

# Insulating gloves and sleeves tester

In compliance with glove standards

ASTM  
D120-22

ASTM  
F496-23

EN  
60903:2003

IEC  
60903  
(annex E)

In compliance with sleeve standards

ASTM  
D1051-23

ASTM  
F496-23

IEC  
60984:2014  
(annex E)



Remote control  
through App

Illustrative Image.



## Description

The dielectric tester DT70KV is an instrument specially developed to insulating gloves testing, in accordance with standards ASTM D120-22, ASTM F496-23, EN60903:2003 and IEC 60903 (annex E) and insulating sleeves testing in accordance with standards ASTM D1051-23, ASTM F496-23 and IEC 60984:2014 (annex E). It was designed with emphasis on safety, versatility and ease of use. The voltage output is adjustable (according to the glove class), with up to 70 kVDC. Its intuitive interface makes it possible to program the glove class and the maximum leakage current, allowing automatic tests.

Complying with the most rigorous safety requirements, the system is divided into two units, a control unit and a high voltage generation unit. Additional safety features include an emergency stop switch and a built-in sound alarm. Furthermore, the ability to fully remote control the instrument from an App for Android – both to program the settings as well as to perform the tests – provides increased safety protection and greater comfort for the operator.

## Remote control by App



**Increased safety and comfort :** Set up, start and stop tests in an even safer and more comfortable way

**Automatic reports :** Generate test reports directly on the App

**Smartphone / tablet features :** Incorporate smartphone features into your reports (photo, GPS coordinates and test location map)

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## Modbus® Protocol

This equipment implements the Modbus® open protocol. All configuration, real-time control, monitoring of measurements, and retrieval of test information can be performed using commercial tools such as LabVIEW® and PLCs, or even through dedicated software and own development. In this way, the entire measurement and analysis process can be automated according to the application's needs. Complete documentation with accessible and controllable parameters is provided, as well as clarification of doubts about the use through technical support.

- Modbus is a registered trademark of Schneider Electric USA, Inc.
- LabVIEW is a registered trademark of National Instruments Corporation

## Technical specifications

ELECTRICAL	
Test voltage	Up to 70,000 V
Test voltage resolution	100 V between 10 kV and 70 kV 10 V up to 9.99 kV
Test voltage accuracy	Up to 50 kV: $\pm$ (2 % of nominal value $\pm$ 2 digits) with 500 $\mu$ A load Above 50 kV: $\pm$ 1 kV
Polarity	Negative voltage, ground positive
Leakage current	Max. 500 $\mu$ A
Leakage current resolution	1 $\mu$ A
Leakage current accuracy	$\pm$ (2 % of nominal value $\pm$ 2 digits)
Ripple	<2 %
FEATURES	
Safety features	<ul style="list-style-type: none"> <li>• Remote control via Bluetooth</li> <li>• Emergency stop buttons</li> <li>• Self-detection of sparks</li> <li>• Visual indicators (LEDs)</li> <li>• Sound indicator</li> </ul>
Advanced features	<ul style="list-style-type: none"> <li>• Automatically configured tests in accordance with ASTM D120, ASTM F496 and IEC 60903 (annex E)</li> <li>• Periodic tests for gloves class: 00, 0, 1, 2, 3 and 4</li> <li>• "Pass / Fail" test</li> <li>• Timed tests (within the limits of each standard)</li> </ul>
Display	Alphanumeric LCD display, 4 lines / 20 characters (Big Number)
Chronometer	Up to 3 min., indication in mm:ss
Built-in memory	Memory for storing up to 107 tests with 3 minutes duration each
COMMUNICATION	
Protocol	Modbus
USB	For configuration, control and download the stored values
Bluetooth	For configuration, control and download the stored values
SOFTWARE	
Desktop (PC/Notebook)	TLogger software: for remote control, allowing to configure, run tests and generate reports
Android (Smartphone/ Tablet)	TENTECH Remote Control app: for remote control, allowing to configure, run tests and generate reports

