

TERA Overview

Trailblazing Terahertz Commercialization

WHAT IS TERA?

TERA is a science-based, deep technology company fueled by cutting-edge engineering, providing technological enhancements in a variety of industries such as food, medical, pharma, and energy. For nearly two decades, TERA has researched and developed its exceptional Terahertz (THz) technology and is now ready to release its platform to the world, offering unparalleled advancements unavailable until today.

THZ WAVES TECHNOLOGY

THz waves (0.3-3THz i.e., 300-3,000GHz) are positioned between microwaves (RF) and infrared (IR) waves on the electromagnetic (EM) spectrum. They are human safe and highly sensitive, capable of detecting biological, chemical, and gas compounds, such as Volatile Organic Compounds (VOCs) and viruses/bacteria found in breath.

Until recently, THz sources were improperly utilized for diverse commercial applications. Now, by customizing its deep technology to various industries needs, TERA is the first of its kind to overcome the industry's current challenges with ingenious applications and solutions alongside its strategic, global, industrial partners.

AT A GLANCE

Founded: 2003

Headquarters: Herzliya, Israel

Origin: Weizmann Institute of Science

Employees: ~75 FTEs*

Total Patent Applications: 112**

Total Investments: +\$130M

Total Investors: ~425

Intro Video on TERA: [Link](#)

ISO Certified: 9001, 13458, 27001

* Including ~20 outsourced employees/advisors

** Granted Patents: 62 (Utility + Design); Patent Applications In Process: 50

Tailored Technology for Specific Industry Challenges

Human-Safe (Non-Ionizing Waves)

Unique Detection of Gases and Bio-Chemical Compounds

Hydrogen Bond & Water Molecule (H₂O) Modification

THz Spectroscopy Molecular Radar

Bio-Availability Enhancements in Food & Pharma Industries

OUR PRODUCTS

TeraSystem® – A THz spectrometer operating as a molecular radar/scanner and platform, customizable for products and solutions. The TeraSystem detects and obtains the chemical fingerprint of any gas or organic material within its proximity.

TeraWaterSystem® – A specialized and proprietary machinery and production processes capable of producing various types of TeraWater with unique and long-lasting properties, suitable for the medical, food, safety, and energy industries.




TERA BioStation

TERA System

TERA Egg

TERA Water

Business Models & Go-To-Market Strategy

B2B BUSINESS MODELS

TERA's B2B business models are precisely customized for specific use-cases, products, solutions, processes. Developed with and for our strategic partners, our business models are based on the sales of TeraSystems and/or TeraTubes, while others are based on sales of TeraWaterSystems and/or recurring TeraWater royalties/usage fees, dependent upon the specific market, application, and customer needs. Our goal is to add substantial economic value and competitive advantage to our global, strategic, and industrial partners with exclusive products and solutions.

TERA has 5 revenue models:

- **TaaS (Test-as-a-Service)** – The TeraBio rapid breath test for COVID-19 is sold to our clients worldwide at a pre-paid cost of US\$4.44/test. The BioStations are leased with an advanced payment for a set quantity of tests/per BioStation.
- **Sales of TeraSystems/TeraWaterSystems** – Sold primarily to our strategic partners (additional related revenues will include installation and service fees).
- **Recurring TeraWater Revenue** – Based on volume and industry usage.
- **Recurring Royalty Fees** – Based on net-revenues generated from specific products and solutions, developed by TERA with its strategic partners.
- **Non-Recurring Engineering Expenses (NRE)** received from TERA's strategic partnerships.

GO-TO-MARKET STRATEGY



Spectrum of Future Terahertz Applications

- Diverse range of applications over time, across multiple high volume and growth industries.
- Significant market potential for each application following successful completion of Proof-of-Concept.
- Targeting specific strategic partners for Terahertz applications, while reducing time-to-market and bundling commercial competence.



¹ Secondary transactions are traded at a discount.

TERA.Bio Overview

TERA, via its fully owned subsidiary, Tera.Bio, has launched a rapid, non-invasive COVID test using the sensitivity of THz to confirm if a subject is or is not clear of COVID and its variants. Using TERA’s Master Classifier (TMC) Tera.Bio assigns a status of “Clear” or “Not Clear” to the individual tested, based on his/her results. Comprised of the proprietary TeraSystem molecular scanner, this rapid test provides accurate and reliable results by capturing VOC particles and other microscopic aerosols found in every breath we exhale, without the use of any chemical reagents.

TERA has begun selling its rapid breath tests to clients globally and will continue to apply for and receive regulatory approvals from countries worldwide.

INTENDED USE

Tera.Bio’s rapid and high throughput breath screening tests are intended to clear asymptomatic people and infectiveness in the general population (i.e., individuals that are negative to COVID and its variants). Tera.Bio intends to perform further clinical studies of other viruses and diseases to prevent future pandemics from spreading, offering an early-warning tool for health and bio threats.

HOW DOES IT WORK? ([Link to a Video Illustration](#))



Real-Time Results	Software Updates for Other Diseases & Variants ¹	Detecting Asymptomatic to COVID
Non-Invasive & Reagents Free	Machine Learning/AI/DSP	Easy to Operate & Portable

TERA.BIO APP (iOS/Android)

The Tera.Bio mobile app provides push notifications with test results.



¹ TBA, following certain clinical trials

TERA.Bio Rapid Breath Test Vs. Current COVID Testing Solutions

WHY TERA.BIO?

TERA believes the only way to prevent a pandemic is by breaking the chain of transmission as early as possible in addition to vaccinations, masks, and other treatments. The most effective method of prevention is performing early screening testing in high throughput for the general population. TERA.Bio detects the infectiousness of COVID at a low-cost with accuracy, efficiency, and speed.

