

**CHALLENGING THE BOUNDARIES
OF HEALTH TESTING**



UNIQUELY POSITIONED TO

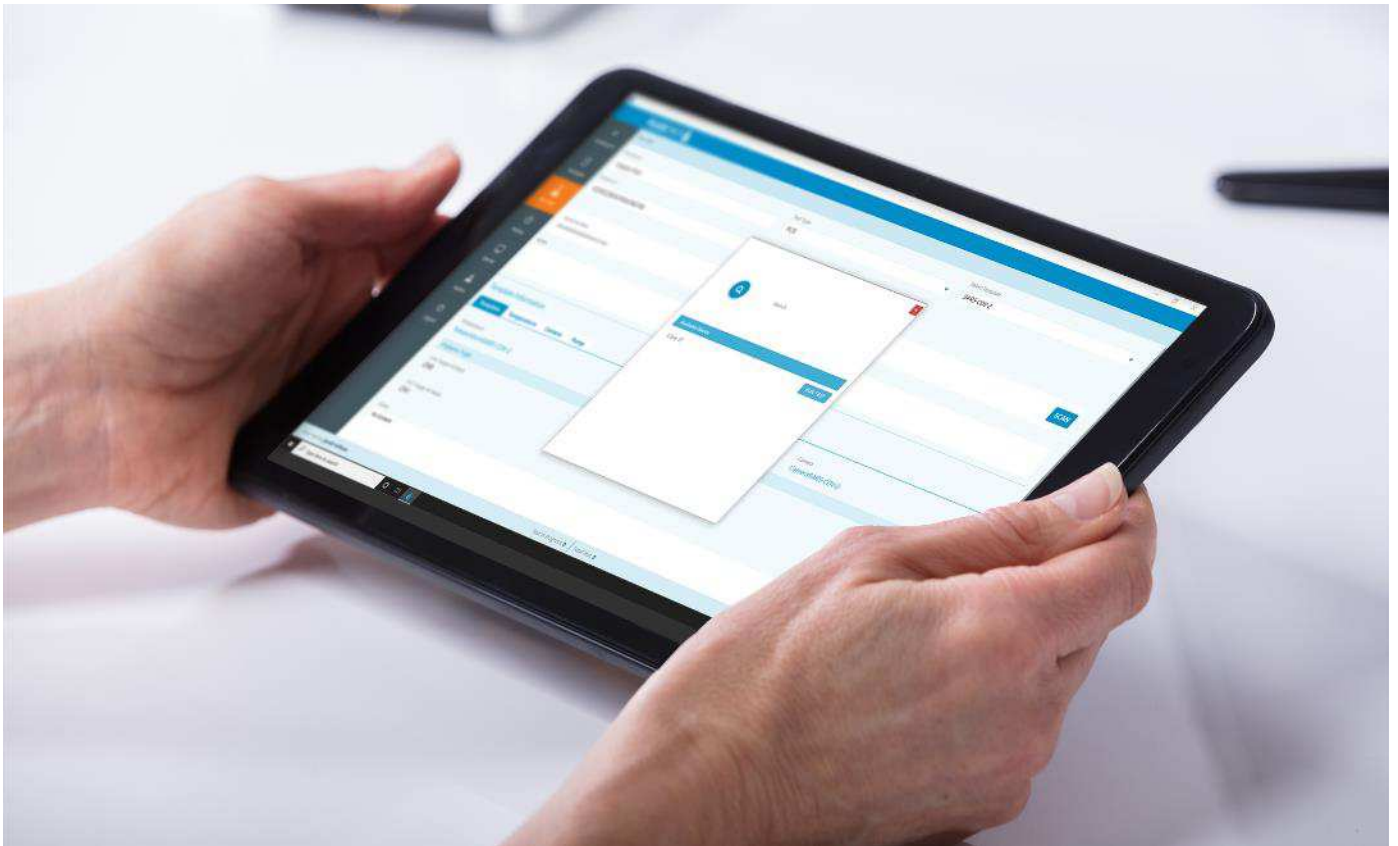
TRANSFORM POINT-OF-CARE TESTING

Issues in Diagnostic Testing Today

Current diagnostic testing methodology is too slow and too inaccessible to address today's dramatically changing healthcare challenges. There is an immediate need for technologies that provide **fast, accurate, and low-cost tests directly at the Point of Care**. Historically, Point-of-Care Testing has struggled with accuracy, cost, and ease-of-use.

