

# **SmartDRY**<sup>TM</sup>



www.ecd.com

The award-winning SmartDRY<sup>TM</sup> desiccant dry cabinet offers the ideal low relative humidity (RH) environment for storage of 3D/additive filament materials. Spooled filament moisture uptake through improper handling and storage can cause issues within the 3D printing equipment (foaming and oozing), as well as defects in finished parts due to diminished mechanical properties induced by hydrolytic degradation.

Storage in a SmartDRY<sup>TM</sup> cabinet ensures a controlled environment for protection of filament materials. With a fast recovery performance of less than three minutes, SmartDRY<sup>TM</sup> helps maintain ongoing product integrity while allowing frequent filament access without adverse humidity impact. The system is fully network-compatible with mobile connectivity, accessible from any networked device and integrates with data-driven smart factory Industry 4.0 processes.

Interior LED lighting status indicators provide on-command bright white illumination for product viewing, while green, yellow and red lights [Compliant (Green), Working (Yellow), and Alert (Red)] reveal cabinet readiness ataglance.









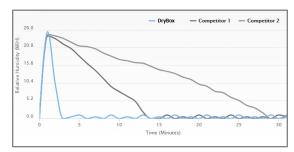






#### **Fast Recovery Time**

Among fastest recovery times (<3 min.) on the market provides constant access to stored fillament. Exceptional, self-regulating drying technology allows assembly specialists to retrieve critical moisture-sensitive filament from dry storage as many as 10 to 12 times per hour. That's more than twice the access of competitive dry cabinets.



Recovery Rate Comparison

### **Exceptional Quality**

Designed and quality-built in the U.S.A.



#### **Network Capable**

Industry 4.0 Ready - Integrated SmartDRY™ network capability tracks performance and events from one or many SmartDRY™ storage cabinets. Access dry storage data 24/7 from any internet-enabled device.



Standard feature for all Models

### **Intelligent Light Status**

Immediate visual confirmation of dry storage status means no more guessing about cabinet readiness. A simple glance at SmartDRY™ and its green, amber or red interior lighting tells operators if the unit can be accessed. It's simple, effective and smart. An optional light tower can be integrated for visual status confirmation from across the factory floor.







### **Display**

#### **4.3" TFT LCD**

Full color HD touch screen display makes controlling SmartDRY $^{\rm TM}$  easier than ever before.

#### Easy-to-use

Quick access to all control functions:

- · Light and Mute Alarm
- Modes: SmartDRY™ and SmartBAKE™
- Graph: RH and Temperature Histogram









### SmartBAKE™ (Model 3D-10SB)

Integrated bake feature available. Adjust max temperature (40-60°C), humidity and time. Unlike traditional standalone baking ovens the 3D-10SB with baking option is still a dry cabinet and will not re-expose your components to humidity once the bake cycle is over.

#### **Features**



#### Restores floor life

SmartDRY $^{\text{TM}}$  maintains safe storage thru controlled humidity during SmartBAKE $^{\text{TM}}$ 



#### Flexible bake cycle programming

Manually set temperature, humidity and time



#### Maximizes the SmartDRY™ investment

Combines storage and bake-out in a single, compact footprint







### 3D-10

The 3D-10 has storage capacity of 283 liters (10 cu ft - 2 doors, floor shelf & 2 Reel Racks) in a 45"H x 20"W x 30"D footprint and offers built-in network capability and a user friendly TFT LCD control display.

- SmartDRY™ Cabinet
- Floor Shelf
- · 2 Reel Racks
- Users Guide
- Quick Reference Guide
- Warranty (2 Years)

Part Number E62-3310-00 | E62-3310-05

Doors

**Door Opening** 18.0"W x 17.5"H



### 3D-10SB

This 3D-10SB includes SmartBAKETM which incorporates a powerful heater and insulation for baking out filament. It has storage capacity of 283 liters (10 cu ft - 2 doors, floor shelf & 2 Reel Racks) in a 45"H x 20"W x 30"D footprint and offers built-in network capability and a user friendly TFT LCD control display.

