# JCI 155v6 Charge Decay Time Analyser

The JCI 155v6 is a benchtop instrument for the measurement of a material's ability to dissipate static electricity, and in conjunction with the JCI 176, to assess whether significant voltages will arise from practical amounts of charge transferred to the surface.

## **General Description**

The JCI 155v6 is a laboratory instrument for easy, direct measurement of a material's ability to dissipate static electricity and, when used with the JCI 176, to assess whether significant voltages will arise from practical amounts of charge transferred to the surface. The version 6 is the latest in our highly successful and unique range of Charge Decay Time Analysers. A high voltage corona discharge deposits a patch of charge on the surface of the subject material and a fast response electrostatic fieldmeter measures the voltage generated by this charge. It also measures how quickly this voltage falls as the charge migrates away. Corona charging is a simple way to simulate practical charging events,

allowing control of initial surface voltage and charge polarity. It is applicable to all types of surfaces - whether uniform or with localised conducting features and provides consistent, reproducible results that are not affected by corona exposure.

An intuitive, user friendly display now includes a large LCD screen for both textual and graphical presentation of results using just 5 menu driven active operator keys.

Full versatility in setting configuration and test parameters is provided by the instrument firmware and display and the analyser may be used independently or connected via USB link to a PC running our proprietary associated JCI Graph software.

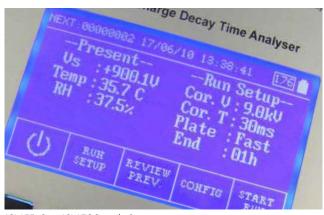
## Benefits:

- > User friendly interface with simple setup of run parameters & settings
- > On instrument graphical LCD display with dimmable back light
- Calculation and display of capacitance loading (in conjunction with JCI 176)
- > Portable, can be used with or without a PC
- > DownloadtestdatatoJCIGraphsoftware for further analysis.

# Optional Extra Accessories & Services

- > JCI Graph Software
- > JCI 170 & JCI 172 Sample Support
- > JCI 166 SampleSupport
- > JCI 176 SampleSupport
- > JCI 255 Calibration Unit
- > JCI 173 Powder/Liquid Support Insert
- > Calibration



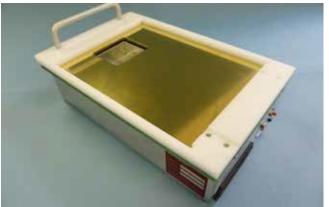


JCI 155v6 on JCI 176 Sample Support

Specification	
Display:	Large Interactive LCD Display (112x60mm)
Test area:	45x54mm aperture in instrument baseplate
Sample:	<ul> <li>The unit may be placed directly on a surface or area of sample material</li> <li>Where the optional sample support unit is purchased this provides a simple support for open and earthed backing tests of films &amp; textiles</li> <li>JCI176 Charge Measuring Sample Support provides open and earthed backing support for film &amp; layer samples up to 5mm thick with measurement of the corona charge received by the sample (earthed and unearthed backing tests are also possible in the JCI 176 when testing films)</li> <li>Powders and liquids may be studied using a JCI 173 in the JCI 176.</li> </ul>

Using a JCI 155v6 with a JCI 176 Charge Measuring Sample support allows measurement of the corona charge received by the sample and calculation of the 'Capacitance Loading' experienced by charge on the surface. A high Capacitance Loading can mean relatively low surface voltages for a given amount of charge, which will often be indicative of a less problematic material.

Powder samples are presented using the JCI 170 Powder Sample Support with the JCI 155v6 supported by a JCI 172 Support Plate. The JCI 170 can be easily put in place and removed so that the base plate of the JCI 155v6 stands off a few millimetres to reduce risk of powder dispersal to the air by action of the air dam.



JCI 176 Sample Support



JCI 170 & JCI 172 Sample Support

#### **DEKRA Process Safety**

The breadth and depth of expertise in process safety makes us globally recognised specialists and trusted advisors. We help our clients to understand and evaluate their risks, and work together to develop pragmatic solutions. Our value-adding and practical approach integrates specialist process safety management, engineering and testing. We seek to educate and grow client competence to provide sustainable performance improvement. Partnering with our clients we combine technical expertise with a passion for life preservation, harm reduction and asset protection. As a part of the world's leading expert organisation DEKRA, we are the global partner for a safe world.

#### Process Safety Management (PSM) Programmes

- > Design and creation of relevant PSM Programmes
- > Support the implementation, monitoring, and sustainability of PSM Programmes
- > Audit existing PSM Programmes, comparing with best practices around the world
- > Correct and improve deficient Programmes

#### Process Safety Information/Data (Laboratory Testing)

- > Flammability/combustibility properties of dusts, gases, vapours, mists, and hybrid atmospheres
- > Chemical reaction hazards and chemical process optimisation (reaction and adiabatic calorimetry RC1, ARC, VSP, Dewar)
- > Thermal instability (DSC, DTA, and powder specific tests)
- > Energetic materials, explosives, propellants, pyrotechnics to DOT, UN, etc. protocols
- > Regulatory testing: REACH, UN, CLP, ADR, OSHA, DOT
- > Electrostatic testing for powders, liquids, process equipment, liners, shoes, FIBCs

## Specialist Consulting (Technical/Engineering)

- > Reactive chemical, self-heating, vent sizing, and thermal instability hazards
- > ATEX / DSEAR & hazardous area classification
- > Mechanical equipment ignition risk assessment
- > Transport & classification of dangerous goods
- > COMAH & SEVESO compliance
- > PHA support & facilitation
- > LOPA & SIL
- Occupied buildings risk assessment
- > Fire engineering
- > Cybersecurity

We have offices throughout North America, Europe, and Asia.

For more information, visit www.dekra-process-safety.co.uk

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Would you like to get more information?

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