

180-degree High Speed Peeling Tester IPTS-20N/50N

High sampling rate of 2000Hz ensures accurate graphing
 Handles a wide range of test speed up to 1500 mm/min
 One-click user-friendly operation
 Handles thick sample up to 0.5mm



Test Image

IPTS-50N

<p>ISO & JIS</p>	<ul style="list-style-type: none"> - ISO 8510-2:2006 Adhesives-Peel test for a flexible-bonded-to-rigid test specimen assembly- Part 2: 180° peel. - ISO 29862:2007 Self adhesive tapes-Determination of peel adhesion properties. (Partly) (Corresponding Japanese standard: JIS Z0237:2009) - JIS K6854-2:1999 Adhesives-Determination of peel strength of bonded assemblies-Part 2 : 180° peel. - Japanese Pharmacopoeia (Partly)
<p>Applications</p>	<p>Stickers, adhesive tape, screen protector film for smartphone, low-friction silicon rubber sheet, laminated package, adhesive tape for first-aid, double postcard (two attached postcards), magnetic tape, electrode's line of solar cell, copper foil of circuit board, and more.</p>

<p style="text-align: center;">Features</p>	
<p>Accurate graphing It captures rapid force change due to its high sampling rate (2000Hz) thus ensures high repeatability.</p>	<p>One-click operation Simply press the START button to start the test. It peels the sample to the set stroke (peel length).</p>
<p>Automatic recording Automatic recording, graphing and saving data when testing.</p>	<p>Visual analysis Overlays Max. 5 graphs to allow easy comparison and visual analysis. Automatically calculates Max/Min/Ave values of each graph and shows them in the same table.</p>

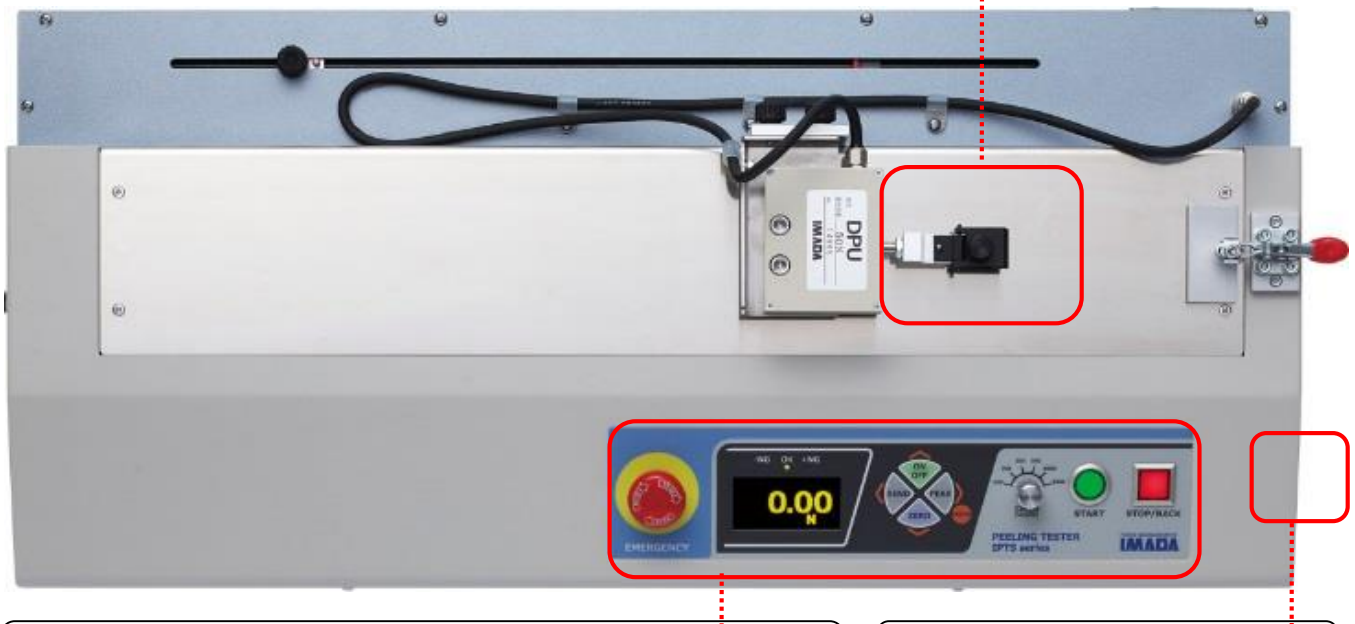
[Main functions]