- SmartDRY™ Cabinet
- SmartBAKE™ (40-60°C bake heater)
- Floor Shelf
- 2 Reel Racks
- Users Guide
- Quick Reference Guide
- Warranty (2 Years)

Part Number E62-3310-10 | E62-3310-15

Doors

**Door Opening** 18.0"W x 17.5"H





### 3D-30

The 3D-30 has storage capacity of 850 liters (30 cu ft- 6 doors, floor shelf & 6 Reel Racks) in a 70"H x 40"W x 30"D footprint and offers built-in network capability and a user friendly TFT LCD control display.

- SmartDRY™ Cabinet
- 2 Floor Shelves
- 6 Reel Racks
- Users Guide
- Quick Reference Guide
- Warranty (2 Years)

Part Number E62-3330-00 | E62-3330-05

Doors

**Door Opening** 18.0"W x 17.5"H



### 3D-30XD

The 3D-30XD has storage capacity of 850 liters (30 cu ft) with 2 tall doors facilitate easy accessibility for filament racks in a 70 $^{\circ}$ H x 40 $^{\circ}$ W x 30 $^{\circ}$ D footprint and offers built-in network capability and a user friendly TFT LCD control display.

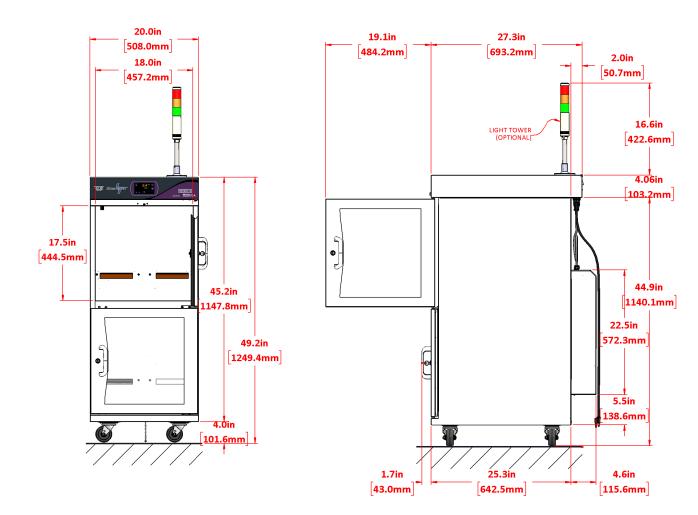
- SmartDRY™ Cabinet
- 2 Floor Shelves
- 6 Reel Racks
- Users Guide
- Quick Reference Guide
- Warranty (2 Years)

Part Number E62-3339-00 | E62-3339-05

Doors

**Door Opening** 18.0"W x 57.25"H

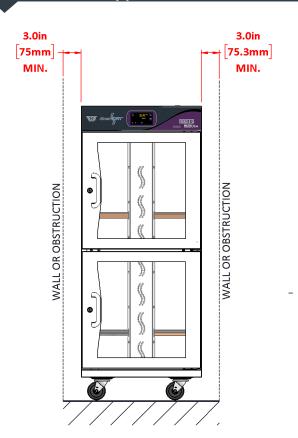
# 3D-10/3D-10SB Technical Data & Specifications

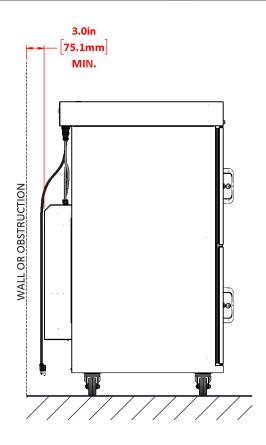


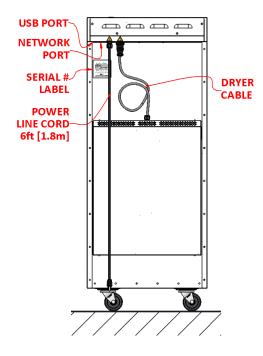
Specification	Value	Specification	Value
External Dimensions (H x W x D)	1143 mm x 508 mm x 762 mm (45" x 20" x 30")	Recovery Time	< 3 minutes
Internal Dimension (H x W x D)	985 mm x 479 mm x 540mm (38.8" x 18.8" x 21.2")	Power Consumption (Average)	10W Standby, 450W Max., 15W/Hr Ave. (1050W Peak w/ SmartBAKE Option)
Internal Capacity	283 liters (10 cu ft)	Display Resolution (RH/Temp)	0.1% / 0.1°C (0.1°F)
Number of Shelves/Racks	1 Floor Shelf & 2 Reel Racks	Accuracy (RH/Temp)	± 1.8% / ± 1°C (1.8°F)
Maximum Shelf Capacity	22 kg (50 lbs)	Casters	76.2 mm (3" ) Diameter
Maximum Cabinet Capacity	68 kg (150 lbs)	Cabinet Weight	< 70 kg (154 lbs)



## 3D-10/3D-10SB Installation Requirements







#### **Power Source**

The power requirements are listed on the cabinet serial number label. (230V 1ph, 50/60Hz or 120V 1ph 50/60Hz).

