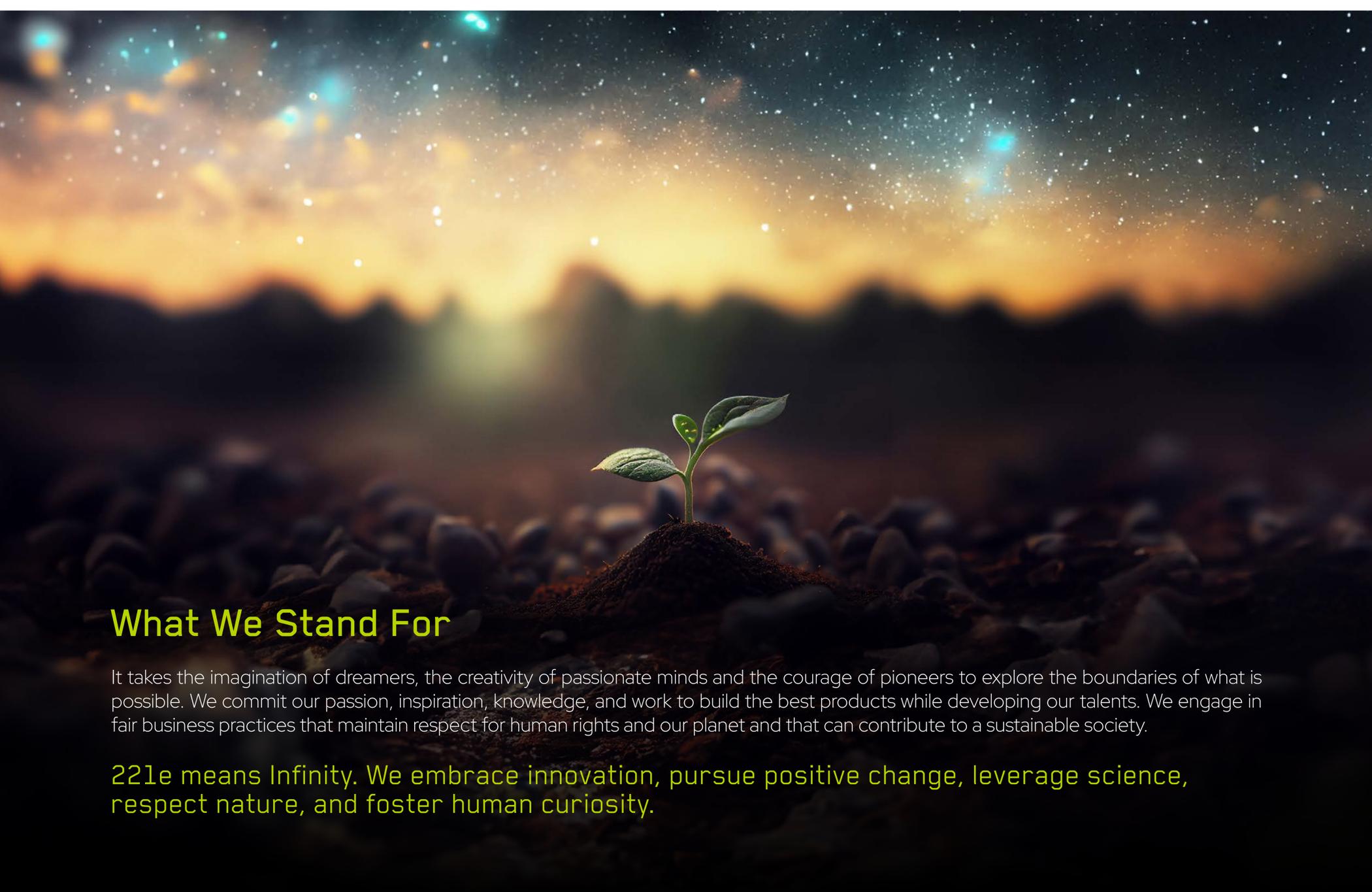


## Unlocking the Value of Sensor Data with AI

221e provides Sensing AI solutions for smart devices, responding to the ever-increasing demand for sensors data processing. Data is fueling the economy as the most precious raw material, coupled with AI as a strategic tool to create value. In this scenario, 221e delivers technology that allows our customers to quickly capture the value of sensors data.

Our mission is to create Intelligent Sensing Products.



## What We Stand For

It takes the imagination of dreamers, the creativity of passionate minds and the courage of pioneers to explore the boundaries of what is possible. We commit our passion, inspiration, knowledge, and work to build the best products while developing our talents. We engage in fair business practices that maintain respect for human rights and our planet and that can contribute to a sustainable society.