[Test conditions]

- **Peel length**
Max. 200mm.
- **Load cell height adjustment**
Handles sample height up to 13mm. Easily adjust the height of load cell by rotating the knob to suit the sample.
- **Stroke limit knob**
Adjust stroke (peel length) easily by the limit knob.

[Sample fixing]

- **Sample clamp**
Insert the sample into the sample clamp and fix it. If the sample is adhesive tape attach it over the table directly.
- **Easy gripping**
Simply grip film with film grip, and hang the grip to the load cell.







[Controls]

- **Organic EL display**
Clear organic display provides excellent readability.
- **Simple operation**
Simply press start button to start the test. It enables automatic graphing by software.
- **A wide range of test speed**
120, 200, 300, 500, 1000, 1500mm/min (Switchable by a knob)

[Output]

- **USB connector**
Connect it to a PC using a supplied USB cable.



Procedure of Test			
Attach a sample	Set test speed and stroke	Grip film	Start test
Insert the sample into the sample clamp and fix it.	Select test speed with SPEED dial, and set stroke (peel length) by limit knob.	Grip the peeled covering tape film with the film grip.	Press START button to start test. Meanwhile it starts automatic recording.
			

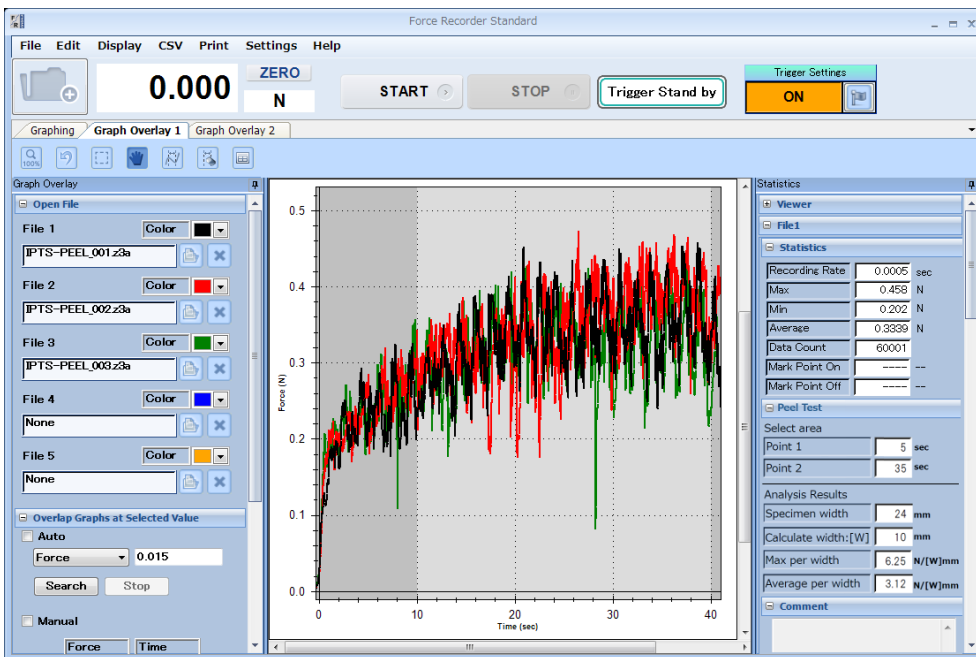
[Main functions of supplied software]

[Basic operation]

- **Save graphs automatically**
It enables automatic graphing and data saving by using trigger function.
- **Switch graphs with plural tabs**
The recorded graphs can be displayed in plural tabs.
- **Add notes**
Notes can be inserted at desired points on the graph.

[Advanced operation]

- **Overlay graphs**
Max. 5 graphs can be overlaid. It can be printed and output in desired format.
- **Zoom graph**
Simply click and drag to specify an area to zoom-in. The Max, Min, and Ave. values of the selected area are displayed. It allows you to print or output in desired format.