These issues can be addressed with a small analyzer which can:

- ✓ Test Multiple Parameters
- ✓ Give Fast, Actionable Results
- ✓ Use Low-Cost Consumables
- ✓ Test Across Industries and Use-Case Settings



Our Vision of the Future

Fluxergy is building a future where testing is simple, the barriers to testing are reduced, and where limitless testing is accessible to everyone.

ABOUT THE FLUXERGY ANALYZER SYSTEM

Fluxergy's simple workflow on a compact analyzer makes it ideal for use in laboratory or field settings. Potential environments for rapid testing applications include **emergency rooms, outpatient procedures, urgent care, workplace screening, mobile testing, and community level testing settings**. This device is solely intended to be used by healthcare professionals.

Designed to deliver test results within one hour (15-60 minutes depending on the test). The Fluxergy Testing System consists of:

- Fluxergy Card - a single-use "lab-on-chip" consumable technology
- Fluxergy Analyzer - a highly integrated detection system
- Fluxergy Works software - an analysis and cybersecure communication platform for test data



Small Footprint:
 < 0.1 square
 meters



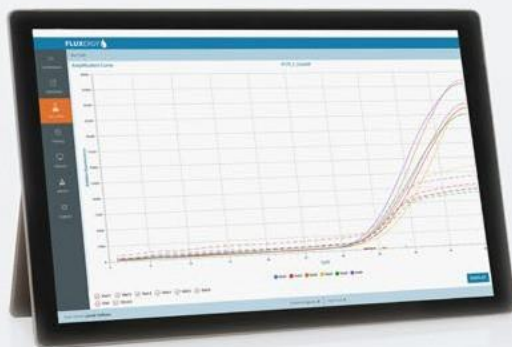
Easy to Use:
 Start Testing in Minutes



**Easily Adaptable
 Multimodal Technology**



**Cybersecure
 Communication**



Fluxergy Works software



Fluxergy Analyzer



Fluxergy Card

WHAT EXPERTS SAY ABOUT THE FLUXERGY ANALYZER SYSTEM



“Two things about the Fluxergy system stand out, especially in the case of a viral pandemic: its accuracy using RT-PCR technology and its ability to deliver results in 1 hour at the point-of-care. When someone is in the emergency room and a person is coughing, you want to confidently know right away what that person has, whether its COVID-19 or Influenza.”

- Dr. David Smith, MD, MAS, FACP, FIDSA

Professor of Medicine, Head of the UCSD Division of Infectious Diseases And Global Public Health
Member of Fluxergy’s Advisory Board

FLUXERGY 

**USING THE FLUXERGY PLATFORM
FOR COVID-19 TESTING**

CE 



FAST PCR: DETECT SARS-COV-2

IN ONE HOUR

The Fluxergy Test Kit COVID-19, which utilizes state-of-the-art Sample-to-Answer-RT-PCR and microfluidics technology, has been shown to identify the SARS-CoV-2 virus in one hour. This device is solely intended to be used by healthcare professionals. Results were obtained from internal performance evaluation using clinical samples benchmarked against an FDA-EUA approved method.

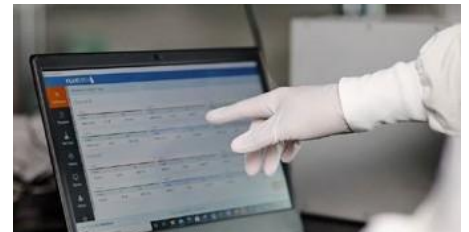
- Simple Workflow designed for rapid testing
- Minimal hands-on time per sample
- Real-Time RT-PCR, RNA extraction NOT required.
- Assay Target: SARS-CoV-2 N-gene and orf1ab gene
- Limit of Detection (LOD): 0.3 TCID50/mL of sample
- Sample: NP swab in VTM.



1. Place Prepared Sample into Fluxergy Card



2. Insert Fluxergy Card into Fluxergy Analyzer



3. Get PCR Results in One Hour



CLINICAL PERFORMANCE MEETS

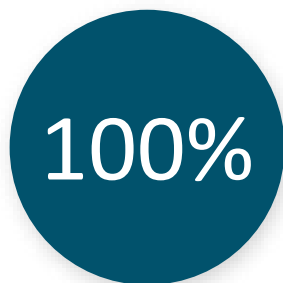
PRACTICAL UTILITY

Ideal for Multiple Use Case Settings:

- Emergency department testing
- Delivery ward testing
- Outpatient procedures
- Surgical procedures
- Workplace screening
- Community reopening applications
- Testing of schools for in-person learning
- Travel certifications



Performance of Fluxergy Test Kit COVID-19 agrees with benchmark RT-PCR
Reliability and Accuracy in a compact, deployable platform



Sensitivity



Specificity



TCID₅₀/mL
Limit of Detection

In a clinical comparison study of 95 NPS specimens, the Fluxergy Test Kit Covid-19 was 100% concordant with Cepheid's Xpert Xpress SARS-CoV-2 (the gold standard for COVID-19 RT-PCR at the Point-of-Care, approved for CE-IVD and other regions).

SIMPLE SAMPLE PREPARATION

WITH NO EXTRACTION REQUIRED



Viral Transport Media (VTM)*
(Not Included)



Vortexer (Not Included)



Fluxergy Reaction Mix



Mini Centrifuge (Not Included)



Fluxergy Card



Fluxergy Analyzer

RNA extraction is NOT required. The Fluxergy Test Kit COVID-19, which utilizes state-of-the-art Sample-to-Answer-RT-PCR and microfluidics technology for a simplified workflow.*

1. Thaw & spin down Reaction Mix tube with mini centrifuge.
2. Vortex the swab sample in VTM.
3. Pipette sample into the Reaction Mix tube.
4. Gently flick the bottom of the tube 5 times & spin down.
5. Place the Fluxergy Card on a flat surface.
6. Carefully dispense master mix into the Fluxergy Card.
7. Press the plastic cap onto the Fluxergy Card.
8. Insert the Fluxergy Card into Fluxergy Analyzer.
9. Click "OK" on Fluxergy Works to begin the test.
10. The test will be complete in about 1 hour.



Fluxergy Works (Computer not included)

DETAILED SPECIFICATIONS

FLUXERGY TEST KIT COVID-19

Assay Specifications	
Test Type	RT-PCR, Direct
Time to Result	~60 minutes
Sample Preparation	~3 min from reagent thaw, No extraction required
Sample Type	NPS in 3mL VTM, See accepted VTMs*
Required Sample Volume	14µL
Storage Condition	Fluxergy Card COVID-19: 10° to 30°C Fluxergy Reaction Mix COVID-19: -10° to -30°C
Gene Targets	Orf1ab polyprotein and N gene; Detects B.1.351 and B.1.1.7. variants (does not differentiate)
LOD*	0.3 TCID50/mL
Platform Specifications	
Analyzer Size	26.19 cm x 13.13 cm x 25.80 cm
Analyzer Weight	6.8 kg
Power Input	12V DC, 7A
Operating Temperature	15°C - 30°C
Storage Temperature	15°C - 30°C
Operating Humidity	10%-85%
Recommended Computer Requirements	Operating System: OS must be 64-bit, Windows 10 v1151 or later Processor: Intel Core i5 2.5GHz or equivalent Ram: 8GB DDR4 HDD: 250GB Screen: 1080p USB: 2x2.0 port (for scanner and mouse) Networking: Ethernet port
Data Analysis Tools	Qualitative Result Interpretation

*Refer to the Fluxergy Analyzer Instruction Manual for full specifications. This device is solely intended to be used by healthcare professionals.

