Introduction

This document explains replacement of the Refillable Desiccant Cartridge (the Cartridge) used in the 5128A RHapid-Cal Humidity Generator (the Product).

How to Contact Fluke Calibration

To contact Fluke Calibration, call one of the following telephone numbers:

- Technical Support USA: 1-877-355-3225
- Calibration/Repair USA: 1-877-355-3225
- Canada: 1-800-36-FLUKE (1-800-363-5853)
- Europe: +31-40-2675-200
- Japan: +81-3-6714-3114
- Singapore: +65-6799-5566
- China: +86-400-810-3435
- Brazil: +55-11-3759-7600
- Anywhere in the world: +1-425-446-6110

To see product information and download the latest manual supplements, visit Fluke Calibration’s website at www.flukecal.com.
To register your product, visit http://flukecal.com/register-product.

Safety Data Sheets

Before you remove the Cartridge, refer to the Safety Data Sheets (SDS) linked below:

- SDS - 5128A Desiccant Cartridge, 5128-2680 - Orange Silica Gel
- SDS – 5128A Desiccant Cartridge, 5128-2680 – Non-Indicating Drierite
Desiccant Cartridge Removal

To replace the Cartridge, remove it from the Product. When the Check Desiccant indicator on the Product is lit, or the display shows L0 RH ERR, then the desiccant needs to be checked. Replace the Cartridge when the indicating desiccant material is green. If the indicating desiccant is orange, it does not need to be changed.

To remove the Cartridge, see Figure 1:

1. Turn off the Product.
2. Turn the front panel cap ¼ turn counter-clockwise and remove the cap (②).
3. Loosen the rear seal of the desiccant by gently nudging the front of the desiccant in various directions (up/down, left/right).
4. Pull the spent Cartridge out of the Product (④) and insert a new Cartridge.

![Figure 1. Remove the Desiccant Cartridge](ibw026.eps)
Empty the Cartridge

To empty the Cartridge, see Table 1:
1. Turn the D-ring on the Cover Assembly counterclockwise 2 or 3 turns to loosen it.
2. Push the D-ring down flush against the Cover Assembly to release the seal.
3. Gently rock and pull the Cover Assembly to remove it. If the Cover Assembly gets stuck, follow these instructions:
   a. The Cover Assembly includes a top and bottom disc with an O-ring gasket compressed in between the discs. Unscrew the D-ring completely and remove the top disc.
   b. Hold the Cartridge upright and gently push on one side of the bottom disc. This loosens the seal of the O-ring and allows the Compression Spring to push the disc out of the tube.
4. Lift the Compression Spring, Vinyl Disc, and Felt Pad out of the Desiccant Cartridge.
5. Remove the used desiccant and dispose of it as recommended in the SDS instructions located at [www.flukecal.com](http://www.flukecal.com).
6. Ensure there is no material left in the Cartridge.
7. Replace the bottom Felt Pads as needed. Discard used Felt Pads.
8. Clean the Cartridge interior and exterior using a low-pressure, clean-air supply.

Refill the Cartridge

To refill the Cartridge, see Table 1:
1. Pour new desiccant material in the Cartridge and fill the Inner Tube first. Gently tap the Cartridge during the fill process to help the material settle.
2. Fill the desiccant to about 8 mm (0.3 in) above the Inner Tube.
3. Install Felt Pad, Vinyl Disc, Compression Spring, and the Cover Assembly (assemble the discs if they were separated earlier) over the open end of the Outer Tube.
4. Push the Cover Assembly into the Outer Tube so that the shoulder is against the tube end and tighten the D-ring to securely seal and hold it in place.
5. Inspect the entire circumference of the Cover Assembly to ensure that it is fully seated against the Outer Tube. Pull or tug-test the D-ring to ensure the Cover Assembly is tight.
6. Place the Dry Seal Cap over the vented end of the Desiccant Cartridge if it is not going to be used immediately after filling. This prevents the desiccant from absorbing moisture prior to use.
7. Remove the Dry Seal Cap before installing in the Product.

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dry Seal Cap – Remove before using in 5128A</td>
<td>5</td>
<td>Vinyl Disc</td>
</tr>
<tr>
<td>2</td>
<td>Desiccant Cartridge (Outer Tube)</td>
<td>6</td>
<td>Compression Spring</td>
</tr>
<tr>
<td>3</td>
<td>Desiccant Cartridge (Inner Tube)</td>
<td>7</td>
<td>Cover Assembly</td>
</tr>
<tr>
<td>4</td>
<td>Felt Pads</td>
<td>8</td>
<td>D-Ring</td>
</tr>
</tbody>
</table>

Table 1. The Desiccant Cartridge