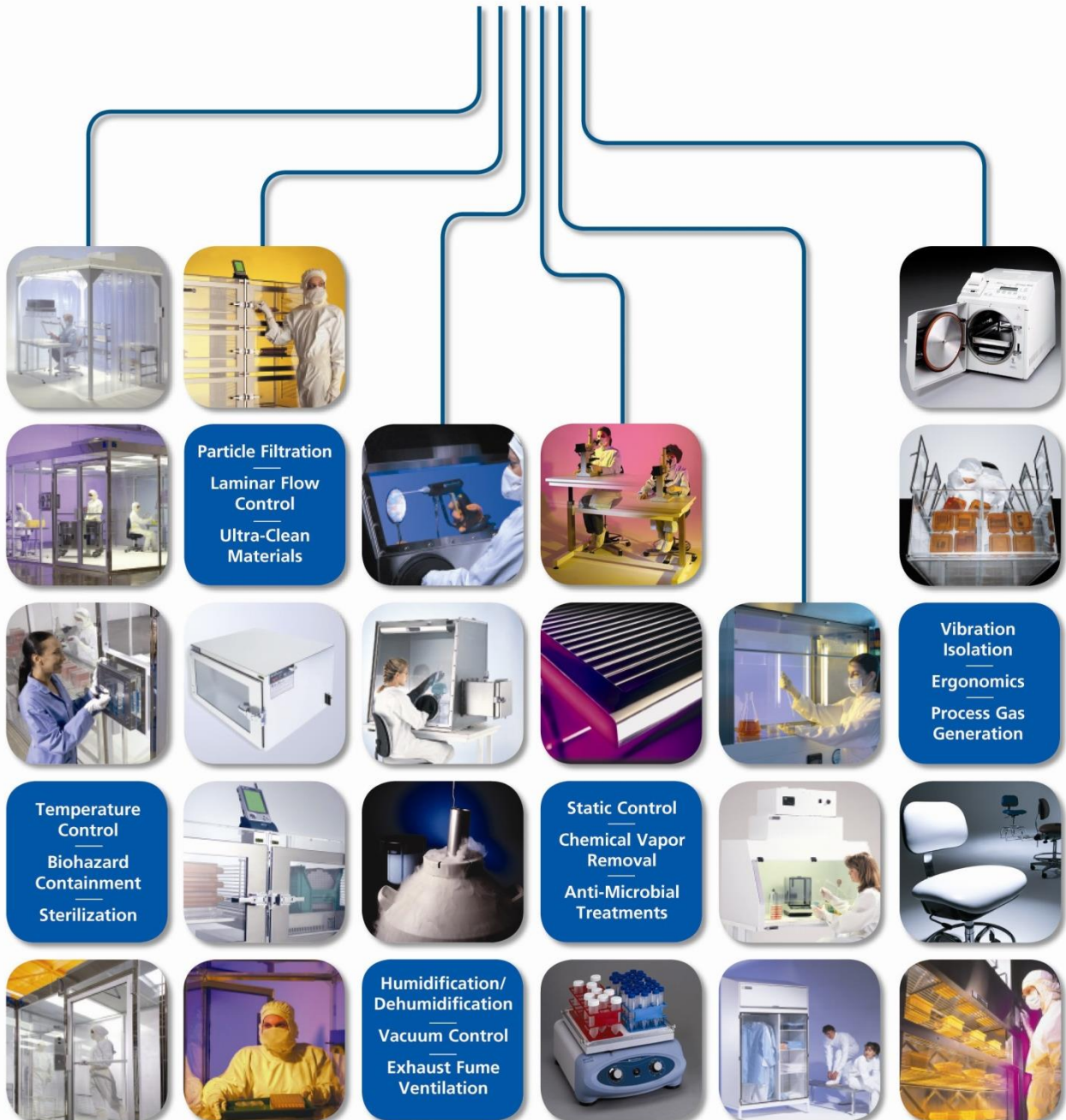


PureDry™ Hand/Glove Dryer

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Your Comprehensive Equipment Source





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Safety Notice

A thorough familiarity with all operating guidelines is essential to safe operation of the product. Failure to observe safety precautions could result in poor performance, damage to the system or other property, or serious bodily injury or death.

The following symbols are intended to call your attention to two levels of hazard involved in operation:



CAUTION

Cautions are used when failure to observe instructions could result in significant damage to equipment.



WARNING

Warnings are used when failure to observe instructions or precautions could result in injury or death.

The information presented here is subject to change without notice.

1.0 Description

The PureDry™ Cleanroom Hand/Glove Dryer provides warm, contamination-free air for drying hands and gloves inside a cleanroom. In a particle-sensitive environment, PureDry helps to eliminate contamination problems by reducing the number of airborne particles and germs that can settle on PC boards, chemical solutions, biological cultures, and other sensitive materials.

Unlike conventional drying towels, a hand dryer ensures fast, thorough drying without generating particles. The unit's heater warms the air stream before it passes through the ULPA filter, which removes 99.999% of particles that are 0.12 microns or larger. The PureDry also eliminates waste disposal and/or laundering costs associated with towel drying and has a minimal impact on the cleanliness, moisture level, or air flow of the surrounding area.