**221e means Infinity. We embrace innovation, pursue positive change, leverage science, respect nature, and foster human curiosity.**

## Trusted by Industry Leaders



*"221e is helping fill the gap for customers who don't have the time or resources to design and develop AI/ML solutions on their own"* Yann LeFaou, director for ML, Microchip.

## Consistently Accurate Sensors Data for AI Integration

The essential idea of intelligent sensors is to provide them with processing capability, moving the algorithms to the embedded layer with advantages of execution speed, power consumption reduction, and data pipeline optimization. Yet, sensor data can be spurious, corrupted by various systematic factors or external conditions: if not addressed properly, these can lead to inaccurate classification and inconsistent results, jeopardizing projects execution. Our sensor fusion and AI algorithms operate in real-time, right where data are generated, resolving issues such as bias, offsets, drift, noise, and interference. We provide fully engineered and tested solutions that ensure data accuracy and reliable ML classification results.

We Deliver on Precision.

### Sensor Fusion Software: MPE (Motion Processing Engine)

MPE™ sensor fusion software enables the highest accuracy and performance for 6-axis and 9-axis inertial orientation estimation (IMU). MPE delivers top precision, data quality and dependability based on a dynamically adaptive Extended Kalman Filter implementation, offsets compensation and automatic calibration procedures. MPE software library is hardware agnostic and compatible with the leading embedded architectures as well as high level operating systems, making it exploitable on any device.

### Edge AI Software: NeuraSense

NeuraSense™ is a set of **intelligent sensing libraries** for consumer, automotive and industrial applications. Optimized for the edge, it enables real-time sensor data analytics through a layer of machine learning that provides pattern recognition, event detection and classification. NeuraSense is implemented as a static C library that can be easily ported to any platform. Retaining full domain expertise on the technology allows 221e to customize NeuraSense software rapidly and efficiently for specific customer needs.

### Embedded Systems: Sensing IoT Platforms

221e designs low power, miniaturized, wireless multi-sensor hardware platforms, incorporating state-of-the-art sensing and processing technology. We integrate inertial, biosignal and environmental sensors with on-board flash storage, wireless connectivity, automated on/off functions and regulated rechargeable power. The resulting system is one that is decidedly versatile, hewed for data acquisition in a multipurpose fashion.

### Custom Electronics: MakeSense

MakeSense™ is a **strategic partnership program**. It is open to companies looking to create smart devices yet need help implementing wireless connectivity and inertial, environmental or biosignal sensing. 221e handles the underlying technologies of your custom solution from design through engineering to manufacturing. After manufacturing, we can also assist with testing, quality control and certification. Our technical support can also help with further data analysis, R&D support, and future prototypes. This tried-and-tested process is valued by MakeSense™ customers, many of which return for additional products.

## Sensing AI for Your Smart Device

Stand Out With Our Precision Sensor Fusion Software and Reliable Hardware Platforms

[LEARN MORE](#)

## Enabling the Innovation of Sensing AI

221e converges sensors and AI, grounded in a solid scientific competence in machine learning, embedded software, electronics, and physics. Bootstrapped and consistently profitable, 221e has evolved with each successful project and today can count on the trust of a solid customer base, from global brands to innovative startups. Our award-winning technology has landed partnerships with formidable semiconductor leaders, leveraging 221e as the right provider where that data quality is key for a successful Sensing AI integration. Since our inception, we explored wearable technology, endeavored on the Internet of Things, and shipped thousands of products.

Our vision is to become the globally trusted brand at the top of the Sensing AI market, known for data accuracy, engineering quality and groundbreaking innovation.

Featured in Emerging Tech Impact Radar



## Why Our Customers Chose Us

"Partnering with 221e has been an absolute pleasure. Their high-tech solutions have elevated our technology development to new heights. From concept to implementation, their team's expertise and innovation have been invaluable. They quickly grasped our unique requirements and tailored their solutions to perfectly fit our needs, saving us time and resources. Their dedication to staying at the forefront of technology ensures we're always equipped with the latest advancements to stay competitive. I highly recommend 221e to any R&D team seeking a reliable and cutting-edge high-tech partner."

**36% CAGR**

Over 10 Years

**2x Revenue**

Year Over Year in 2023

**100+ Clients**

30% Returning Customer

**20+ People**

50 % R&D

## Offices

### HQ Padova

Via Brustolon, 14  
Abano Terme  
Padova, Italy

### Bergamo

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Albano Sant'Alessandro  
Bergamo, Italy

### Tel Aviv

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Israel

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