Position the unit to allow user access to the power cord for mains disconnect.

#### Location

Allow a minimum of 75 mm (3") between the unit and any walls or obstrutions which might block free air flow.

#### Avoid:

- Heat from radiators, ovens / production equipment
- Steam / Moisture
- · Direct Sunlight
- Fast-moving air currents
- · Heating/Cooling ducts



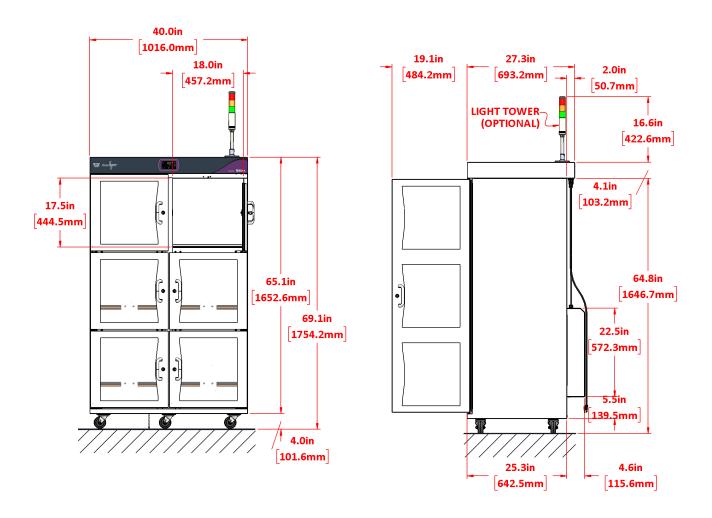






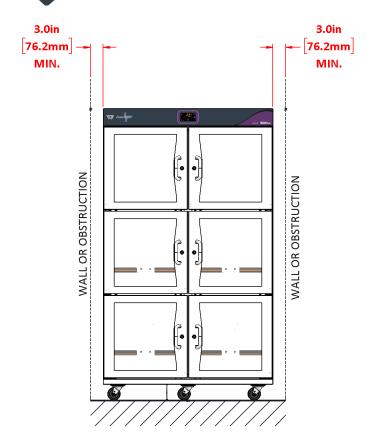


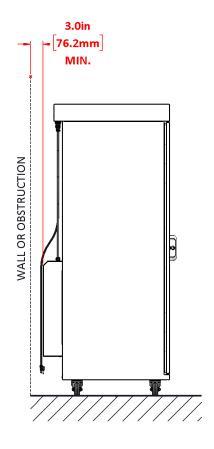


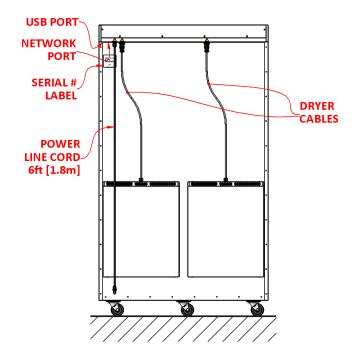


Specification	Value	Specification	Value
External Dimensions (H x W x D)	1778mm x 1016mm x 762mm (70" x 40" x 30")	Recovery Time	< 4 minutes
Internal Dimension (H x W x D)	1500mm x 990mm x 540mm (59" x 38.9" x 21.2")	Power Consumption (Average)	25W Standby, 850W Max., 30 W/Hr Average
Internal Capacity	850 liters (30 cu ft)	Display Resolution (RH/Temp)	0.1% / 0.1°C (0.1°F)
Number of Shelves/Racks	2 Floor Shelves & 6 Reel Racks	Accuracy (RH/Temp)	± 1.8% / ± 1°C (1.8°F)
Maximum Shelf Capacity	22 kg (50 lbs)	Casters	76.2 mm (3" ) Diameter
Maximum Cabinet Capacity	113 kg (250 lbs)	Cabinet Weight	< 163kg (360 lbs)









#### **Power Source**

The power requirements are listed on the cabinet serial number label. [230V 1ph, 50/60Hz or 120V 1ph 50/60Hz].

