

See the Invisible. Detect Weapons. Save Lives.

Nathan M. Monroe, PhD
Founder & CEO



Cambridge Terahertz | Company Intro

- **Deeply Technical Roots**

Spun out from MIT in 2021 based on 10+ yrs of research

- **Fast-Growing Silicon Valley Startup**

\$17M venture capital raised | investors include Amazon, Felicis, 17 others

- **Deep Military Ties**

Five active contracts with US Gov't and DoD

- **Proven Technology**

Third generation system demo'ed at ISC West 2025

- **Government Compliant by Design**

One of only companies globally with FCC THz license, rigorous human safety analysis

The Concealed Weapons Problem

At Cambridge Terahertz,
we're driven by the belief
that if we can detect
concealed weapons,
we can save lives, and that
**even one death
is too many.**

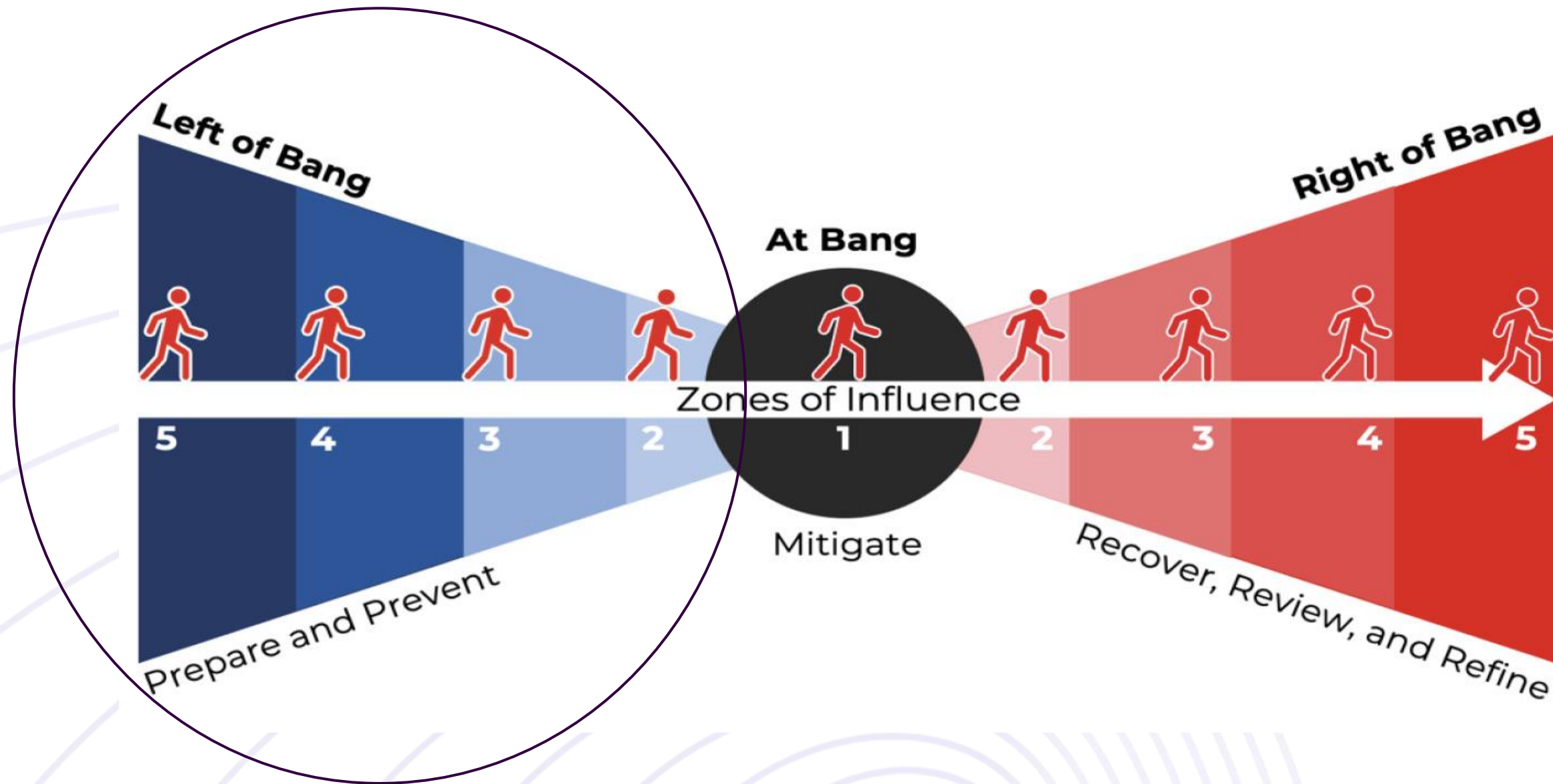
**Our goal is to create
a threat detection
solution that is:**

