

Company information

- US
- Production US (Raman)
- Employees: 75.000
- Revenue: \$2 BILLION USD
- Acquired Ahura in 2010
- Ahura: founded in 2002

Market presence

- First in the market (Thanks to Ahura acquisition)
- Global
- Many technologies
- Life Science, Pharma, Industrial, Clinical, Diagnostics, Environmental, Materials, S&S

Raman portfolio

- FirstDefender MX
- FirstDefender RMX
- TruNarc
- Gemini (FTIR + Raman)

Price Range

40-50 k € (FirstDefender)
25-35 k € (TruNarc)
85-95 k € (Gemini)

Support/Warranty

- 1-2 years
- 24/7 Reach-back support.
Local number, site

Positioning

- Strong market share
- Focus: CBRN and Safety& Security
- Reputation (past)
- Proven record
- How they see themselves: "We are the best and well proven solution for S&S, we are Thermo, we are experts on CBRN, we are the benchmark solution for Handheld Raman"

SW/FW/libraries

- Target customers: S&S / CBRN
- Libraries: Same than 100Indicator
- Updates/upgrades (Libraries, FW, SW): free & unlimited

Weaknesses

- Still the Ahura design – No new improvements
- High price
- Bulky and heavy (except TruNarc)
- No good ergonomics
- No flexible 90° free turning adaptor
- No SERS, except for TruNarc
- TruNarc: Close system: Only Narcotics and no CFR compliant

Strengths

Market benchmark for many years
Huge distribution network

Good with complex mixtures

Stable and solid algorithms

Well rugged / robustness
TruNarc is reference for Narcotics

SERS kit

They have a sampling probe

Serstech's response

- Not any longer. We developed and improved very fast.
- Thermo partners are upset with them: No good after-sales services.
- We are also good at identifying mixtures and complex samples.
- We have even better algorithms. Constantly developing new ones.
- Same certifications for ruggedness (MIL & IP).
- Not any longer. TruNarc users complain about their sampling method. Plus: No customizable libraries in TruNarc.
- Newer SERS. Excellent for low concentrations + better sample handling.
- Users generally dislike the sampling probe – bulky, **very expensive** (extra 5k €!).

How Serstech wins

- Size, weight, price
- Speed
- SERS kit
- Ease of use
- Having SERSTECH as a company:
Easier to reach
Better and faster support
Fully focused on Raman
We're not arrogant towards users
- Universal Raman jcamp extension files. Thermo: Only internal report extension files
- The flexibility of our libraries.
TruNarc is a "closed" system, with no possibilities to expand as our 100ID.

Notes:

ThermoFisher – TruNarc

ThermoFisher
SCIENTIFIC

Positioning

- Thermo's device for Narcotics
- Strong market presence
- Thermo decided to make it a closed system: Only Narcotics
- They still believe they have the best algorithms, but no new developments in a long time.
- They "cheat": They try to identify substances based on weak peaks and based on good guesses within the algorithms

Price Range

Apr. 17 to 23k €

Weaknesses

- Closed system: Only Narcotics
- Very long analysis time
- Old SERS kit. No upgrades in a long time
- SERS accessories (spoons, etc.): Not easy to use
- Weak protection: IP 53 / NO MIL-STD-810
- No camera / no barcode reader
- No labelling option for measurements
- No CFR
- No Wi-Fi. Only USB
- Very limited accessories. No 90° adaptor
- One single focal point: No Autofocus
- Problems with heterogeneous samples
- Problems with fluorescence from wall containers
- No view of spectra and correlation



Competitor strengths

Very compact and light

Reputation and proven record

Market benchmark for many years

Good with complex mixtures and low concentration due to big spotsize

Stable and solid algorithms

TruNarc is reference for Narcotics

SERS kit

- Serstech's response
- Only 10 g weight difference. ARX has better ergonomics
- Mainly old references. They're struggling now that there're more competition. No longer the best/only option for Narcotics
- Not any longer. We developed and improved very fast. Thermo partners are upset with them: Bad quality after-sales services.
- We have small spot size which perform much better in very low amount of samples
- We have even better algorithms. Constantly developing new ones.
- Not any longer. TruNarc users complain about their sampling method. Plus: No customizable libraries in TruNarc.
- Ours is a new SERS technique (patented): Better for low concentrations and sample handling

How Serstech wins

- SERS kit (fluoresc. & LOD)
- Ease of use, size, weight
- Open system: Not only Narcotics
- Raman jcamp extension files
- ARX SharpEye & autofocus:
 - Reduced glass fluorescence
 - No sample heterogeneity issues
 - Faster speed of analysis
- ARX device workflows:
 - Simpler navigation
 - Shorter time to measurement
 - Comprehensive analysis modes

Comments:

- Many users of TruNarc's SERS kit complain about it, claiming it is very unstable and not reliable. Also, they tend to dislike the sample prep.
- Thermo has issues with fentanyl and its derivatives. Same with street drugs
- New Serstech SharpEye lens system and the auto focus algorithms automatically adjust the focal position to where the Raman signal is the strongest. Moving the focal point and evaluating strength of the Raman response is done in milliseconds.
- AUTOFOCUS AND SHARPEYE LENS ARE UNIQUE IN THE MARKET

ThermoFisher – FirstDefender MX - RMX

ThermoFisher
SCIENTIFIC

Positioning

- Thermo's device for Narcotics
- Strong market presence
- Focus: CBRN and Safety & Security
- First in the market (Thanks to Ahura acquisition)
- They still believe they have the best algorithms, but no new developments in a long time.
- They "cheat": They try to identify substances based on weak peaks and based on good guesses within the algorithms

Price Range

Appr. 50 k €

Weaknesses

- Very long analysis time
- No SERS
- Still the Ahura design – No new improvements
- High price
- Bulky and heavy
- No good ergonomics. Very rigid
- No flexible 90° free turning adaptor
- No camera / no barcode reader
- No labelling option for measurements
- No CFR
- No Wi-Fi. Only USB
- One single focal point: No Autofocus
- Problems with heterogeneous samples
- Problems with fluorescence from wall containers



Competitor strengths

Good with complex mixtures

Reputation and proven record

Market benchmark for many years

Stable and solid algorithms

Well rugged / robustness

Sampling probe for the RMX

Serstech's response

→ We are now better at identifying mixtures and complex samples

→ Mainly old references. They're struggling now that there're more competition

→ Not any longer. We developed and improved very fast. Thermo partners are upset with them: Bad quality after-sales services.

→ We have even better algorithms. Constantly developing new ones.

→ Same certifications for ruggedness (MIL & IP)

→ Users generally dislike the sampling probe – bulky, very expensive (extra 5k €!)

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Comments:

- New Serstech SharpEye lens system and the auto focus algorithms automatically adjust the focal position to where the Raman signal is the strongest. Moving the focal point and evaluating strength of the Raman response is done in milliseconds.
- Having SERSTECH as a company should be a great advantage. Better and faster support, fully focused on Raman, one device; all applications.
- AUTOFOCUS AND SHARPEYE LENS ARE UNIQUE IN THE MARKET