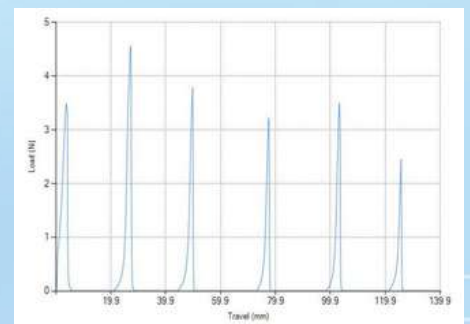
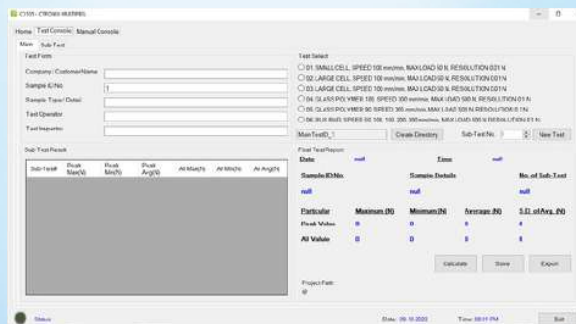


SINGLE CHANNEL (MULTI PEEL) SOLAR CELL PEEL TESTER CX 105



Variable Speed / Peel Length || Preset Tests for 10/12/16BB Peel (Half Cut) || 180° Synchronized 90° Peel / 180° Bus Bar Testing || High Resolution 0.01N / 0.2 mm || Real Time Force v/s Time Graph || Multiple Peaks (F Max) for each Peel || Sequential Multi Peel || Custom Auto-Tightening Jaws / Jig || Customized reporting || Auto Return to sample length || Overload, overtravel protection

Made to Measure - Built for Precision

Single channel Peel tester customized for Solar Cell Peel Strength Test. Fully automatic testing system with high precision control and accuracy, includes automated computer control of test methods giving simplicity of operation.

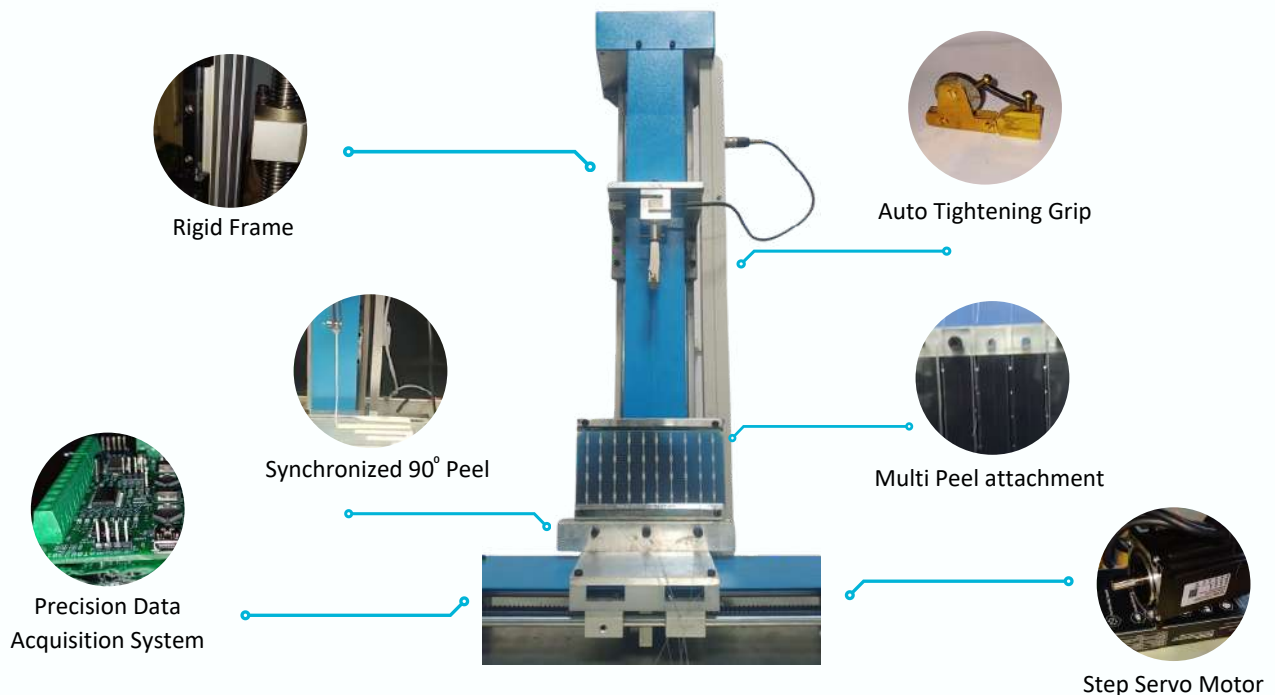


Fig: Single channel solar cell peel tester (CX 105)



Robust Loading Frame

High Stiffness Loading frame based on extruded Aluminum section for precision linear guidance supporting 2 steel rails & rolling sliders with imported ball bearings to ensure flutter free sliding of the moving jaw.



Special Holding Jaw

Specially designed auto-tightening spring-loaded Jaws ensures slippage free peeling of the sample.



