



Fraunhofer

TESTED[®] DEVICE

Changyu Precision
FlexiModule CY20260103001
Report No. CH 2605-1778

Statement of
Qualification

Single product
Particle Emission
in Cleanroom
(atmospheric)

Statement of Qualification · Single product

Customer	Changyu Precision Manufacturing (Suzhou) Co., Ltd. NO.258 Jinshun Road, Jinxi TownLake 215324 Kunshan City, Suzhou City, Jiangsu Province China
Tested product	
Category:	Energy Supply
Subcategory:	Cable Systems
Product name:	FlexiModule CleanGuard CY20260103001 (manufacturing date: 3/1/2026; color: white; charge number: HIMM.0505.02003P; batch number: CY202601030033; serial number: CY20260103001)

Random sampling of particle emissions (airborne) at representative sites in cleanroom under atmospheric conditions

Standards/guidelines:	ISO 14644-1, -14 The norms stated generally refer to the version valid at the time of the tests.
Test equipment:	Optical particle counter: LasAir II 110 and LasAir III 110 with measuring ranges $\geq 0.1\text{ }\mu\text{m}$, $\geq 0.2\text{ }\mu\text{m}$, $\geq 0.3\text{ }\mu\text{m}$, $\geq 0.5\text{ }\mu\text{m}$, $\geq 1.0\text{ }\mu\text{m}$ and $\geq 5.0\text{ }\mu\text{m}$
Test environment parameters:	- Cleanroom Air Cleanliness Class (according to ISO 14644-1):..... ISO 1 - Airflow velocity:.....0.45 m/s - Airflow pattern:..... vertical laminar flow - Room temperature:22 °C ± 0.5 °C - Relative humidity: 45 % ± 5 %
Test procedure parameters:	- Energy chain: igus E61.29.02.150 - Bending radius:r = 150 mm - Stroke length:..... s = 820 mm - Parameter Set 1:.....$v_1 = 0.5\text{ m/s}$; $a_1 = 1.0\text{ m/s}^2$ - Parameter Set 2:.....$v_2 = 1.0\text{ m/s}$; $a_2 = 2.0\text{ m/s}^2$ - Parameter Set 3:.....$v_3 = 2.0\text{ m/s}$; $a_3 = 4.0\text{ m/s}^2$

Test result / Classification

The FlexiModule CleanGuard CY20260103001 is suitable for use under the specified test parameters (room temperature: 22 °C ± 0.5 °C; relative humidity: 45 % ± 5 %) in cleanrooms of the following Air Cleanliness Classes according to ISO 14644-1:

Test parameter(s)	Air Cleanlines Class
$v_1 = 0.5\text{ m/s}$; $a_1 = 1.0\text{ m/s}^2$	1
$v_2 = 1.0\text{ m/s}$; $a_2 = 2.0\text{ m/s}^2$	1
$v_3 = 2.0\text{ m/s}$; $a_3 = 4.0\text{ m/s}^2$	1
Overall result	1

Please note: Transport damages, incorrect installation, aging behavior, etc. can influence the test result.

The measuring devices used for the qualification tests are calibrated at regular intervals; their results can be traced back to national and international standards. In cases where no national standards exist, the test procedure implemented complies with the technical regulations and norms applicable at the time of the test. The relevant documentation can be viewed on request at any time.



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on behalf of 	
Dr.-Ing. Frank Bürger, head of business unit Testing and Certification	

This document only applies to the named product in its original state and is valid for a period of 5 years from the date the first document was issued. The document can be verified under www.tested-device.com.