



## LONG-TERM RELIABILITY TESTING

At Mission Solar Energy, all products are tested to the highest standards, outperforming our competitors and far exceeding the industry norm.

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## 3X IEC

### THERMAL CYCLING (TC)

IEC Standard    Mission Solar



200

Cycles



600

Cycles

### HUMIDITY FREEZE (HF)

IEC Standard    Mission Solar



10

Cycles



30

Cycles

### DAMP HEAT (DH)

IEC Standard    Mission Solar



1000

Hours



3000

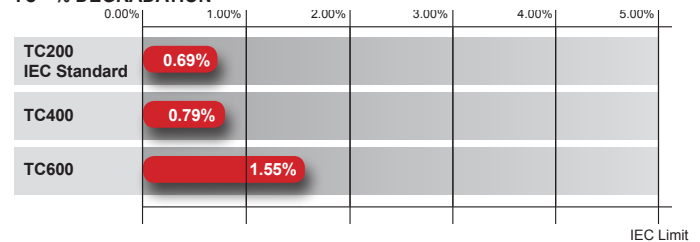
Hours

# THIRD-PARTY TESTING RESULTS

## THERMAL CYCLING (TC):

Simulates the thermal stresses as a result of changes of extreme temperatures (-40°C to 85°C, -40°F to 185°F).

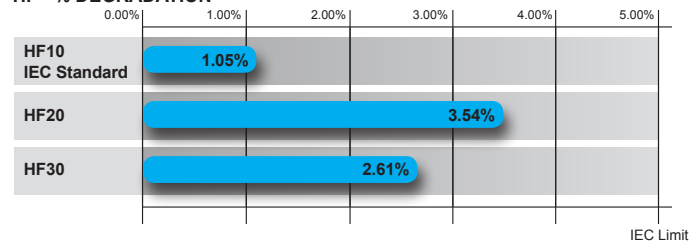
TC - % DEGRADATION



## HUMIDITY FREEZE (HF):

Determines the module's ability to withstand the effects of high temperatures combined with humidity, followed by extremely low temperatures.

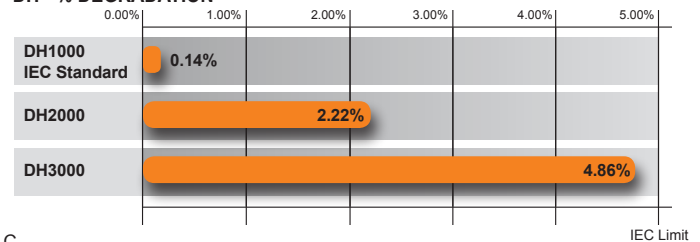
HF - % DEGRADATION



## DAMP HEAT (DH):

Determines the ability of the module to withstand long-term exposure to penetration of humidity up to 3000 hours.

DH - % DEGRADATION



\*Third-party testing conducted by the Renewable Energy Test Center, RETC LLC

# INTERNAL TESTING

We vigorously test our modules to the same IEC standards at our in-house laboratory. Additionally, Mission Solar modules are tested for: Hail, Wet Current Leakage, Dynamic Mechanical Load, and PID.



## OTHER THIRD-PARTY TESTING INCLUDES:

- Potential Induced Degradation (PID)
- UV Exposure
- Ammonia
- Salt Mist
- Reflectivity

## FIELD DATA

We collect field data from our multi-technology test bed at our San Antonio, TX facility. The data obtained allows us to analyze and compare production across different panel, inverter, and tracker technologies.



Mission Solar Energy Facility  
San Antonio, Texas



# CERTIFICATIONS

IEC 61215/ IEC 61730/ IEC 61701    UL 1703



Independently Audited by



\*As there are different certification requirements in different markets, please contact your local Mission Solar Energy sales representative for the specific certificates applicable to the products in the region in which the products are to be used.