

CRG

Introducing CRG's Sweat Collection and Sensing Patch

This flexible and unobtrusive biosensing patch provides chronological sweat collection and storage with real-time sweat rate analysis and an incorporated biosensor platform customizable to mission needs. The design eliminates cross-contamination between samples and enables easy sample recovery for post analysis. CRG's design for sweat collection, analysis, and storage have been combined into a compact 2" diameter and 0.125" thick form factor.

Empowers Greater Insight of Operator Health and Performance

Microfluidic sweat collection patch allows for high resolution sensing and chronological sweat collection as well as storage for post analysis



Chronological Sweat Collection

Chronological collection and storage of sweat with isolation to valves minimize cross contamination



Easy Sweat Extraction Simple extraction of sweat for post analysis with minimal introduction of contaminates



Low Cost Materials Small, flexible form factor made from single use, disposable materials offer an economically friendly solution



Real-Time Feedback

Continuous, flexible sensors provide real-time, high-resolution analysis of sweat rate and output



User-Friendly Data

Mobile app UI with Bluetooth connection records and displays real-time sweat rate for 5+ hours

Customizable Training

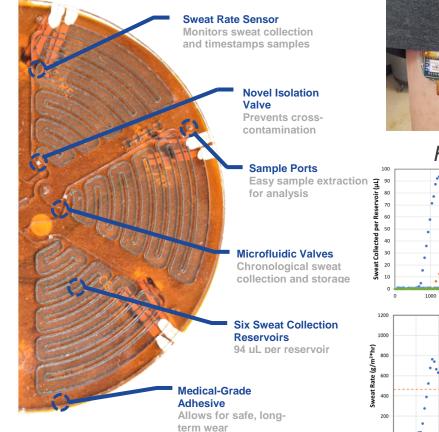
Real-time sweat rate data to tailor workouts and hydration levels for individualized use

Distribution A: Approved for public release

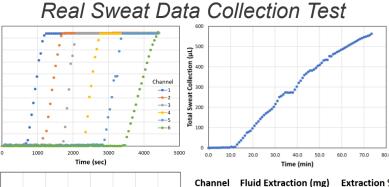
This material is based upon work supported by the U.S. Army Medical Research Development Command (USAMRDC)/Military Operational Medicine Research Program (MOMRP) under Contract No. W81XWH-19-C-0110. Any opinions, findings and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the USAMRDC/MOMRP or U.S. Army Medical Research Acquisition Activity (USAMRAA).

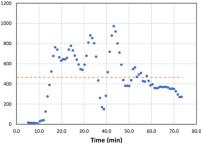
Enable Real-Time Stress Analysis

via customizable and continuous sweat rate and biosensor data collection









| | Time (min) | |
|---------|-----------------------|--------------|
| Channel | Fluid Extraction (mg) | Extraction % |
| 6 | 87 | 93% |
| 5 | 92 | 98% |
| 4 | 88 | 94% |
| 3 | 84 | 89% |
| 2 | 91 | 97% |
| 1 | 88 | 94% |
| Average | 88 | 94% |

Testing performed on human subjects was performed under Internal Funds and IRB #2021/04/21, Modular Biosensor Sweat Patch Evaluation

Sweat Collection and Sensing Patch Status:



Technology Readiness Level:

Manufacturing Readiness Level:

CRG In-House Manufacturing Capacity:





100-1000s of patches

Interested in learning more about CRG's technology? Contact us at <u>sales@crgrp.com</u>



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