- Non-intrusive
- Privacy-preserving
- Accessible and affordable
- Capable of detecting both traditional and emerging threats

Personal Story

CTHz Founder Nathan Monroe

Proactive Concealed Weapons Detection



Current
Solutions
Fall Short.

Cambridge
Terahertz
Redefines
Success.

Conventional Millimeter
Body Scanners



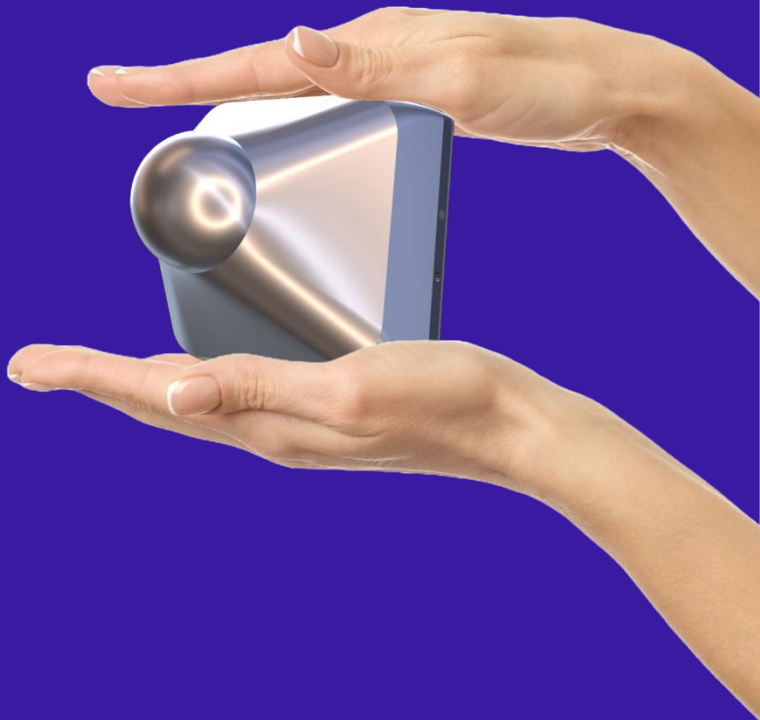
AVG. DEVICE WEIGHT	1,200 LBS
AVG. SCANS PER HOUR	300
AVG. DETECTION RANGE	<1M
DETECTS NONMETAL ITEMS?	YES

Enterprise Walk-Through
Metal Detectors



AVG. DEVICE WEIGHT	100 LBS
AVG. SCANS PER HOUR	600
AVG. DETECTION RANGE	0.5M
DETECTS NONMETAL ITEMS?	NO

CAMBRIDGE TERAHERTZ



DEVICE WEIGHT	2 LBS
SCANS PER HOUR	600-1200
DETECTION RANGE	3M+
DETECTS NONMETAL ITEMS?	YES

Seamlessly Secure.

This isn't just a replacement for metal detectors—it's a new model of **proactive security**. Our technology **blends into the background**, providing seamless, unobtrusive protection.