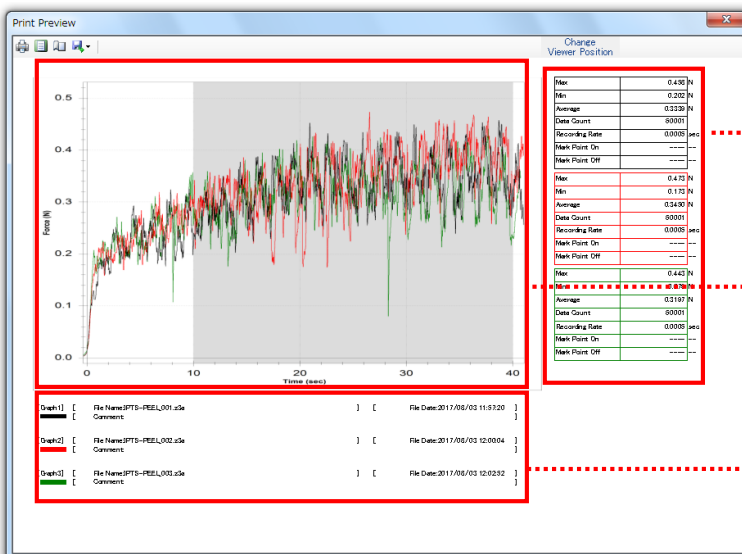
[Others]

- **Statistics display**
The Max, Min, and Ave. values can be displayed. When the specimen width and calculate width are input, the Max and Ave per width can be calculated and shown as N/(width)mm.

Analysis Results	
Specimen width	24 mm
Calculate width: [W]	10 mm
Max per width	6.25 N/[W]mm
Average per width	3.12 N/[W]mm

- **Input comment**
Notes such as testing conditions up to 198 characters can be input.

[Output sample image]



Statistics

Graph data

File name, folder, and comments

[Output]

- **Printing**
Prints out in A4 or letter size.
- **Digital output**
The data can be output in Word, Excel, and PDF format. Graph is attached as an image file.



Specifications		
Model	IPTS-20N	IPTS-50N
Capacity	20N	50N
Resolution	0.01N	
Accuracy	+/-0.2%F.S. +/-1digit	
Overload	Approx.150%F.S (It warns with light flashing and buzzer when the force is over 110% of capacity.)	
Sampling rate	Max.2000 data / sec (2000Hz)	
Test speed	120, 200, 300, 500, 1000, 1500mm/min (Switchable)	
Stroke (length)	Travel of load cell: Approx. 400mm (Peel length: Approx.200mm)	
Peel angle	165°-180° (Height and angle are adjustable.)	
Max. sample width	Adhesion: 88mm (Grip: 20mm, Clamp: 50mm)	
Max. sample thickness	Grip: 3mm Clamp: 13mm	
Safety device	Emergency stop button, Overload prevention (Valid only when the power is ON) (*1)	
Power	AC100 to 240V free input (*2)	
Weight	Approx. 11kg	
Operating environment	Temperature: 0 to 40°C Humidity: 20 to 80%RH	
Accessories	Force Recorder Standard (graphing software), USB cable, Power cable, Film grip, Spacer block, Inspection certificate, Instruction manual	

*1 It does not guarantee complete protection against overload.

*2 Please specify the voltage when you order. (Accessory varies depending on voltage.)

