

# IceShield™ for CM300xi

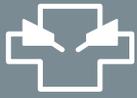
## Low-Temperature RF Probing Solution Without TopHat

FormFactor's IceShield™ solution is now available on the CM300xi probe station. As an alternative to a TopHat/TopChamber enclosure, the IceShield insert provides an open environment for low-temperature RF probing.

The "flat hat" solution operates at wide temperature range, including tests down to  $-60^{\circ}\text{C}$  without a build-up of frost and condensation.

Ideal for S-parameters and load-pull applications that do not require light tightness or EMI-shielding, the IceShield insert ensures minimized insertion loss for highly accurate and repeatable cold measurements.

With this test data, engineers can evaluate device performance and reliability at low temperatures.



$-60$  to  $300^{\circ}\text{C}^*$

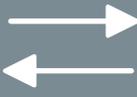
### Cold On-Wafer Measurements

Open environment for frost-free operation



### High Accuracy and Repeatability

Optimized insertion loss for demanding RF applications



### Modular Design

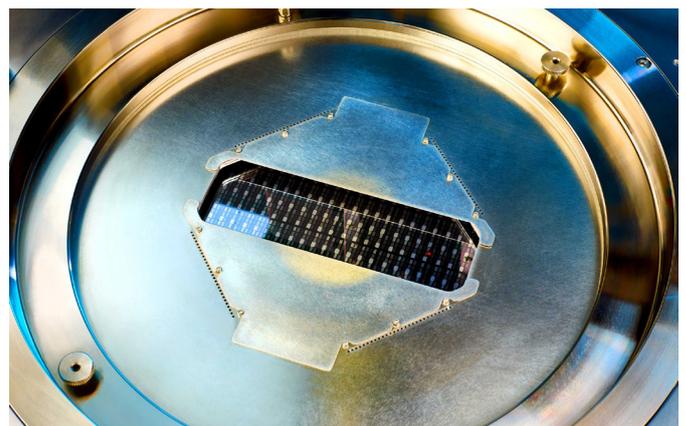
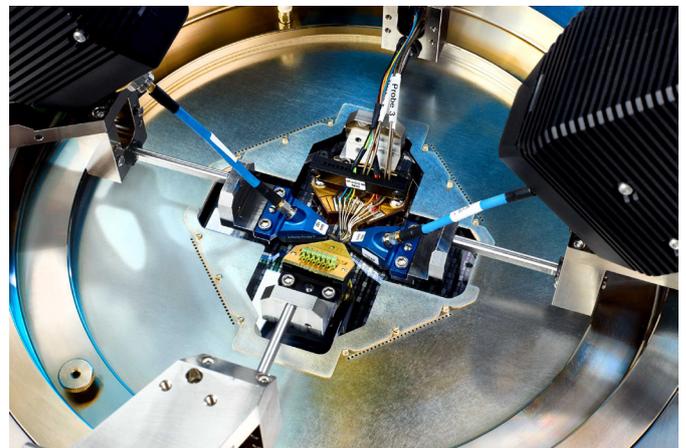
Easy to swap platen insert between IceShield and TopHat



### Multiple Aperture Shapes

Four different aperture shapes available to suit application needs

\*  $-40^{\circ}\text{C}$  tested at 50% relative humidity  
 $-60^{\circ}\text{C}$  tested at 25% relative humidity

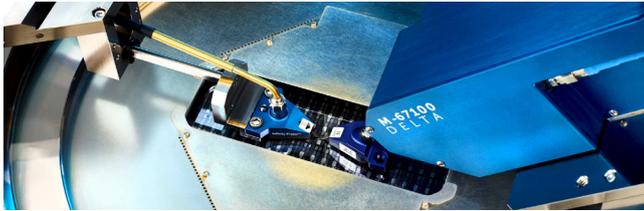
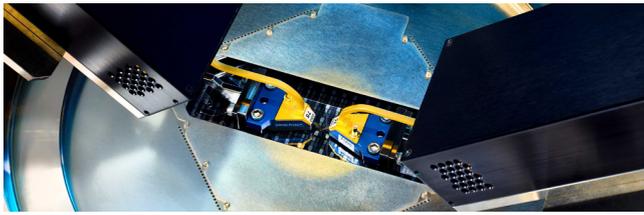


## Cold On-Wafer RF Measurements

With the CM300xi IceShield solution, users can easily collect cold measurements without a TopHat.