### STANDARDS

Safety class IEC 61010-1

### ENVIRONMENTAL

IP rating IP65 (with closed lid)

Operating temperature 23 °F to 122 °F (-5 °C to 50 °C)

Storage temperature -13 °F to 158 °F (-25 °C to 70 °C)

Humidity range 95 % RH (non condensing)

Maximum operating altitude Up to 13,000 ft (4,000 m)

### POWER SUPPLY

Mains 200 - 240 V~ 50/60 Hz 50 VA

### MECHANICAL (OF THE INSTRUMENT)

Weight Control unit: approx. 16.76 lb (7.6 kg)  
High voltage unit: approx. 21.16 lb (9.6 kg)

Dimensions Control unit: 17.5" x 14.2" x 7.5" (450 x 360 x 190 mm)  
High voltage unit: 17.5" x 14.2" x 7.5" (450 x 360 x 190 mm)

## Accessories

- Graduated tank
- Interconnection cable\* (control unit <-> HV unit)
- High voltage cable\*
- Return cable HV\*
- 2 protective grounding cables\*
- 2 glove holders
- 4 clamps for fixing gloves
- Power cord
- USB cable
- User manual
- TLogger software (download)
- TENTECH Remote Control App (download)
- Carry case (control unit)
- Carry case (HV unit)