Discreetly mounted for non-intrusive scanning at a distance

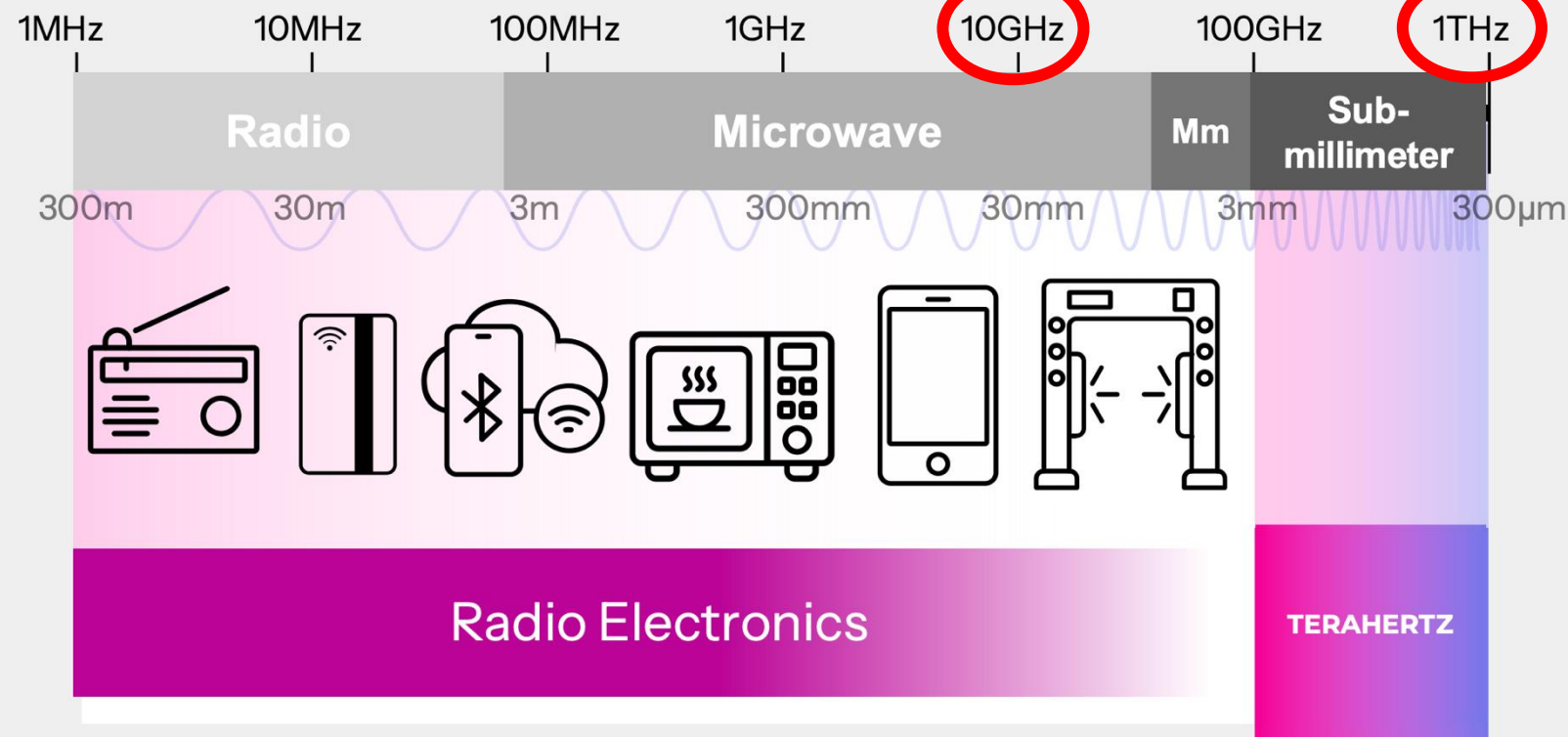
High-throughput scanning—
no queues, bottlenecks, or security protocols

AI automatically detects concealed items

Alerts operators to investigate further



Terahertz is the Big Brother of Millimeter-Wave



Terahertz Enables...

Miniaturization

Reduced size, weight, power needs

Cost Effectiveness

CMOS fabrication drives affordability above ~0.1THz

Higher Performance

Higher resolution imaging means improved detection

See and detect...

