DATA SHEET

# Nunc Cell Factory Incubator

#### An incubation unit designed for Cell Factory systems

Achieve process consistency with the Thermo Scientific<sup>™</sup> Nunc<sup>™</sup> Cell Factory<sup>™</sup> Incubator. Mitigate the risk of spillage from moving full cell factories. Easily load and unload carts with the convenient floor height. Designed to seamlessly accommodate four racks of 10- or 40-layer Nunc Cell Factory systems.

#### **Features and benefits**

- Can handle forty-eight 10-layer or sixteen 40-layer standard Nunc Cell Factory systems (forty-eight 13-layer or sixteen 52-layer Nunc High Density Cell Factory systems)
- Available with and without CO<sub>2</sub> control (0–20% CO<sub>2</sub>)
- Optional CO<sub>2</sub> sensor with infrared technology
- Equipped with warning and alarm systems
- Temperature control from 7°C to 50°C
- Incubator cabinet and interior made of 316L stainless-steel for easy cleaning
- Can be part of a closed-system workflow



### Designed to work seamlessly with:

- Thermo Scientific<sup>™</sup> Nunc<sup>™</sup> Cell Factory<sup>™</sup> racks and carts
- Thermo Scientific<sup>™</sup> Nunc<sup>™</sup> Cell Factory<sup>™</sup> Shaker System
- Thermo Scientific<sup>™</sup> Nunc<sup>™</sup> Automated Cell Factory Manipulator (ACFM)



#### Nunc Cell Factory Incubator design features and options

- 1. Mains fuses
- 2. Key-operated main switch
- 3. Temperature controller
- 4. Over-temperature controller
- 5. Over-temperature indicator

- 6. Alarm buzzer
- 7. "Quit" push button for alarm buzzer
- 8. Push button for lighting
- 9. CO<sub>2</sub> controller (optional)



Front view

# **Design specifications**

Front view





## **Nunc Cell Factory Incubator**

Specifications	
Construction	1.4404 (AISI 316L) stainless steel
Footprint (W x D x H)	186 x 118.5 x 148.9 cm (73.23 x 46.65 x 58.62 in.)
Unit weight	600 kg (1,322.8 lb)
Load capacity	600 kg (1,322.8 lb)
Rated voltage	208–240 V, single phase, 50/60 Hz
Rated power	1.25 kVA at 230 V
Current draw	5.4 A at 230 V
Range	7°C above ambient to 50°C
Uniformity	±0.6°C at 37°C
Power consumption	320 Wh/h at 37°C operation
Temperature control sensor	Pt 100 sensor
	• CO <sub>2</sub> control: 0–20% CO <sub>2</sub>
	<ul> <li>CO<sub>2</sub> consumption at 5% CO<sub>2</sub>: approximately 1,000 L/day</li> </ul>
Optional	<ul> <li>CO<sub>2</sub> flow rate: approximately 15 L/min</li> </ul>
	<ul> <li>CO<sub>2</sub> connection: 3 m PVC hose, hose clamps, fittings</li> </ul>
	• $\text{CO}_2$ line sterile filter separation rate: 99.998% particle size 0.3 $\mu\text{m}$
Declaration of conformity	
EC machinery directive	2014/35/EC
EC electromagnetic compatibility directive	2014/30/EC
Ambient temperature range	
Lower limit temperature	5°C above ambient
Upper limit temperature	40°C above ambient
Relative humidity	<80%
System sound pressure level	<60 dB(A)

#### Accessories

#### Nunc Standard Cell Factory systems

Obtain faster results and lot-to-lot consistency with Nunc Cell Factory systems. A proven solution for large-scale production of cells, vaccines, and therapeutic proteins, these systems have the same growth kinetics as laboratory-scale cell culture products. The ports of the system make it easy to customize and close, with custom tubing assemblies that facilitate venting, filling, and harvesting; available in 1-, 2-, 4-, 10-, and 40-tray versions.



#### **Standard Cell Factory systems**

Sterile polystyrene chambers with Thermo Scientific<sup>™</sup> Nunclon<sup>™</sup> Delta

No. of layers	Cell culture area	Nominal dimensions (L $x$ W $x$ H)	Quantity	Cat. No.
1	632 cm <sup>2</sup>	335 x 205 x 35 mm (13.2 x 8.1 x 1.4 in.)	Case of 8	165250
2	1,264 cm <sup>2</sup>	335 x 205 x 53 mm (13.2 x 8.1 x 2.1 in.)	Case of 6	167695
4	2,528 cm <sup>2</sup>	335 x 205 x 87 mm (13.2 x 8.1 x 3.4 in.)	Case of 10	140004
10	6,320 cm <sup>2</sup>	335 x 205 x 190 mm (13.2 x 8.1 x 7.5 in.)	Case of 2	164327
10	6,320 cm <sup>2</sup>	335 x 205 x 190 mm (13.2 x 8.1 x 7.5 in.)	Case of 6	170009
40	25,280 cm <sup>2</sup>	335 x 205 x 698 mm (13.2 x 8.1 x 27.5 in.)	Case of 2	139446

### Each Nunc Cell Factory system includes a set of:

White Tyvek<sup>™</sup> filter adaptor caps (Cat. No. 167525)







#### Nunc High Density Cell Factory systems

Thermo Scientific<sup>™</sup> Nunc<sup>™</sup> High Density Cell Factory systems provide a simple solution for increasing cell culture yields. With their additional layers, the Nunc High Density Cell Factory systems are designed to optimize your process by increasing your output, while maintaining the same manufacturing footprint as that of the standard Nunc Cell Factory system.