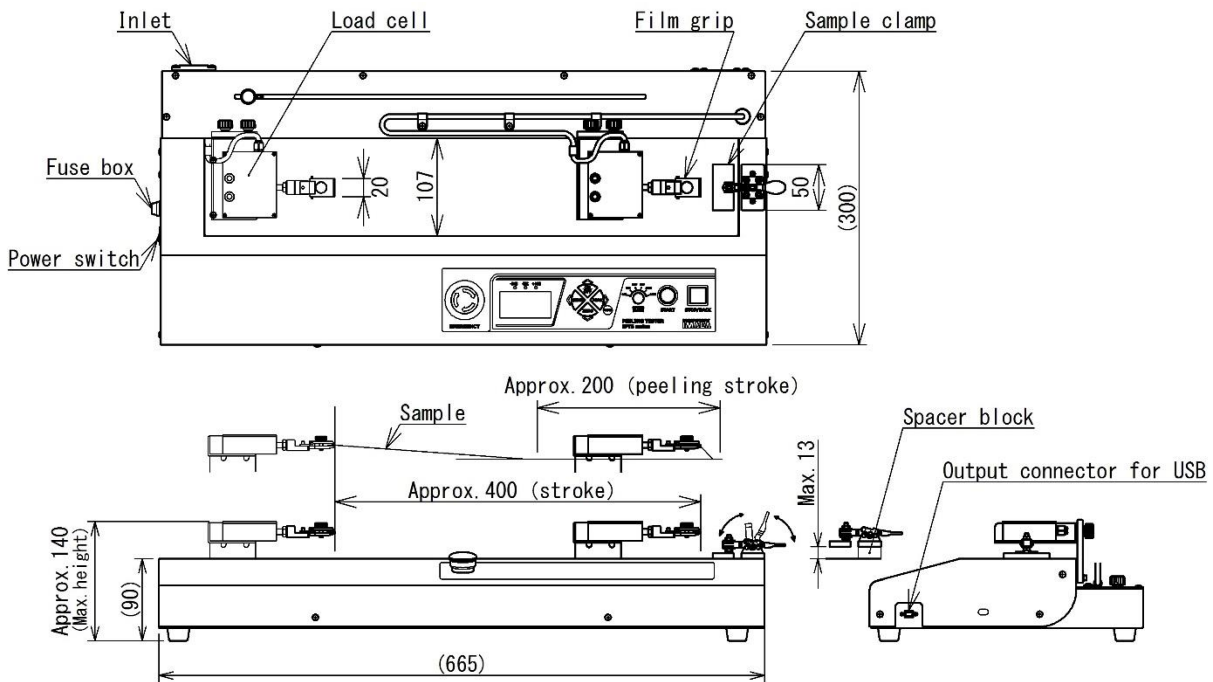
Specifications for supplied software	
Data transferring speed	Max. 2000 data / sec (2000Hz)
Recording data point	Max. 7.2 million
Graph	Graph overlaying function, Capture function, Graph scaling, Statistics output, Point marking
Graph recording	Trigger function
Edit	Comment, Add notes, Borderline function
Output	Printing (A4, letter size), CSV, Word, Excel, PDF
OS	Windows 7/8/8.1/10
Hardware	CPU: Pentium4(1GHz or more) or more is recommended. Memory: 2GB or more is recommended. Hard disk (data storage area): 10GB or more is recommended.
Platform	NET Framework4.6 or later
Execute environment	Microsoft Internet Explorer 6 or later Windows installer 3.1 or later
Image size	Resolution 1024×768 pixel or more
Connection port	USB1.1, USB2.0 connector * Operation in USB 3.0 has not been varified.

* Some old versions of Excel show data up to 65,531 only.

Related Products		
90-degree peel test fixture P90-200N	180-degree peel test fixture P180-200N	Probe tack fixture MED-IS-20N
Fixture for 90-degree peel testing by peeling adhesive tape and the like.	Ideal for 180-degree peel testing for adhesive tape.	Designed for tack test of adhesive plaster and the like.
		
Rubber roller for peel test APR-97	Film cutter FSC-1525	
Designed to bond a sample at a regular pressure in peel test.	Designed to cut film and paper at stable width. Available samples: paper and film.	
		
JIS Z0237:2009 (*1)	Corresponding Standard (width: 15mm)	JIS Z1707:1997 (*1) JIS Z0238:1998 (*1)
	Corresponding Standard (width: 1 inch)	ATSM F88 (*1)

*1 Complies with a part of this standard.

IMADA CO.,LTD
 180-degree High Speed Peeling Tester
 [IPTS-20N/50N Dimensions]



Unit: mm

[Cautions]

- Specifications are subject to change without prior notice.
- This product is designed for force testing only. Do not use it for any other purposes.
- Some samples may not be suitable to grip with this product.
- Do not copy and use this content without authorization.
- Some samples are not suitable due to the materials of the sample and measuring conditions.

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