\* Supplied in different lengths on request

## Optional gadgets

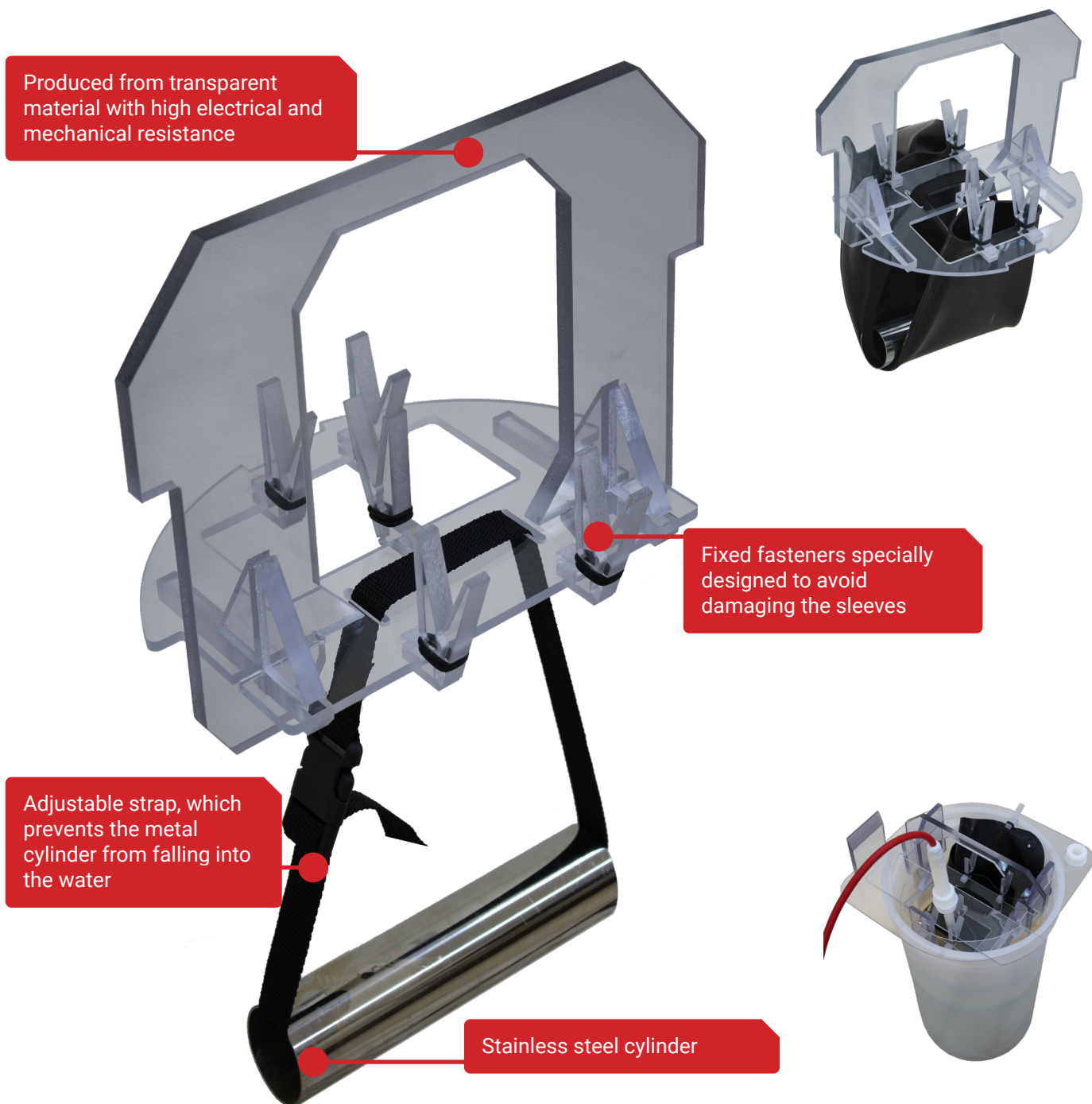
- Sleeve fixing kit

### Drawer for fixing and testing insulating sleeves

The DT70KV has several accessories that make it possible to carry out tests on different PPE.

The sleeve drawer is a practical and efficient solution, which allows the quick and safe exchange of insulating sleeves during dielectric tests.

Developed for dielectric testing of sleeves in accordance with standards ASTM D1051-23, ASTM F496-23 e IEC 60984:2014 (annex E)



Images are for illustrative purposes only



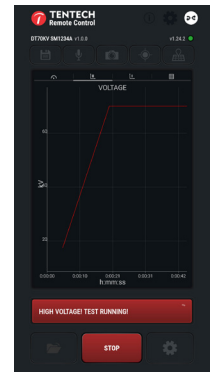
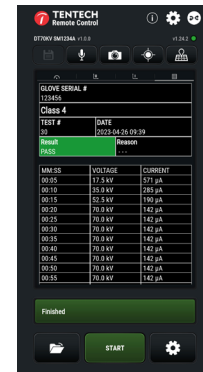
## Remote control by App

TENTECH equipment that has Bluetooth® interface can be controlled remotely via an Android™ smartphone / tablet running the TENTECH Remote Control application. Set the parameters, start / stop a test, save the data and generate reports.

Real-time measurement

Test details

Test Start / Stop



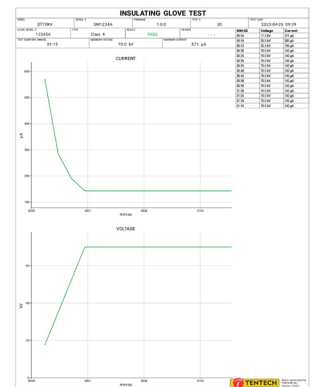
## Increased safety

TENTECH Remote Control communicates with the equipment through a Bluetooth® connection, allowing remote control of the tests, further increasing user safety in tests with potential risks.



## Smartphone features and automatic reporting

Record voice annotation for each measurement, generate automatic test reports directly on the App. Incorporate smartphone / tablet features into the report (photo, GPS coordinates and test location map).



Using the remote control does not require Internet connection (the Internet is only necessary if you want to see a map of the test site or send reports by email).



- Android, Google Play and the Google Play logo are trademarks of Google LLC
- Bluetooth is a registered trademark of the Bluetooth SIG, Inc. Worldwide





## Software for remote control and reporting

TLogger communicates with the equipment through a USB connection. Set the parameters, start / stop a test, save the data and generate reports.