The IceShield insert offers frost-free operation over an extended temperature range, from -60°C to +300°C. The solution is designed to create a laminar flow curtain to prevent ingress of moisture, allowing it to withstand high relative humidity.

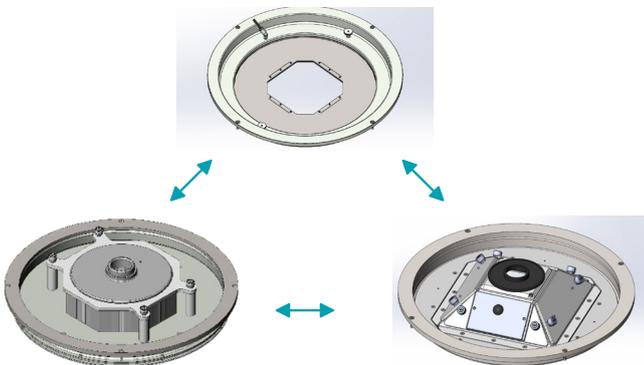
The open IceShield environment allows for the shortest path between the probes and the test instrumentation, considerably reducing insertion loss and maximizing accuracy for S-parameters and load-pull application layers.



The FormFactor IceShield solution is ideal for cold measurement applications such as S-Parameters (top) and Load-Pull (bottom).

## Modular Solution

FormFactor's IceShield and TopHat platen inserts are easy to swap for different test requirements. The IceShield solution is field upgradeable to existing CM300xi systems.

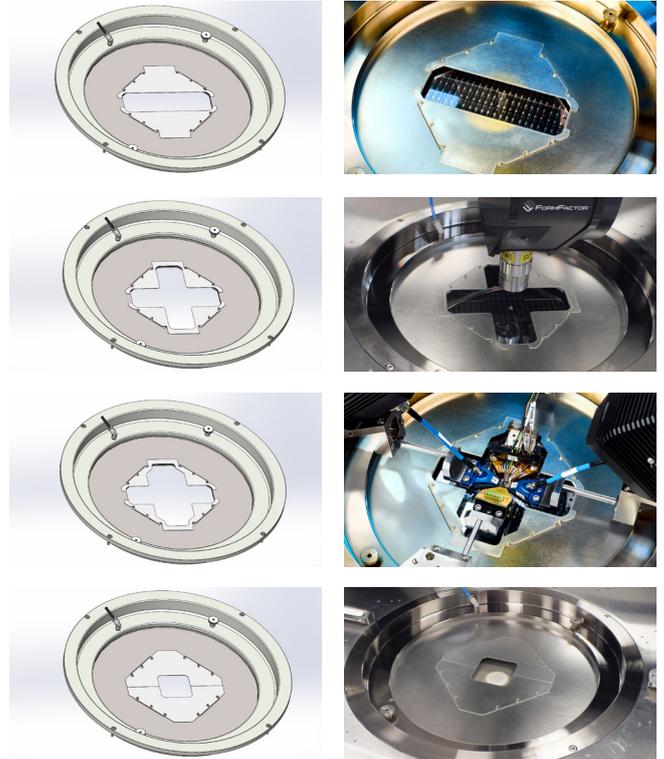


The IceShield (top), 8-sided TopHat (bottom left), and RF TopHat (bottom right) platen inserts are easy to swap on the CM300xi probe system.

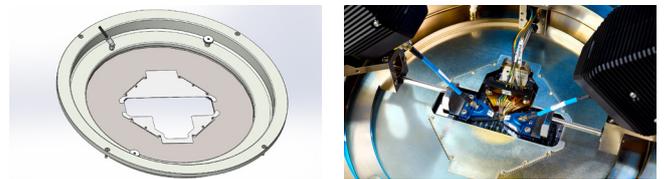
## Multiple Aperture Shapes

For highest application flexibility, the IceShield kit includes four different cutout shapes:

- Extended cutout in X-axis for RF East/West setup
- Cross cutout for RF East/West and RF/DC North/South setup
- Extended cross cutout for RF East/West and multi-contact North/South setup
- Square cutout for DC probing



The cutout shapes can be mixed and matched to perfectly fit application requirements, for example with a T-shape cutout. Up to 10 different combinations are possible. Customized cutouts are available upon request.



## Probes and Positioners Compatibility

The CM300xi IceShield solution is compatible with a wide range of FormFactor probes and positioners, including RF coaxial ACP, Infinity and IZI Probes, Infinity Waveguide probes, multi-contact probes and DC probes.