FLUXERGY COVID-19 TEST KIT CE-IVD

PRICING STRUCTURE



Fluxergy Analyzer



Fluxergy Reaction Mix



Fluxergy Card

Analyzer (Quantity)	Price per Analyzer (In USD)	Price Per Analyzer (In Euros)	Test Kits (Quantity per Month)	Price Per Test Kit (In USD)	Price Per Test Kit (In Euros)
1	\$4.500,00 USD	3.850,00 €	100	\$35,00	30,00 €

Contact us for special pricing quotes for both the Fluxergy Analyzer and Test Kits!

At the end of the twelve month period, the Actual Unit Price for Product will be established based on the schedule presented in the Proposal and the actual ordered volume. If the Actual Unit Price exceeds the Projected Unit Price, COMPANY will pay FLUXERGY the difference in price times the number of units ordered. If the Projected Unit Price exceeds the Actual Unit Price, FLUXERGY will refund to COMPANY the difference in price times the number of units ordered. Shipment: Incoterms Ex Works Share (EXW)

COMMITTED TO COMPLIANCE:

CE, ISO 13485:2016, AND MDSAP

Fluxergy has obtained CE marking for its one-hour COVID-19 RT-PCR test, to use by healthcare professionals as an in vitro diagnostics (IVD) for the detection of SARS-CoV-2. The CE-mark will allow Fluxergy's innovative testing platform to enter the European Union market and any other markets that accept CE-marking as valid regulatory approval.

In December 2020, Fluxergy received dual ISO-13485:2016 and MDSAP certifications. ISO 13485:2016 is the medical device industry's most widely used international standard for quality management systems to design, develop, produce, and deliver products. MDSAP certification satisfies the quality system requirements of the regulatory authorities participating in the program, including the U.S. Food and Drug Administration (FDA), Health Canada, Brazil's Agência Nacional de Vigilância Sanitária and Australia's Therapeutic Goods Administration.



“Fluxergy is dedicated to producing tools that make health information accessible and available to everyone. We are focused on bringing our unique diagnostic products to market rapidly and innovatively, ensuring our end-users always have a product with the latest technology while maintaining the highest level of quality. We do this through a data-driven process that focuses on continuous improvement. Fluxergy is seeking commercial partnerships with healthcare providers and potential international go-to-market partners in Europe, Asia, and Australia”

- Dr. Ali Tinazli, Chief Commercial Officer

**MULTIMODALITY: THE FUTURE OF THE
FLUXERGY TESTING PLATFORM**



**MULTIMODALITY: THE GAMECHANGER
IN POINT-OF-CARE**



“The beauty of multimodality is the potential wealth of information provided to a healthcare provider, an amount of information typically reserved for 3 or 4 tests from different lab platforms. Our multimodal technology has the potential to consolidate a majority of critical lab tests to a single platform.”

–Tej Patel, Fluxergy President and Co-Founder

OUR MISSION

To transform the world of laboratory testing by building the world’s first point-of-care multimodal testing platform.

FUTURE COMBINATION TESTS AND SYNDROMIC PANELS

In addition to exploring saliva/throat/nasal swab sample types for our existing COVID-19 test, we are also developing tests that can utilize Fluxergy's first-of-its-kind multimodal technology. We are designing the following tests for the existing Fluxergy Analyzer model. Our product development pipeline includes:

- COVID-19 IgG Antibody Test
- Combined Test for SARS-CoV-2 RNA + COVID-19 IgG (a first in multimodal testing)
- Respiratory COVID-19/Influenza/RSV PCR panel



PCR, Immunochemistry, and Chemistry Fluxergy Card, and Fluxergy Analyzer Mk 13 Prototypes