See through

Clothing, bags, boxes, packages

Detect metallics

Guns, knives, etc

Detect Non-metallics

Explosives, 3d-printed weapons, drugs, contraband, electronics

Terahertz Imaging: Passive versus Active

Passive THz



Relies on natural thermal emissions

Lower 2D image quality and detection performance

Severe environmental issues limit uses

Detect nonmetal items

Cost-prohibitive
>\$100k

Refrigerator-sized immobile unit

Illuminates subject with radio waves

3D imaging, airport-grade detection performance

Works well indoors and outdoors, across temp

Detect nonmetal items

Enterprise-grade price point

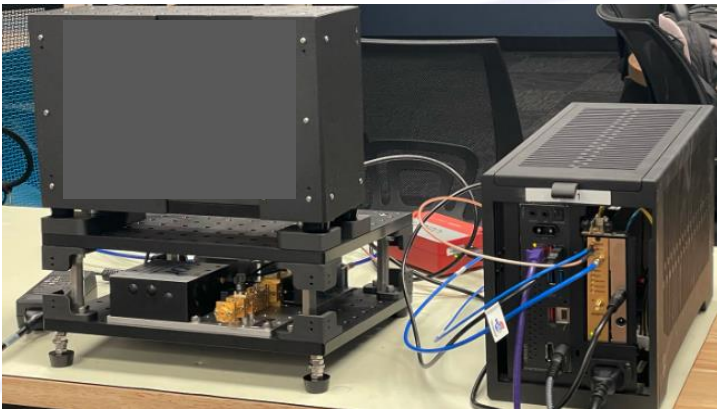
Camera-like form factor

Active THz



- Active THz uses human-safe radio waves, like airport mmW scanners
- 1000x less power than a cell phone
- Cambridge Terahertz has FCC license, includes rigorous human-safety analysis

