with closed frame	88900003
Carboy kit	Carboy kit for use with electronic humidity control	88900001
Window cover	Front window cover for light-sensitive applications	88900002

\*Compatible with 15 mL conical tubes \*\*Compatible with 50 mL conical tubes

## Services and support

When you invest in Thermo Scientific<sup>™</sup> IntelliStack<sup>™</sup> Incubator Shakers and CO<sub>2</sub> Incubator Shakers, you not only benefit from top-notch product performance, you can also enjoy worldclass service solutions from Unity<sup>™</sup> Lab Services, part of Thermo Fisher Scientific. Their comprehensive service portfolio was designed to meet the needs of your lab—everything from start-up to maintenance and repair to compliance support.

#### **Equipment service plans**

Unity Lab Services service plans help maximize uptime and maintain peak performance. Customers with service plans enjoy 2x faster on-site response times compared to those without a plan.

#### **On-demand services**

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Take advantage of flexible services that are available to access when you need them.

- Start-up services: Let factory-trained field service engineers make sure you're set up for success from installation day onward
- Compliance services: Stay audit-ready with installation qualification, operational qualification and performance testing (temperature mapping)
- Preventive maintenance: Extend the life of your equipment; typical procedures include general inspection and cleanup, replacement of worn parts, general performance testing, tuning and more

To learn more about services and view ordering information, see our flyer at thermofisher.com/shakersservicesflyer

Learn more at thermofisher.com/intellistack

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