The WR TestWorks Q-Sweat System provides sensitive, reproducible, and non-invasive measurements of sweat rate and volume. A dynamic quantitation of sweat output from 4 sites simultaneously allows the study of resting sweat activity and persistent sweat activity, which are particularly useful in examining the integrity of the postganglionic sympathetic sudomotor axon.

Q-Sweat recordings reveal whether a sweat pattern is normal, reduced, absent, excessive, or persistent, to assist the physician or researcher in determining the severity of autonomic disorders, and recognize patterns related to specific syndromes.

Measurement chambers are provided in two sizes to vary the surface area of the measurement site. Recordings are displayed in real time in an easy to use Windows-based application.

The Q-Sweat can be operated by physicians or technicians with minimal training. On-site installation and training are included for all locations in the USA and Canada.

- Uses room air (no special gasses required)
- Easily interfaces with laptop or desktop computer running Windows XP
- Highly accurate, specific, and repeatable
- Time efficient 11 minute recording is standard
- Self calibrating
- Rate is measured in nL/minute, totalized volume in µL

The Q-Sweat runs on WR Testworks software, and can be integrated with modules for cardiovagal and adrenergic testing of the Autonomic Nervous System. It can also be integrated with CASE Systems for QST (Quantitative Sensory Testing) for the study of thermal and vibration detection thresholds.

# 🔍 Q-Sweat

- Quantitative Sweat Measurement System

WR Testworks graphical interface showing 4 simultaneous sweat recordings.

Q-Sweat



#### Used for the study of

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Small fiber neuropathies

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- Diabetic neuropathies
- Autonomic neuropathies
- RSD (Reflex Sympathetic Dystrophy, aka CRPS, Complex Regional Pain Syndrome)

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- Multiple System Atrophy (Shy-Drager syndrome)
- Generalized Hypohidrosis and Anhidrosis
- Enzyme disorders
- Dysautonomia
- Pharmaceutical agents
- Dermatological studies
- Cosmetics/Consumer goods testing

**TESTWORKS** 

# **Q-Sweat Technical Specifications**

## SWEAT OUTPUT MEASUREMENT:

- Number of channels: 4
- Measurement method: direct vapor pressure calculation
- Measurement area (two chambers provided): 0.787 and 5.06 square cm.
- Dry air flow rate: 60.0 SCCM
- Volume:
  - Rate range: 0-1000 nanoliters
  - Accuracy: ± 5 percent
  - **Repeatability:** ± 5 percent
  - **Sensitivity:** 0.1 nanoliters
  - Air Source: Room air, dried with internal desiccant pack
- Rate:
  - Range: 0-1000 nanoliters per minute
  - Accuracy: ± 5 percent
  - **Repeatability:** ± 5 percent
  - Sensitivity: 0.1 nanoliters per minute

#### **ENVIRONMENT:**

- **Power:** 100–240 VAC, 50/60 Hz
- **Power consumption:** 40VA
- Dimensions (W x H x D): 406 x 184 x 330 cm. (16.0 x 7.25 x 13.0 in.)
- Weight: 10.0 kg. (22.0 lbs.)
- Operating temperature: 20–25.6 degrees C. (68–78 degrees F)
- Operational humidity: 0-70 percent

#### INDICATIONS FOR USE:

 The Q-Sweat<sup>™</sup> Quantitative Sweat Measurement System is designed to measure the sweat output of human skin. This device does not make a diagnosis or indicate that any disease state exists.

#### **CONTRAINDICATIONS:**

• Do not conduct this test on fragile or broken skin.

#### WARNINGS AND CAUTIONS:

- Warnings: None.
- Cautions:
  - This device is restricted to sale by or on the order of a physician.
  - This device is to be serviced only by WR Medical Electronics Co. If servicing is done by any party other than WR Medical Electronics Co., the product warranty and/or safety or quality certifications could be invalid. Contact the factory for repair advice before attempting to repair.

## **Quality and Safety**

ISO 9001:2000 ISO 13485:2003





**Q-Sweat™ Measurement Capsules** 



Q-Sweat<sup>™</sup> Capsule affixed to patients arm.

For more information on this product, please contact:



www.wrmed.com 1700 Gervais Avenue, Maplewood, MN 55109 Phone: 800.635.1312 • Fax: 800<u>.990.9733</u>