The unit features hands-free operation and the extended exposure area provides ample space to dry elbow-length gloves. The all-stainless-steel housing of the PureDry is ideal for many applications, from pharmaceutical laboratories to microelectronics manufacturing plants to hospitals.

Terra Universal offers two models: Germ-Free Recirculating and Single-Pass.

Germ-Free Recirculating Model

Unlike other electric hand dryers, this unit employs a recirculating air design that minimizes turbulence and captures particles that may fall from hands and gloves. As the heated, filtered air stream passes downward, it is captured in a collection area (along with moisture and contaminants) and routed back through the heater/filter/blower module (see figure below). Because this design recirculates already-filtered air, it extends the life of the ULPA filter and lessens the chance of overheating the motor/blower system due to a dirty filter. This model may also be used as a bench-top unit.



Germ-Free Recirculating Model



Single-Pass Model

The economical alternative to the Germ-Free Recirculating Model, Terra Universal's Single-Pass Model is a space-saving, wall-mount unit that features an ULPA filter that you can replace without un-mounting the dryer. ULPA-filtered air passes through the blower once, without recirculation.



Single-Pass Model

2.0 Installation

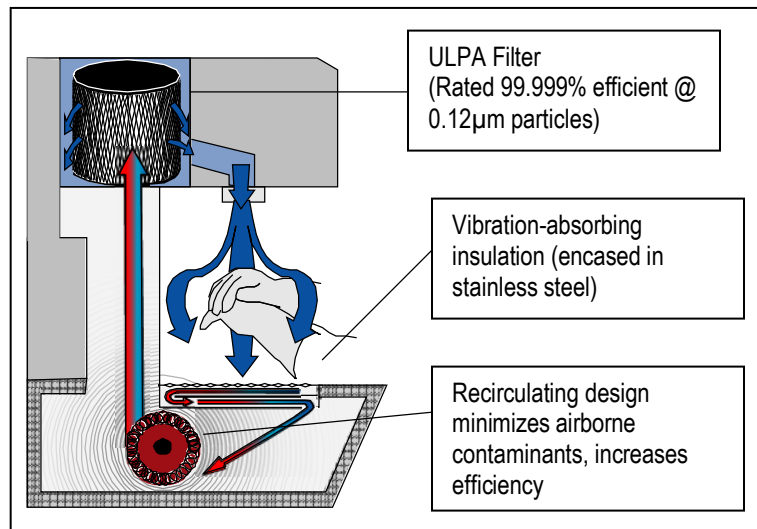
The power cord exits from a cord grip on the rear of both versions of the PureDry™. When wall-mounting these units, be sure to plan ahead for wiring the power cord through the wall.

Keyhole slots on the back of the units allow for easy wall mounting. Simply fasten screws of the appropriate thickness to your cleanroom wall and slide the PureDry into position. A gasket or other type of sealant can be applied to the rear edges of the PureDry to form a seal along the cleanroom wall.

3.0 Operation

Both Germ-Free Recirculating and Single-Pass PureDry™ Cleanroom Hand/Glove Dryers employ a photoelectric cell which senses an object within the drying area and activates the 60 CFM 115VAC/60Hz (optionally 220VAC/50Hz) brushless blower. This air stream passes over a 1600 watt glow-coil heater element in order to provide even, non-chafing warm air for greater efficiency in the drying process.

Germ-Free Recirculating Model





After passing over the operator's hands, the airstream is drawn back into the unit housing through the air-entry duct and back through the ULPA filter before again being blown out onto the operator's hands. The dryer will continue to operate until personnel remove their hands.

Single-Pass Model

On the single-pass model, ambient air from the cleanroom is pulled through the ULPA-filter and blows over the operator's hands. There is no contaminant-capture system. The dryer will continue to operate until personnel remove their hands.

4.0 Troubleshooting

The PureDry™ Cleanroom Hand/Glove Dryer is designed to provide years of reliable and efficient operation. If you should experience any problems with your system, refer to the appropriate troubleshooting procedure below. If the problem persists, call Terra Universal for assistance.



Disconnect the power supply before servicing the unit.

Problem: Blower does not activate when hands are in the drying area.

Possible Cause:

1. Unit's power supply has been interrupted. Check to be sure unit is properly connected to power source.
2. Blower unit's internal power supply has failed. Contact Terra for instructions.
3. Unit's photo cell may need to be adjusted. If damaged, contact Terra for a replacement.

Problem: Blower runs continuously.

Possible Cause:

Unit's photo cell may need to be adjusted. If damaged, contact Terra for a replacement.

Problem: Air stream is insufficient.

Possible Cause:

1. Unit's filter has become full, blocking air and causing backpressure. Check/replace filter.
2. Blower unit has malfunctioned. Contact Terra for instructions

Problem: Air supply contains high particle counts.

Possible Cause:

1. Unit's filter has become full or damaged. Check/replace filter.

Problem: Air is not properly heated.

Possible Cause:

1. Heater element has malfunctioned due to being damaged or disconnected. Contact Terra for instructions.



5.0 Maintenance

The PureDry™ Cleanroom Hand/Glove Dryer requires minimal maintenance as long as normal operating instructions are followed.