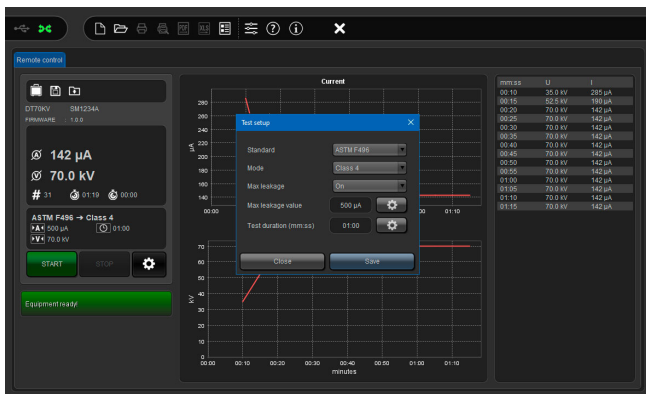


Real-time measurement

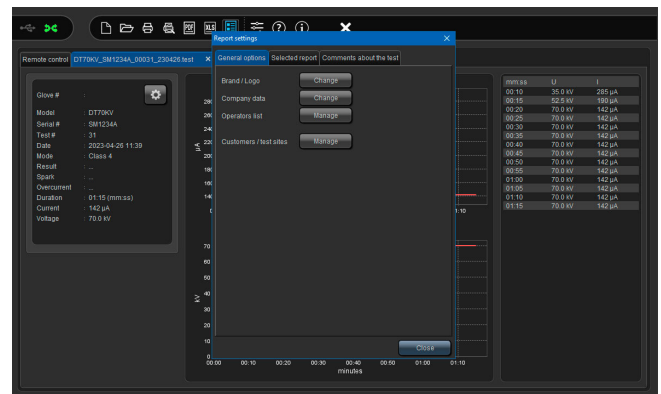
Remote control

Test results

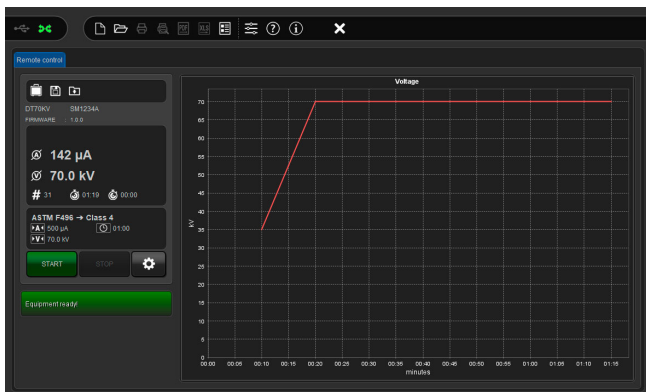
Available for download at: [www.tentech.com/tlogger](http://www.tentech.com/tlogger)



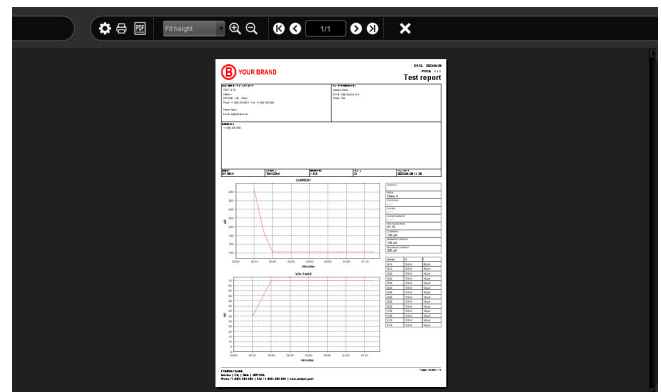
Test settings



Report settings



Charts



Report generation



**TENTECH instruments are made in the USA and used in over 40 countries worldwide.**



### **Test & Measurement equipment**

Earth ground testers  
Hipots  
Insulating glove tester  
Insulation testers  
Kilovoltmeters  
Micro-ohmmeters



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