Position the unit to allow user access to the power cord for mains disconnect.

#### Location

Allow a minimum of 75 mm (3") between the unit and any walls or obstrutions which might block free air flow.

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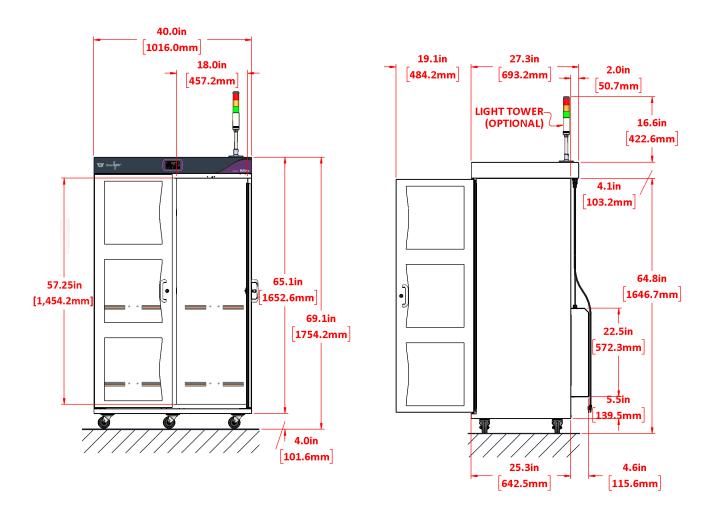






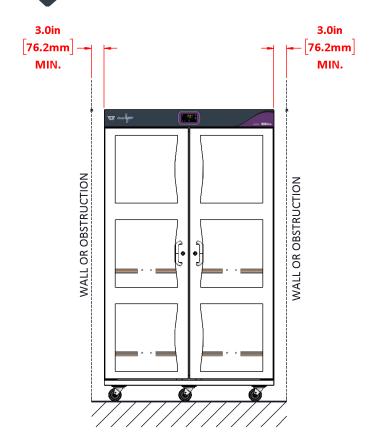


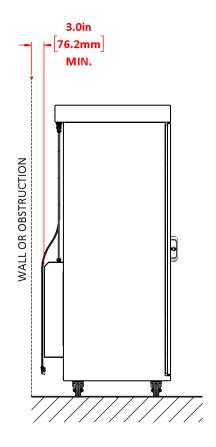


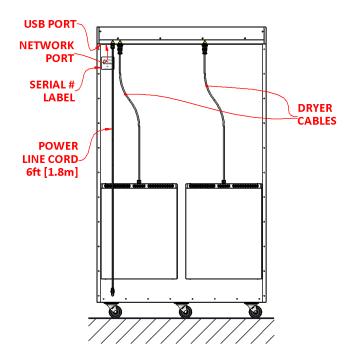


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#### Shelf & Rack Options



Fixed

### Filiment Reel Rack

- Vertical storage filament reels on one rack
- Three rows of up to 24 reels each for up to 72 reels (8mm wide tape)
- Fixed width reel supports at 48mm (1.9") inside dimension

Part Number

Dimension (wide x deep)

**Fits** 

E60-3233-23-100

17.85" x 20.8" (424mm x 528mm)

3D-10, 3D-10SB, 3D-30, 3D-10XD

#### **Cabinet Options**



# **Light Alarm Tower**

While the cabinet comes standard with a unique interior lighting system to indicate the
cabinet's status, a light alarm tower can be added for additional visibility. For situations
where the cabinet status requires confirmation from across the factory floor or from
the rear of the system, the light alarm tower provides a 360° view.

Part Number

Colors:

**Fits** 

E55-7379-74

Red, Yellow, Green

3D-10, 3D-10SB, 3D-30, 3D-10XD



### **Combination Door Locks**

 Secure keyless entry functionality eliminates worry about lost keys or non-authorized access.

Part Number

Dials:

**Fits** 

P57-7850-34

3 (Resettable)

3D-10, 3D-10SB, 3D-30, 3D-10XD



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