Cambridge Terahertz Concealed Weapons Detection System in Action

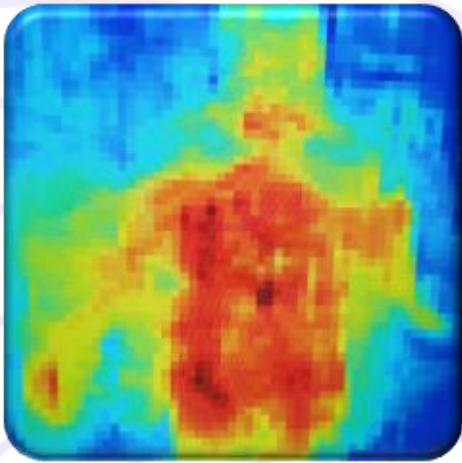


Terahertz Imaging System



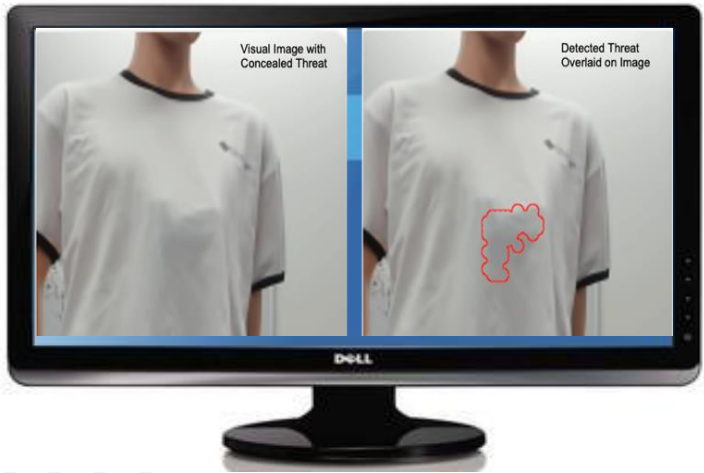
Test Scene

Mock Gun



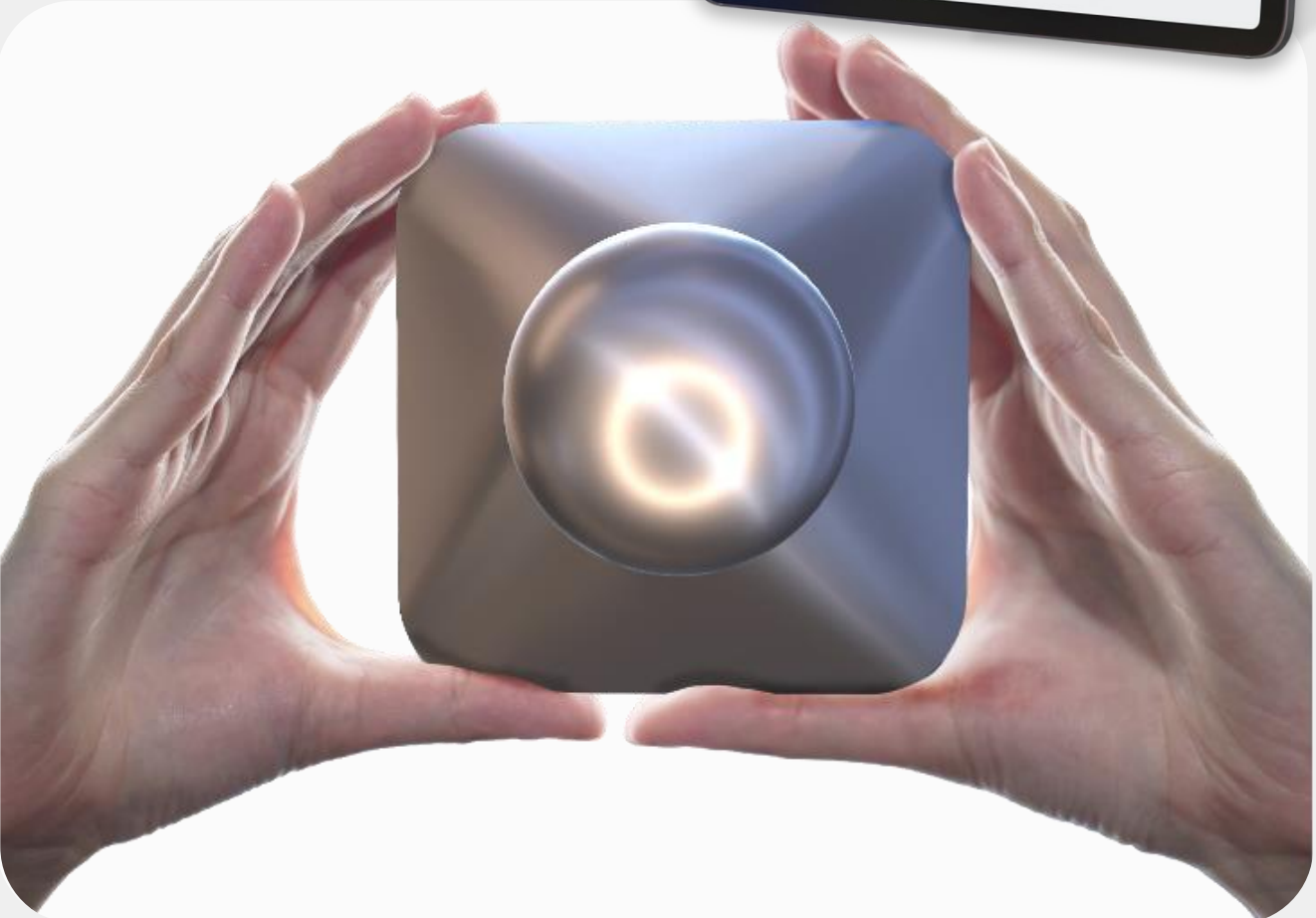
Radar Image at 2m Offset

AI-Based Detection



Proactive Smart Security

Powered by AI, our Terahertz system uses harmless radio waves to generate LiDAR-like 3d images while seeing through household materials.



Detects metallic and nonmetallic items:

- Electronics
- Weapons
- Explosives
- Drugs & paraphernalia

Hidden inside:

- Clothing
- Bags
- Boxes & envelopes

Imaging Demo: Concealed Gun Under Shirt



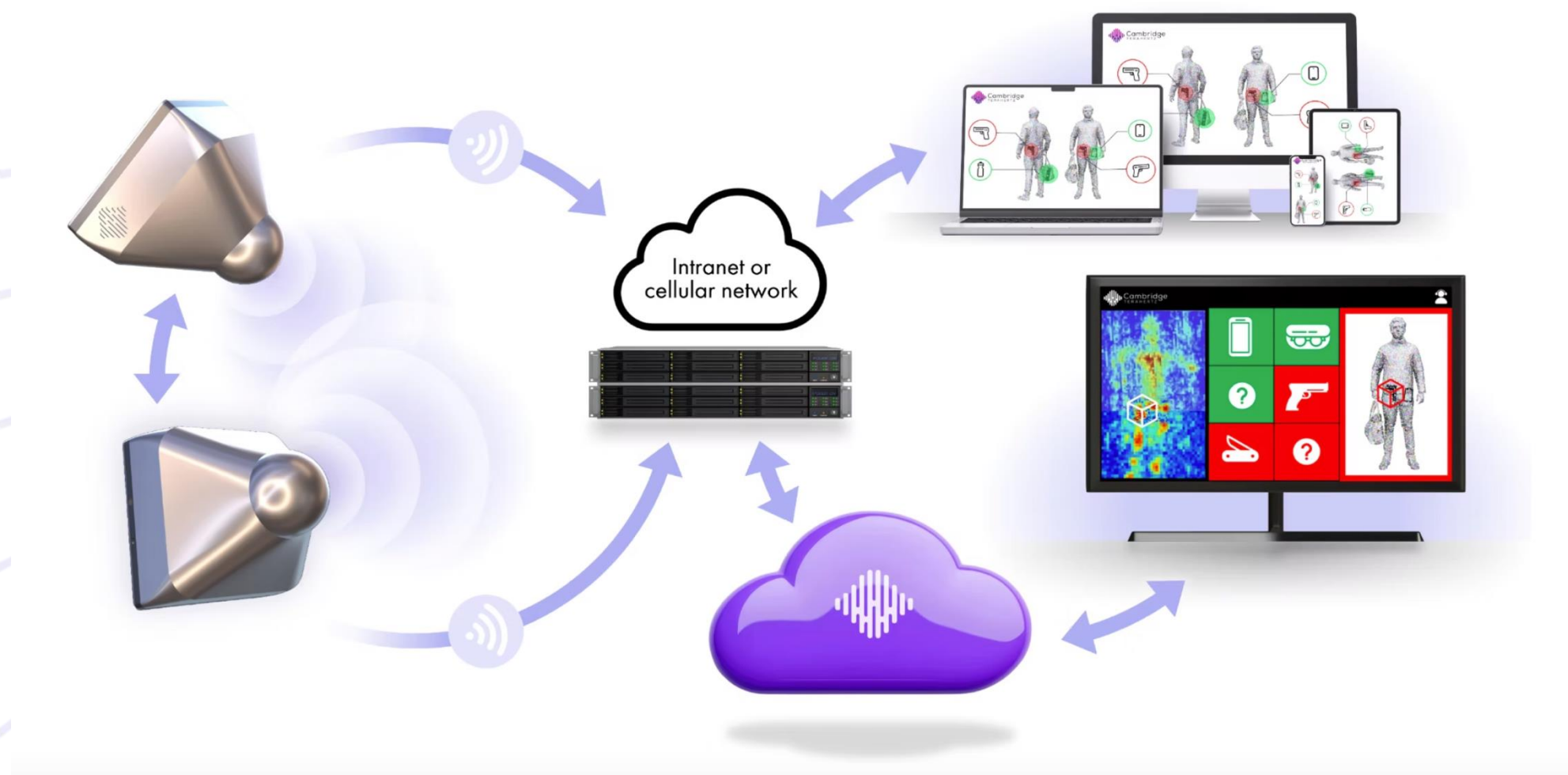
Unmatched Deployment Flexibility



Walkways, Turnstiles, Doorways, Entrance Systems

Distributed Weapons Detection Architecture

Autonomous Edge and Centralized Cloud



ACQUIRE

3D Images @ 10 fps

ACT

Real-time, Edge AI automatically detects concealed weapons & contraband & alerts operations

OPERATIONALIZE

ML/AI
Closed-Loop System integrates with Security Operations

Q & A

Get a Demo
At Booth #3301

THANK YOU FOR ATTENDING
TODAY'S SESSION:

“See the Invisible. Detect Weapons. Save Lives.”

PLEASE COMPLETE THE EVALUATION WITHIN THE GSX APP.

DOWNLOAD
THE APP HERE:

