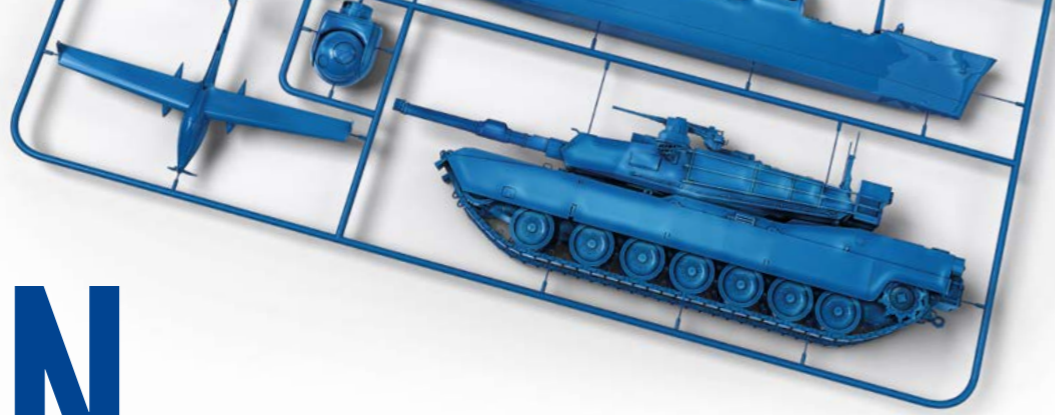


# ULTISENSE

Customized OEM Solutions





# WHEN SMALL THINGS MAKE A BIG DIFFER- ENCE.



## ULTISENSE – THE OEM SUCCESS FACTOR

We set standards when it comes to sensors of the highest quality for orientation and distance measurement.



**ULTISENSE**

Your reliable partner for state-of-the-art and tailormade OEM-Solutions.

As the market leader in the fields of observation and location, we offer optronic devices, systems and sensors for both military and civilian applications. Our reliable products are popular across the globe.

We rise to each new challenge, making continuous advancements along the way. Our business activities are clearly focused on our customers' specific needs as well as the implementation of these in a professional manner. As a result, we create customized products and solutions that are unparalleled the world over.

**Swiss Roots. Global Focus.**

As a global partner with roots in Switzerland, we focus on reliable, accurate and flexible premium components, particularly when it comes to integrating optical components and sensors into systems used in the defense and security sector as well as industry in general. This attitude and experience has made us well-known, even beyond the borders of Switzerland.



# “SWISS ENGINEERING” – OVER 95 YEARS OF SWISS MANUFACTURING TRADITION

Vectronix’s roots stretch back to 1921. For over 95 years, dedicated employees have continuously driven the development of this innovative company, headquartered in the Swiss town of Heerbrugg. Our goal is to manufacture world-class products and systems for orientation and distance measurement.

In 1986, Wild Heerbrugg and Ernst Leitz teamed up and formed the Wild Leitz Group. This company was later acquired by the Leica Group, out of which Vectronix was formed. Today, Vectronix is a part of the highly innovative Safran Group.

## Quality that develops from partnership.

With Swiss precision, we develop and produce electro-optical devices, such as laser rangefinders and digital magnetic compasses, as OEM modules and solutions for system integration. Through ongoing communication with our partners, customers, and specialists, we guarantee innovative solutions, components and services. At Vectronix, decades of experience and expertise come standard with our products.

# SAFRAN GROUP

Safran is a leading international high-technology group.

Safran has three core businesses: Aerospace, Defense and Security. Operating worldwide, the group has over 90 000 employees and generates 21 billion Euros in sales.

Through its global presence, Safran not only enhances competitiveness; it also builds industrial and commercial relations with the world’s leading prime contractors and operators, while providing fast, local service to customers around the world at the same time. Whether working alone or in partnership, Safran holds world and European leadership positions in its core markets.

## Key Facts – Safran Group

Ranked among Top 100 global innovators by Thomson Reuters

European leader in optronic systems

World’s leading manufacturer of single-aisle commercial jet engines

12% of consolidated revenues invested in R&D

Over 90 000 employees in more than 60 countries

Global portfolio comprising 26 000 patents



# CUSTOMIZED SOLUTIONS FOR BETTER PERFORMANCE

As individual as our customers: the customized packages from Ultisense.

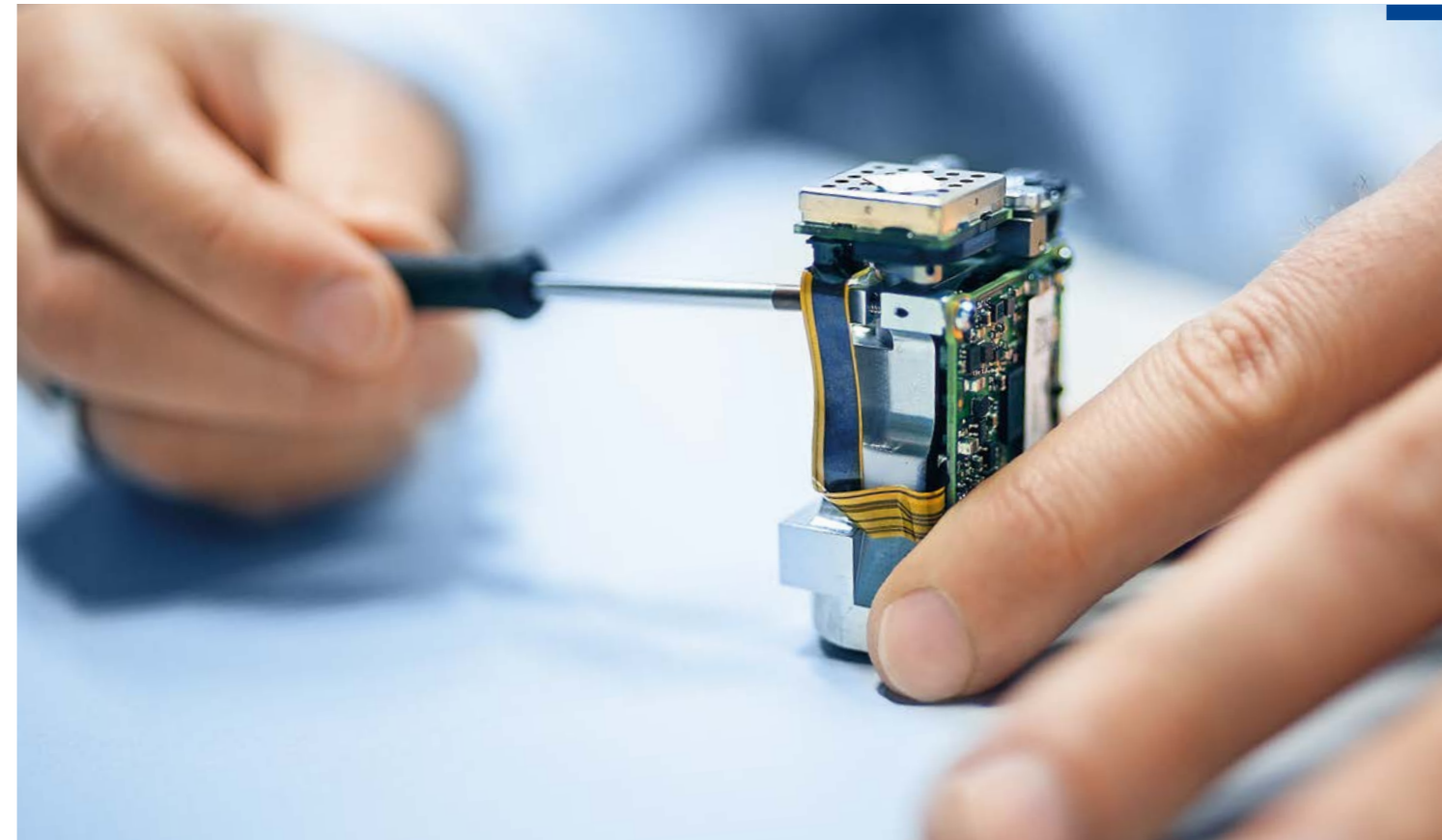
As a high-tech company, we aren't focused on existing benchmarks; but instead, we go one step further. What counts isn't just world-class products; paramount is our solution for our customers - regardless of whether as a standard product or as a custom module developed specifically for the customer.

We support our customers throughout the entire integration process, from specification to design to qualification. As a part of the project team, we better understand our customers' needs and develop ideal solutions together. Ultisense guarantees project security through reliability and precision.

Our range of products and services makes us a reliable partner over a solution's entire lifecycle.

## Range of Services

- Flexible solution provider
- High-end quality OEM modules
- Sturdy and reliable products
- Highest performance under the toughest conditions
- Minimal lifecycle costs
- Experienced and reliable project partner
- Short response times and rapid service
- Support during the decision-making process



## Development Services

Within the scope of providing customer-specific solutions, we offer a complete range of development services from one source.



## Sophisticated Products

At Ultisense, our customers can select from a wide range of existing high-end products.



## Pre-Sales Advice

Our specialists identify all of a customer's requirements and support them throughout the entire project.



## Custom-Tailored Solutions

Many of our customers' missions demand customized, independent modules. Solutions from Ultisense are perfect in this regard.



## On-Site Support

To ensure successful system integration, an experienced Vectronix team advises and supports our customers on-site at their location.



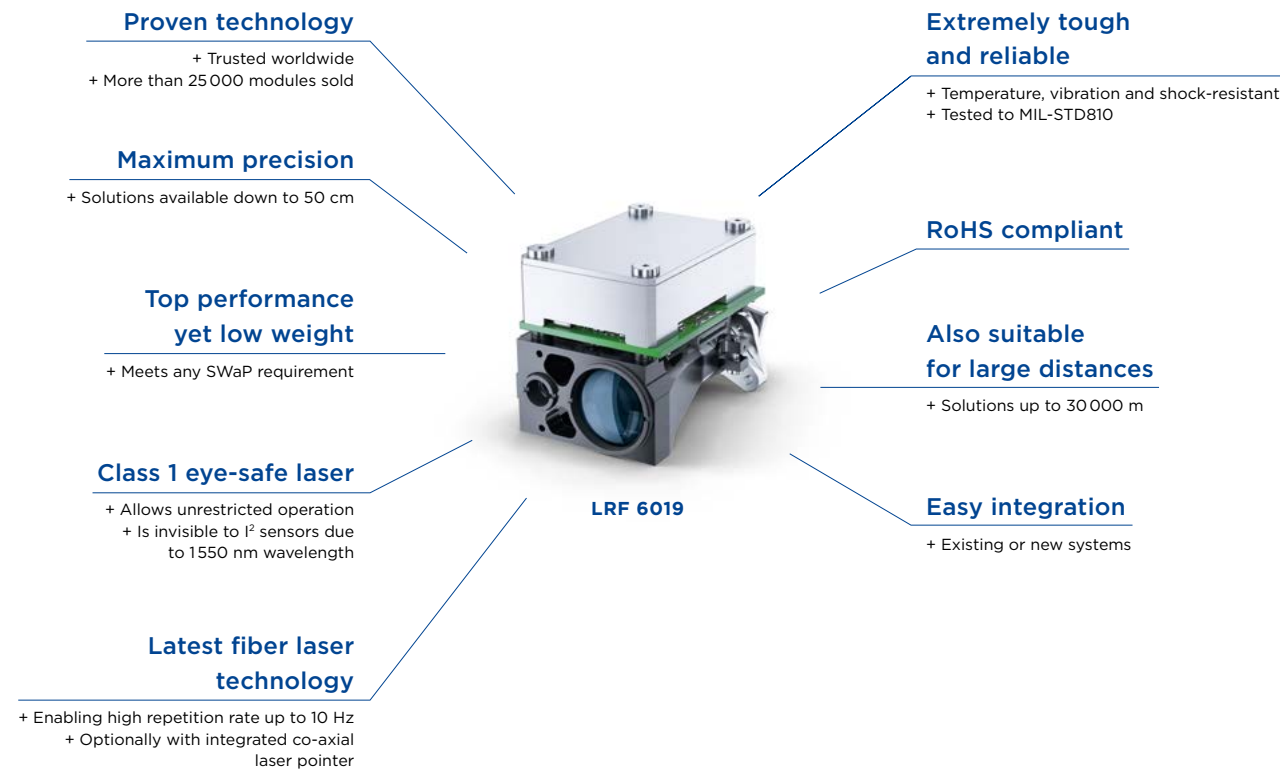
## Rapid Service Worldwide

Our service team is available worldwide around the clock for all of our customers' issues and guarantees rapid response times.

# LASER RANGEFINDING

Laser ranging (LRF) is one of Ultisense's proven core competencies. Our LRF modules stand out for exhibiting top performance characteristics yet being of minimal size and weight.

This is how they meet the highest of demands and have proven themselves in a multitude of applications. We also gladly adapt our modules to customers' specific needs.

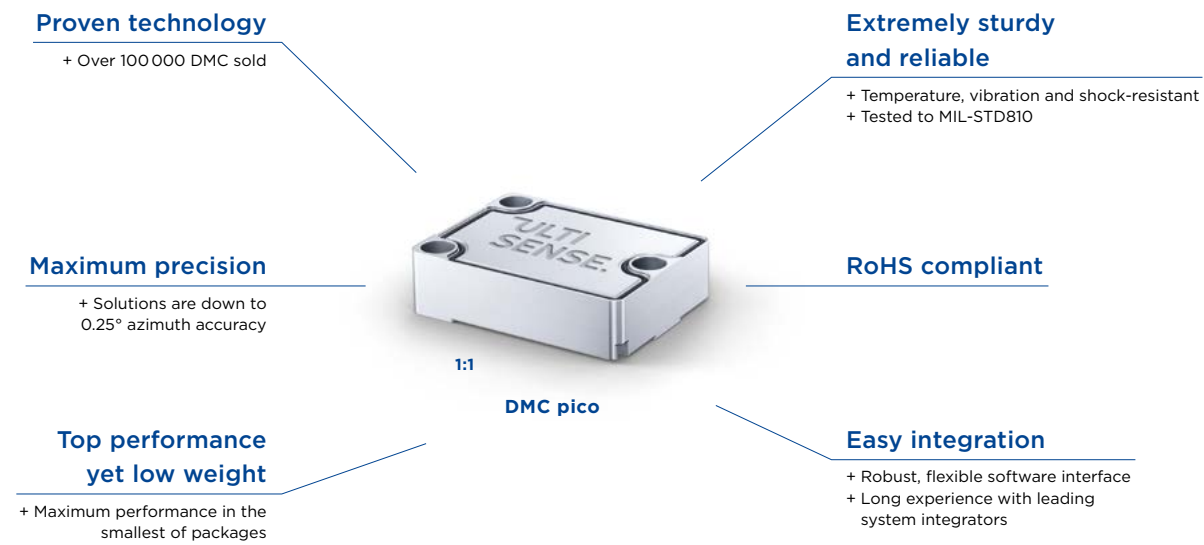


RANGEFINDING	LRF 3013	LRF 5020	LRF 3042	LRF 5042	LRF 6019	LRF 7047
Range capability	3.3 km	4.5 km	6.0 km	8.0 km	8.0 km	> 20.0 km
Typical accuracy	± 0.75 m	± 3 m	± 3 m	± 3 m	± 1 m	± 1 m
Dimensions (l × w × h)	52 × 37 × 22 mm	100 × 50 × 35 mm	114 × 100 × 50 mm	114 × 100 × 50 mm	60 × 40 × 45 mm	93 × 68 × 87 mm
Weight	45 g	120 g	325 g	325 g	100 g	460 g

# DIGITAL MAGNETIC COMPASS

Our Ultisense DMC is an extremely accurate and reliable magnetic compass that has now proven itself in over 100 000 optoelectronic devices. Our digital magnetic compass compatibility makes

it an ideal module for a wide range of systems. We also gladly adapt our modules to customers' specific needs.

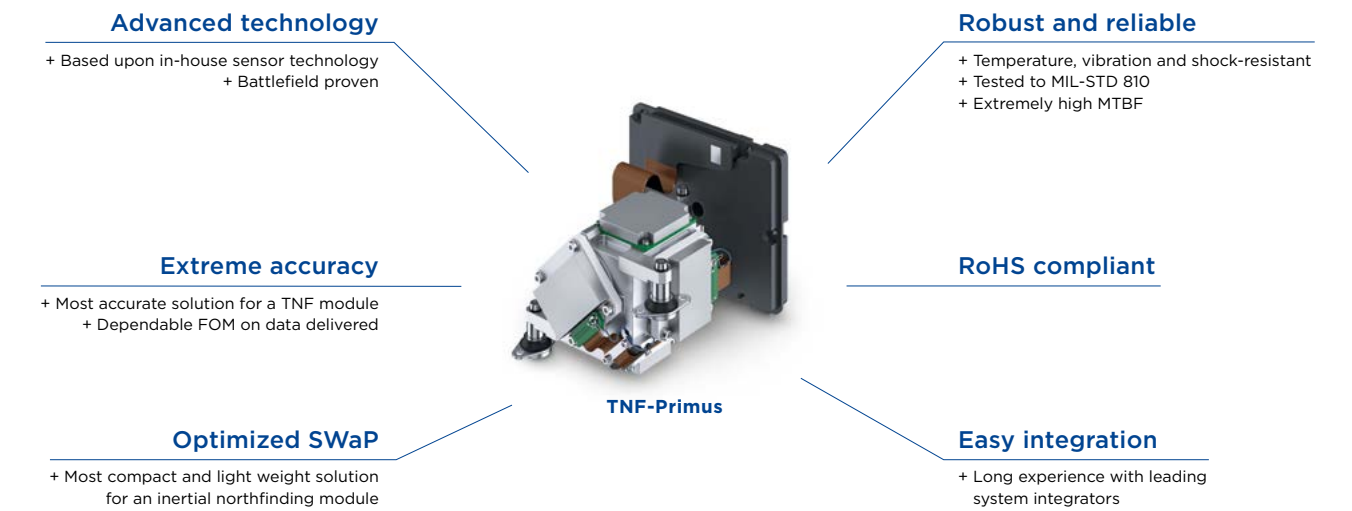


NORTHFINDING	DMC pico	DMC SX 4000	DMC SX 5000
Azimuth (heading) (1σ)	± 0.25°	± 0.5°	± 0.25°
Elevation and bank (1σ)	± 0.1°	± 0.2°	± 0.1°
Dimensions (l × w × h)	31 × 23 × 8.5 mm	33 × 31 × 13.5 mm	33 × 31 × 13.5 mm
Weight	9 g	< 25 g	< 25 g

# INERTIAL TRUE NORTH FINDER

Our Ultisense TNF-Primus is an extremely accurate and reliable autonomous True North Finding module based on advanced Hemispherical Resonator Gyro technology. It delivers azimuth, eleva-

tion and bank angles even in magnetically disturbed environments without need for GNSS. Coupled to a Laser ranging module, it is the ideal solution for far target location.



NORTHFINDING	TNF-Primus
Azimuth (1σ seclat)	± 0.1°
Elevation and bank (1σ)	± 0.05°
Dimensions (l × w × h)	Sensors: 90 × 81 × 76 mm / Electronics: 90 × 75 × 15 mm
Weight	420 g



Your experienced partner in OEM solutions for orientation and distance measurement.

**ULTISENSE.  
THE OEM  
SUCCESS  
FACTOR.  
PRECISION  
IN EVERY  
DETAIL.**



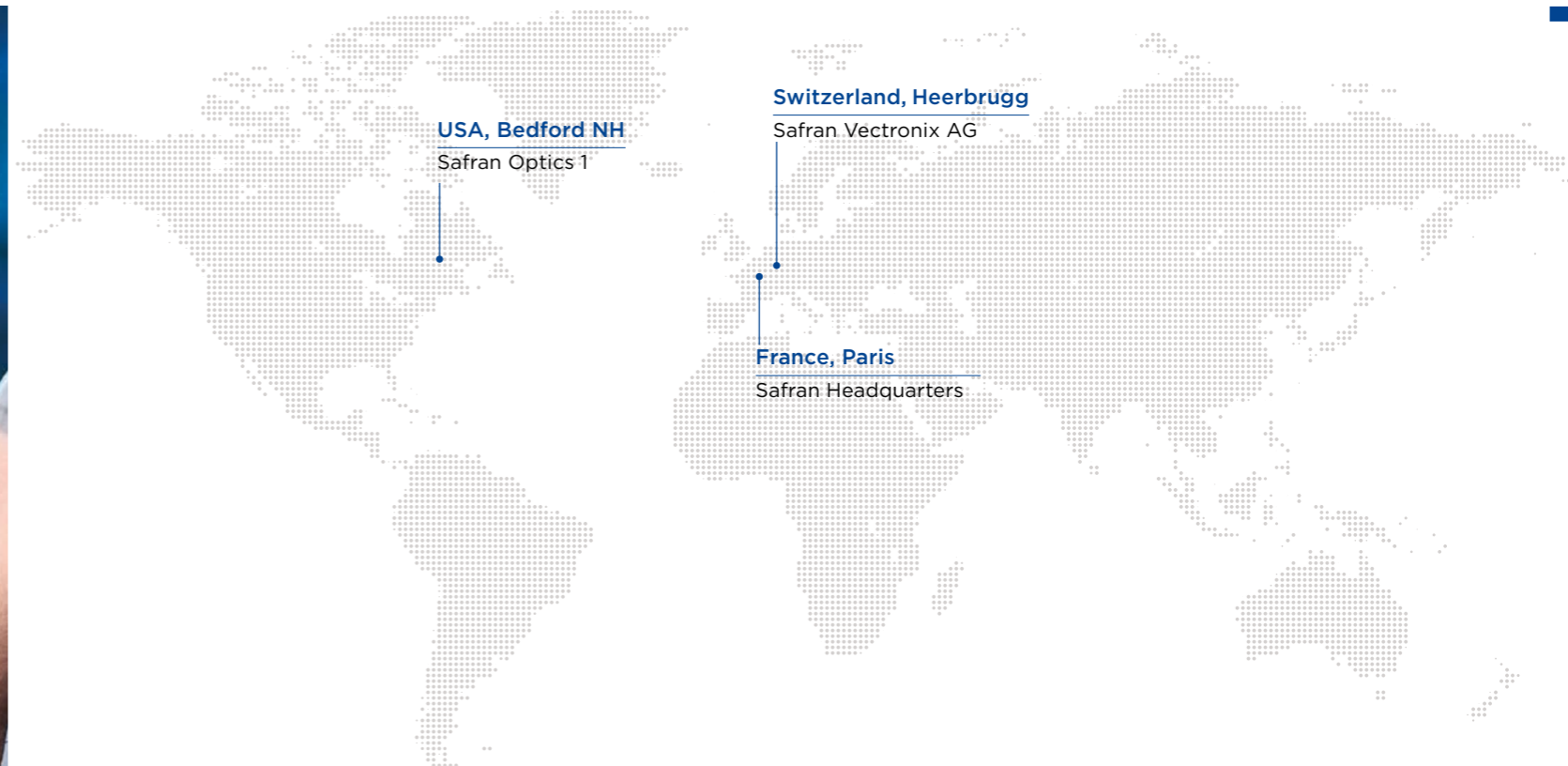
**99%**  
of products are exported

**95**  
years of experience

**166**  
customers

**> 25 000**  
LRF modules sold since 2002

**> 100 000**  
DMCs in use since 2002



**USA, Bedford NH**  
Safran Optics 1

**Switzerland, Heerbrugg**  
Safran Vectronix AG

**France, Paris**  
Safran Headquarters

## SERVICE AND SUPPORT

Perfect service wherever our customers need it:  
around the world and around the clock.

Our goal is to build long-term, constructive partnerships with satisfied customers. Here at Vectronix, we are convinced that the range of services we offer needs to go far beyond normal repair services.

As a result, our experienced service experts are out in the field worldwide in service of our customers. Comprehensive after-sales service and support increases the cost-effectiveness of our customized solutions and components.

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# POWERED BY TRUST

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Safran Vectronix AG  
Max-Schmidheiny-Strasse 202, 9435 Heerbrugg, Switzerland  
Phone +41 726 72 00, Fax +41 71 726 72 01  
[ultisense@safrangroup.com](mailto:ultisense@safrangroup.com)  
[www.safran-vectronix.ch](http://www.safran-vectronix.ch)

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