TESTING MULTIPLE PARAMETERS ON A SINGLE TEST CARD

Fluxergy is addressing the current bottleneck in point of care testing: Right now, point-of-care testing requires a different analyzer for each kind of test. The Fluxergy Analyzer is being designed to run individual or combination panels for the following test types:



Molecular tests like PCR



Immunochemistry tests
to measure proteins



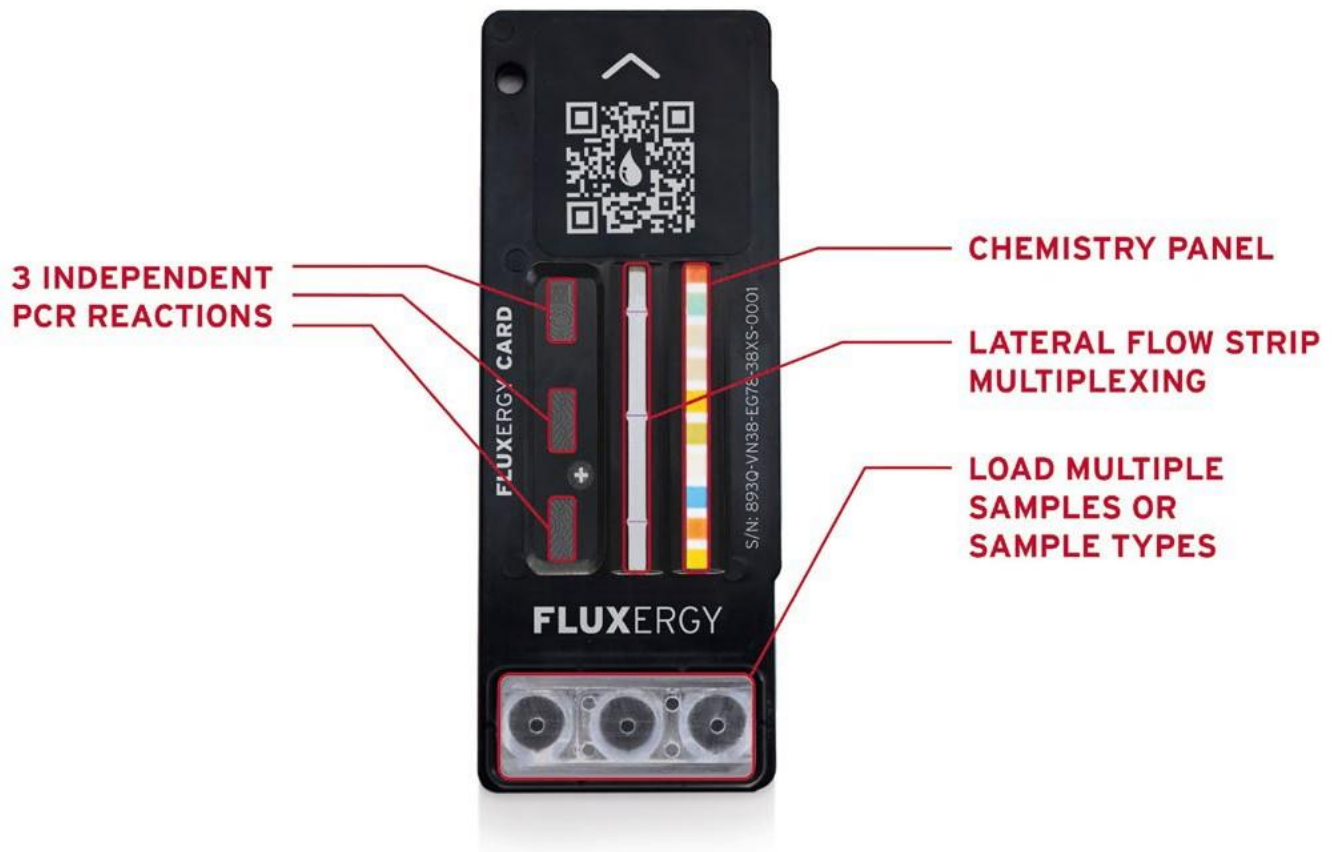
Chemistry tests for analytes
like electrolytes