Drive Train

High precision Step Servo motors ensure smooth flow of power to the loading frame via imported ball screw enabling true CRE (Speed remains constant even at varying loads).



Synchronized 90° Peel

Specially designed synchronized 90° peel plate ensures peel at exact right angle.



Extreme Automation

Entire system controlled by proprietary software preloaded with test parameters sample Length, Speed etc. and easy to use interface



Preset Test Set up

Preset test setup for speed and Peel length according to Solar Cell Type



Auto Sample Length/ Speed Set Up

Auto returns to sample length. Speed is controlled by Step Servo motor with +/- 1 % of the set speed even under load ensuring high accuracy of Peel Length of 0.2 mm.



High Resolution

Electronic Data Acquisition System coupled with imported sensors ensures high resolution 0.01N (Force) and 0.2mm (peel length)



Multi Peel Attachment

Specially designed Sliding Solar Cell holder with matching slots for each Bus bar size enable proper aligning of each bar conductor for sequential Multiple Peel Testing



Enhanced reporting

Customized reporting to provide data for single test / multiple tests (with F Min/Max Avg etc.) with real time graph of Force and Peel Length.

Tried and Tested Proprietary Software

A flexible and intuitive software package to suit all types of Solar Cell Testing (180° / Synchronized 90° Peel), built-in test methods including Bus Bar testing. Automated storage of all test data, ease of export to pdf for reporting. Fully automatic function covering a) Set up of Test Bed, b) Sample Peeling and c) Reporting



Fig: Ctronix Proprietary Software

a) Set up of Test Bed

- Based on test selected Parameters such as Sample Length and Speed of Peel is configured
- Jaw is Positioned to desired sample length
- Operator positions the sliding solar cell holder aligning the Bus Bar and attach the conductor to the Jaw

b) Sample Peeling

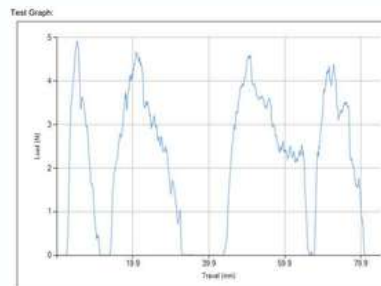
- System starts peeling the sample at desired peel speed
- Display of Real time Force v/s peel Length
- Auto Stop post reaching Peel length
- Auto returns of the Jaws to sample length

c) Reporting

- The graph of Force v/s Peel Length is plotted
- Individual Peak values are displayed
- Min. Max. and average peel strength
- Lot Testing displays average across all tested

Demo Video

- ▶ <https://cutt.ly/3wlowK3d>
- ▶ <https://cutt.ly/VwloeBYy>
- ▶ <https://cutt.ly/lwloroB3>
- ▶ <https://cutt.ly/OwlormlF>
- ▶ <https://cutt.ly/owciyuPl>



Date: 23-07-2022
Time: 02:56 PM
Main Test No.: 1
Sub-Test No.: 2
Speed (mm/min): 50
Travel Length (mm): 85
Resolution (N): 0.01

Sub-Test Report:

| Particular | Maximum (N) | Minimum (N) | Average (N) |
|-------------|-------------|-------------|-------------|
| Peak Value: | 4.92 | 3.43 | 3.43 |
| All Value: | 4.92 | 0.00 | 0.00 |

Fig: Sample Report

Technical Specifications

Load Frame & DAS

- ✓ Single Ball Screw power train/ Steel rail / Ball bearing mounted sliders
- ✓ Synchronised moving platform for 90° Peel
- ✓ Sample Length up to 150mm accommodates 10BB -16BB
- ✓ Peel Length
 - (a) 180 – 300 mm
 - (b) 90° Peel – 160mm
- ✓ Custom Jigs matching Bus Bar holders for Multi Peel Testings
- ✓ Imported Sensors and high precision DAS

Test Parameter

- ✓ Max Force & Resolution:
 - (a) 180° – 100N @ .01 N
 - (b) 90° Peel – 500N @ 0.1N
- ✓ Peel Speed:
 - a) 180° Peel - 100mm / Min
 - b) Glass Polymer - 300 mm/ Min
 - c) Bus Bar - 50 - 300 mm/Min
- ✓ Peel Resolution : 0.2 mm
- ✓ Preset Sample Lengths / Peel Length / Speed based on Cell Type

Operations & Reporting

- ✓ Auto Set up of
 - (a) Sample/Peel Length
 - (b) speed of Peel
 - (c) Resolution
- ✓ Auto Stop at preset peel Length
- ✓ Real Time Force v/s Peel Graph with Individual Peak data
- ✓ Single V/S Lot reporting of peel Data (Min/ Max/ Average of lots)



Get Your Free Quote Today...

Contact us now to learn more about our Products and how it can benefit your organization.



Ctronix Corporate Office,

37A, Chakrabere Lane, Kolkata - 700020, India

Works,

P-21, Maa Saradamoni Sarani , Kolkata - 700003, India

Branch,

8/A, Sebak Baidya Street, Kolkata - 700029, India



(+91) 9831175824 / (+91) 9831215824



prabir.sircar@ctronix.in



www.ctronix.in



@ctronixsales6848