	TERA.Bio	Antigen	RT-PCR
Methodology	Express, mass screening of breath aerosols and VOCs	Rapid screening for detecting fragments of the virus ¹	Molecular technology testing COVID-19's RNA ³
Technology	Spike Protein THz detection without reagents, adjustable to variants	Viral Agents, requires re-adjustment for variants	RNA, requires re-adjustment for variants
Result Time	~ 1 minute	~ 15 minutes	6 - 72 hours
Detection Period	Day 1 of infectiousness with or without symptoms	Day 1 of symptoms and if without symptoms, Day 3-5	Best detected during Day 4 - 7 of infection
Price	\$4.44 per test	~\$5-\$25 per test	~\$50-100 per test
Accuracy	High detection of asymptomatic	May need confirmatory testing ² , low sensitivity for asymptomatic	Moderate-to-high sensitivity
Invasiveness	Non-invasive; blow into tube, increased comfortability	Moderately invasive; nasal pharyngeal swab or nasal swab	Most invasive; nasal pharyngeal swab, often with discomfort

<https://www.cdc.gov/coronavirus/2019-ncov/lab/resources/antigen-tests-guidelines.html>¹

<https://www.cdc.gov/mmwr/volumes/70/wr/mm7019a3.htm#:~:text=Among%201%2C732%20paired%20samples%20from,%25%20and%2098.7%25%2C%20respectively>²

<https://my.clevelandclinic.org/health/diagnostics/21462-covid-19-and-pcr-testing>³

Disclaimer & Forward-Looking Statements

THE INFORMATION IN THIS DOCUMENT MAY INCLUDE PREDICTIONS, ESTIMATES OR OTHER INFORMATION THAT MAY BE CONSIDERED FORWARD-LOOKING. SPECIFICALLY, STATEMENTS REGARDING TERA'S FUTURE BUSINESS, BUSINESS PLANS, REVENUE PROJECTIONS, COSTS, EARNINGS, INVESTMENTS OR OTHER FINANCIAL ITEMS; STATEMENTS RELATING TO THE OBJECTIVES OF MANAGEMENT, AND STATEMENTS REGARDING NEW PRODUCTS ARE FORWARD LOOKING STATEMENTS, WITHIN THE MEANING OF THE SAFE HARBOR. THESE STATEMENTS ARE BASED ON MANAGEMENT'S CURRENT EXPECTATIONS. ACTUAL RESULTS MAY DIFFER MATERIALLY FROM THOSE PROJECTED AS A RESULT OF CERTAIN RISKS AND UNCERTAINTIES, INCLUDING BUT NOT LIMITED TO: THE GROWTH OF THE MARKETS ADDRESSED BY OUR PRODUCTS AND OUR STRATEGIC PARTNERS. WHILE THESE FORWARD-LOOKING STATEMENTS REPRESENT OUR CURRENT JUDGMENT ON WHAT THE FUTURE HOLDS, THEY ARE SUBJECT TO RISKS AND UNCERTAINTIES THAT COULD CAUSE RESULTS TO DIFFER MATERIALLY. YOU ARE CAUTIONED NOT TO PLACE UNDUE RELIANCE ON THESE FORWARD-LOOKING STATEMENTS, WHICH REFLECT OUR OPINIONS ONLY AS OF THE DATE OF THIS REPORT. PLEASE KEEP IN MIND THAT WE ARE NOT OBLIGATING OURSELVES TO REVISE OR PUBLICLY RELEASE THE RESULTS OF ANY REVISION TO THESE FORWARD-LOOKING STATEMENTS IN LIGHT OF NEW INFORMATION OR FUTURE EVENTS.

TERABIO'S RAPID BREATH TEST AND ITS RELATED RESULTS, PERFORMED IN ANY OF THE IRB REGULATED VALIDATION SITES WORLDWIDE, PROVIDES EFFICACY AND/OR ACCURACY RESULTS APPLICABLE ONLY TO SUCH STUDY, AND IT IS SUBJECT TO ITS LOCATION (AND RELEVANT PREVALENCE), POPULATION TESTED, THE TESTED COVID-19 VIRUS STRAIN, AND DATA RECEIVED BY TERA.BIO FROM ITS TESTING SITE STUDY PARTNERS (USED TO TRAIN, LOCALIZE, AND CALIBRATE THE SYSTEM). ONE SHOULD NOT RELY ON SUCH RESULTS AS A DEFINITIVE INDICATION OF THE PERFORMANCE OF THE SYSTEM FOR THE GENERAL POPULATION AND/OR FOR SPECIFIC INDIVIDUAL, AS THEY MAY VARY FROM DAY TO DAY, LOCATION TO LOCATION AND VIRUSES TO VIRUSES, AND ULTIMATELY ARE SUBJECT TO THE GENERAL HEALTH AND CLINICAL CONDITIONS OF THE TESTED INDIVIDUALS.

THE SYSTEM AND SOFTWARE HAVE BEEN PRODUCED AND DESIGNATED INITIALLY ONLY FOR SARS- COV-2 (COVID-19) AND IS NOT SET UP, AT THIS STAGE, FOR ANY OTHER DISEASES AND/OR VIRUSES. TERA.BIO RAPID BREATH TEST EFFICACY, AND/OR ACCURACY, MAY VARY OVER TIME AND LOCATION, AS IT IS SUBJECT TO MANY VARIABLES INCLUDING THE WORKING ENVIRONMENT AND CLINICAL/HEALTH CONDITIONS OF THE INDIVIDUALS TESTED AND COMPARATOR ACCURACY LEVEL AT THE TIME OF THE COMPARISON.

FOR MORE INFORMATION REGARDING TERABIO'S TECHNICAL PERFORMANCE, PLEASE SEE OUR TERA.BIO SYSTEM TECHNICAL PERFORMANCE DISCLAIMER.