The ULPA (ultra-low penetration air) filter provides many years of reliable service; typically, its filtration efficiency increases as it captures more particles. The filter does not require replacement until the backpressure it generates increases to the point that the system can no longer provide an adequate air flow velocity to maintain required particle counts. Under normal use, this condition will take several years to develop. To monitor this condition, periodic testing with a particle counter is recommended.



WARNING

Disconnect the power supply before servicing the unit.

Germ-Free Recirculating Model

Replacement ULPA Filter
#3333-35

To replace the ULPA filter, follow the procedure below:

1. Disconnect the power supply
2. Lift open the top lid of the PureDry™
3. Disconnect the two wires attached to the side of the filter cover
4. Remove the wing nut on top of the filter cover
5. Lift off the filter cover
6. Remove old ULPA filter and install the new ULPA filter
7. Replace the filter cover and secure it with the wing nut
8. Reconnect the two wires to their respective terminals
9. Close the lid and reconnect the power supply

Single-Pass Model

Replacement ULPA Filter
#3333-39

To replace the ULPA filter, follow the procedures below:

1. Disconnect the power supply
2. Depress fastener clips on both ends of the filter housing
3. Remove the filter housing from the dryer
4. Remove old filter
5. Replace with new filter
6. Reinstall the filter housing back into the dryer while depressing the fastener clips on both ends (the filter housing should snap into place)
7. Reconnect the power supply



ULPA filter housing releases after depressing the fastener clips



Cleaning the Drip Tray



Only use clean, nonwoven wipes and an appropriate disinfectant when cleaning the unit.



Loosen the attachment screws



Lift off the protective screen



Wipe the rear air inlet cut-out with disinfectant



Continue to disinfect the sub-surface plate



Reinsert the screen and tighten the screws



Perform one final wipe of the protective screen



6.0 Specifications



Unless otherwise indicated, the specifications below apply to both Germ-Free Recirculating and Single-Pass PureDry Cleanroom Hand/Glove Dryer Models.

Construction:	304 stainless steel (electropolished stainless steel available)
Dimensions:	Germ-Free Recirculating Model: 15"W x 11"D x 23"H Single-Pass Model: 14"W x 12"D x 9.5"H
Shipping Weight:	Germ-Free Recirculating Model: 32 lbs. Single-Pass Model: 26 lbs.
Filter:	ULPA filter rated 99.999% effective @ 0.12µm particles
Heater:	1600W
Power:	115VAC/60Hz or 220VAC/50Hz



7.0 Warranty

Products Manufactured by Terra: Terra Universal, Inc., warrants products that it manufactures to be free from defects for a period of 12 months for parts and 90 days for labor, commencing from the date of shipment. Terra's sole responsibility is to repair or replace, at its option, any part of the product that proves defective or malfunctioning during this time limit. In some cases, components incorporated in Terra Universal products are covered by additional warranties from component manufacturers; obtain specific information from Terra sales representatives. This warranty is void if the equipment is abused or modified by the customer, is operated outside Terra's operating instructions or specifications, or is used in any application other than that for which it is specified. This warranty does not include routine maintenance or service procedures, breakage of quartz baths after 60 days, shipping damage, nor damage from misuse, intentional or unintentional abuse, neglect, natural disasters, or acts of God.

Products Manufactured by Others: Terra Universal, Inc., warrants that, to the best of its ability, Terra's representations of products that are manufactured by others reflect the manufacturer's representations, subject to change without notice. Sole warranty for these products is the original manufacturer's warranty that is passed forward to the purchaser and constitutes the customer's sole remedy for these products. Detailed warranties for distributed products are available through Terra sales representatives.

Freight Shortage or Damage: Upon receipt of any equipment from Terra Universal, Inc., customer shall immediately unpack and inspect for damage or shortage. The customer shall not accept a damaged package or a short shipment until the carrier makes a "damage or shortage" notation on both the carrier's and customer's copy of the freight bill or delivery receipt. Service title passes when the shipment is loaded, so customer is responsible for filing and collecting a freight claim. Any replacement products must be ordered and paid for separately. For Terra's "Policy and Procedures for Returning Goods," see Terra's Internet site: www.TerraUniversal.com.

Generally, customers can improve the chance of collecting on a freight claim by following these procedures: 1) formally requesting that the carrier inspect the shipment immediately upon suspecting damage or shortage to verify condition; 2) notifying the carrier upon discovery of concealed damage and requesting an inspection within 15 days of receipt, both in person or phone and following up via mail; 3) keeping the shipment as intact as possible, including retaining original packaging materials and keeping the product as close to the original receiving location as possible; 4) holding salvage for disposition by the carrier.

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Warranty Returns: All warranty returns must be authorized in advance by Terra Universal and approved under an RMA. Unless approved in advance for good reason, all returns must be in original condition, including all manuals, and must be packaged in original packaging materials. All returned goods are to be shipped to Terra Universal, freight prepaid at customer's expense. See Terra's "Policy and Procedure for Returned Goods."

**Thank you for ordering from
Terra Universal!**