### Nunc High Density Cell Factory systems

Sterile polystyrene chambers with Nunclon Delta surface.

No. of layers	Cell culture area	Nominal dimensions (L x W x H)	Quantity	Cat. No.
3	1,896 cm <sup>2</sup>	333 x 204 x 54 mm (13.1 x 8.0 x 2.1 in.)	Case of 4	169160
13	8,216 cm <sup>2</sup>	333 x 204 x 186 mm (13.1 x 8.0 x 7.3 in.)	Case of 3	169118
52	32,864 cm <sup>2</sup>	333 x 204 x 698 mm (13.1 x 8.0 x 27.5 in.)	Case of 1	169102

## Nunc EasyFill Cell Factory systems

Thermo Scientific<sup>™</sup> Nunc<sup>™</sup> EasyFill<sup>™</sup> Cell Factory<sup>™</sup> systems are an out-of-the-box, multilayer solution, as easy to use as a T-flask. Scale up with confidence. These systems feature our certified Nunclon Delta cell culture surface, which is available on most Nunc cell culture products to assure consistent performance from lot to lot and from format to format.



#### Nunc EasyFill Cell Factory systems

Sterile polystyrene chambers with Nunclon Delta surface.

No. of trays	Cell culture area	Nominal dimensions (L x W x H)	Quantity	Cat. No.
1	632 cm <sup>2</sup>	335 x 205 x 35 mm (13.2 x 8.1 x 1.4 in.)	Case of 6	140000
2	1,264 cm <sup>2</sup>	335 x 205 x 53 mm (13.2 x 8.1 x 2.1 in.)	Case of 6	140250
4	2,528 cm <sup>2</sup>	335 x 205 x 87 mm (13.2 x 8.1 x 3.4 in.)	Case of 4	140360
10	6,320 cm <sup>2</sup>	335 x 205 x 190 mm (13.2 x 8.1 x 7.5 in.)	Case of 2	140400
10	6,320 cm <sup>2</sup>	335 x 205 x 190 mm (13.2 x 8.1 x 7.5 in.)	Case of 6	140410
40	25,280 cm <sup>2</sup>	335 x 205 x 698 mm (13.2 x 8.1 x 27.5 in.)	Case of 2	140440

#### **Nunc Cell Factory system accessories**

Nunc Cell Factory accessories support the use of aseptic methods for fluid handling relating to filling, inoculation, feeding, and harvesting procedures of the Nunc Cell Factory system. These accessories enable the further development of applications requiring a more closed cell culture system, reducing the number of open interventions.

#### **Key features**

- Connect media bag or tubing set to any Nunc Cell Factory system for enhanced aseptic connectivity for filling and harvesting
- Prevent buildup of back pressure during filling
- Venting options provide additional air venting when filling and harvesting by gravity or with a peristaltic pump





# Nunc Cell Factory racks and carts

# Integration with all Nunc Cell Factory equipment

Easily store and transport Nunc Cell Factory systems safely and efficiently using Nunc Cell Factory Racks and Carts. Each rack can hold up to four Nunc Cell Factory 40-layer systems or twelve Nunc Cell Factory 10-layer systems. Racks and carts are designed to integrate perfectly with all Nunc Cell Factory equipment, adding consistency to and streamlining your process.

#### **Features**

- Can handle twelve 10-layer or four 40-layer standard Nunc Cell Factory systems (twelve 13-layer or four 52-layer Nunc High Density Cell Factory systems)
- Optional tubing clamp for 13.5 mm or 16 mm OD tubing
- Designed for use in clean room environments
- · Side-loading design for easy loading and unloading
- Made of 316L stainless steel for easy cleaning
- Movable rack designed to come off from cart and interact seamlessly with other Nunc Cell Factory equipment
- Cart for Nunc Cell Factory 40-layer system can accommodate other layered adherent cell culture systems
- Cart for Nunc Cell Factory 10-layer system carts can be customized to accommodate other layered adherent cell culture systems



#### **Nunc Cell Factory Racks and Carts**

Specifications		
Footprint (W x D x H)	103.5 x 36 x 96.6 cm (40.7 x 14.2 x 38 in.)	
Construction	1.4404 (AISI 316L) stainless steel	
Unit weight	65 kg (143.3 lb)	
Load capacity	60 kg (12 Nunc Cell Factory 10-layer systems) 80 kg (4 Nunc Cell Factory 40-layer systems)	

#### Integrates with:

- Nunc Cell Factory Incubator
- Nunc ACFM
- Nunc Cell Factory Shaker
- Nunc Cell Factory Hand Manipulator Systems
- Fluid transfer assemblies

# thermo scientific

## **Ordering information**

Description	Cat. No.
Nunc Cell Factory Incubator	
Nunc Cell Factory Incubator, Gen 5, 208–240 V, 50/60 Hz, single phase	120100
Nunc Cell Factory Incubator, with CO <sub>2</sub> control, Gen 5, 208–240 V, 50/60 Hz, single phase	120300
Nunc Cell Factory racks and c arts	
Side Loading Rack with Cart for 40-layer Nunc Cell Factory system and 52-layer Nunc High Density Cell Factory systems	140503
Side Loading Rack with Cart for 10-layer Nunc Cell Factory system and 13-layer Nunc High Density Cell Factory systems	140504
Retrofit Clamping Kit for Racks for Use with Shaker	120289

# Find out more at thermofisher.com/cfequipment



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