Imaging cytometry tests

Measuring Multiple Types of Health Parameters at Once Can Potentially:

- Address the full life cycle of disease
- Reduce cost and increase efficiency, with consolidated testing consumables
- Improve clinical outcomes due to increased data access
- Increase access to health testing



**ABOUT US: MAKING LABORATORY
TESTING MORE ACCESSIBLE**



FLUXERGY'S THREE CORE TECHNOLOGIES



Fluxergy Card

Highly integrated and manufacturable single-use test cards for fast Sample-to-Answer testing.



Fluxergy Analyzer

A multisensor testing system designed to quickly detect molecules, chemicals, cells, and more.



Fluxergy Works

Our user interface capable of analyzing and disseminating data to users.

APPLICATIONS ACROSS INDUSTRIES

Fluxergy's modular testing platform is built for use across industries and application types. Various sample types can be addressed with optical and electrical detection methods.



Human



Veterinary



Food and Beverage



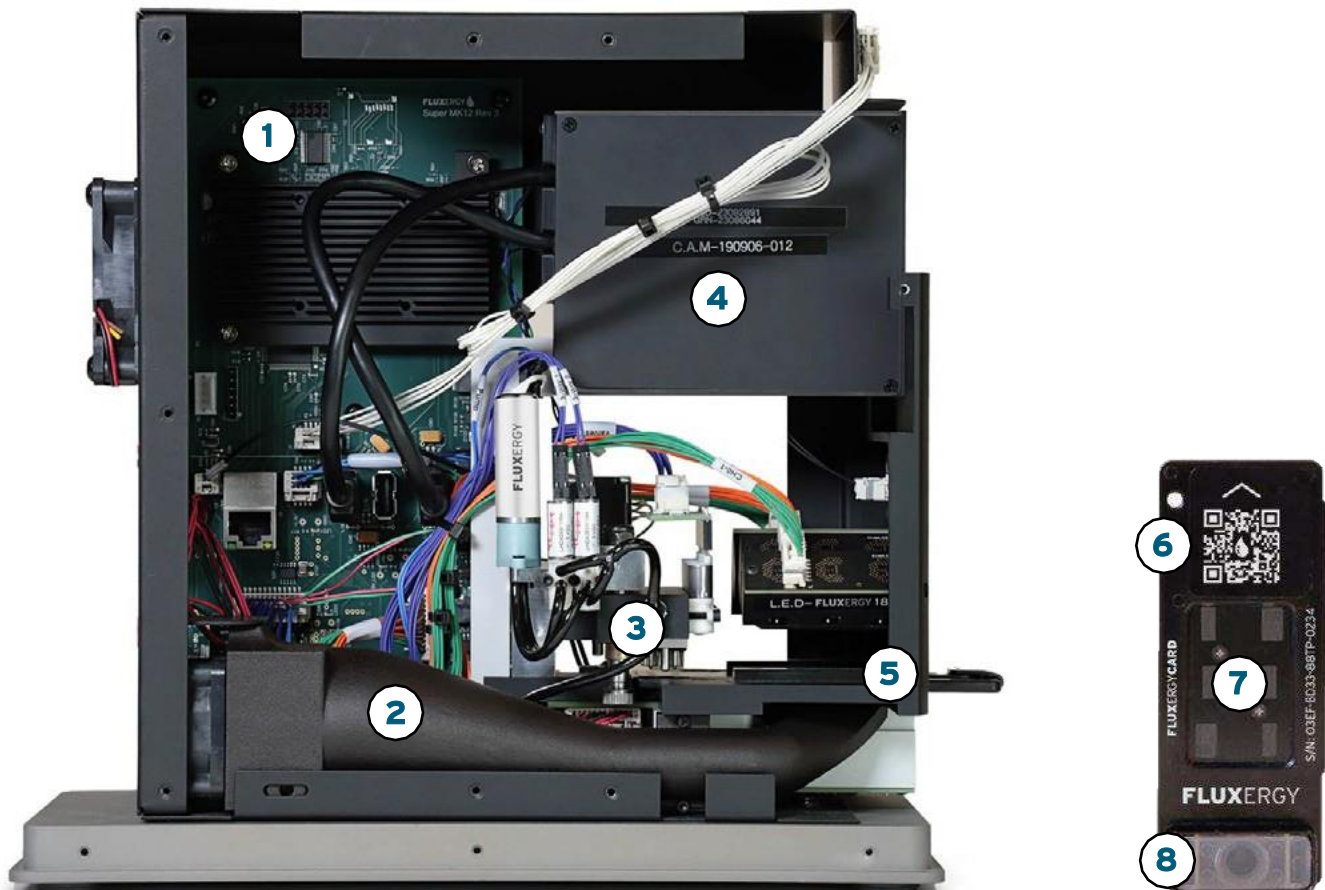
Environmental



Forensics

INSIDE THE CURRENT

FLUXERGY ANALYZER SYSTEM



- ① Proprietary Fluxergy-built Motherboard for Device Control and Connectivity
- ② Optical Sensors for Fluorescent and Active Cooling for Optimal Thermal Control
- ③ Colorimetric Detection
- ④ Image Recognition Capability with Multiple High-Resolution Cameras and Microscope
- ⑤ Insert and Power Fluxergy Cards
- ⑥ Medical-grade polycarbonate test card housing
- ⑦ Six independent PCR Reaction Zones
- ⑧ Integrated Loading Port with Lid

OUR VISION TO DEMOCRATIZE THE WORLD OF LABORATORY TESTING

Fluxergy started 10 years ago by Ryan Revilla and Tej Patel with a vision to democratize the world of laboratory testing, by making testing more accessible and affordable. Fluxergy's platform technology enables us to understand our world and our health in ways which were never possible before. Fluxergy's core guiding principles are:

Automation

All the technologies we build are scalable and accessible. Reducing price barriers and democratizing laboratory testing is key to our future.

Modularity

We want to do every lab test you can imagine in the palm of your hand, enabling anyone the ability to understand their world better.

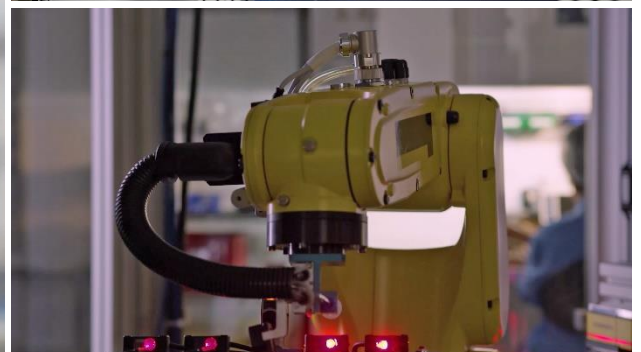
Connectivity

Doing more tests faster lets us collect data to better understand the world around us. We want to help make sense of all that information.

Kingston Technology co-founder John Tu joined the Fluxergy team as the primary investor allowing Fluxergy to leverage his team's knowledge and experience in the semiconductor industry to support Fluxergy's scale up, enabling our ability to create scalable low-cost technologies anyone can use.

OUR MANUFACTURING CENTER

Since Fluxergy has started, we have grown from a team of three in a garage to 80+ employees at Fluxergy's technology and manufacturing campus totaling 70,000 sq. ft, cGMP-compliant and ISO13485:2016/MDSAP-certified. Our combined 27000 sq. ft. state-of-the-art manufacturing facility and 16000 sq. ft. innovation development facility allow Fluxergy to continually develop new and exciting technologies that bring the lab closer to you.



This device is solely intended to be used by healthcare professionals.



Fluxergy's Manufacturing Center



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Fluxergy's Research & Development Center

