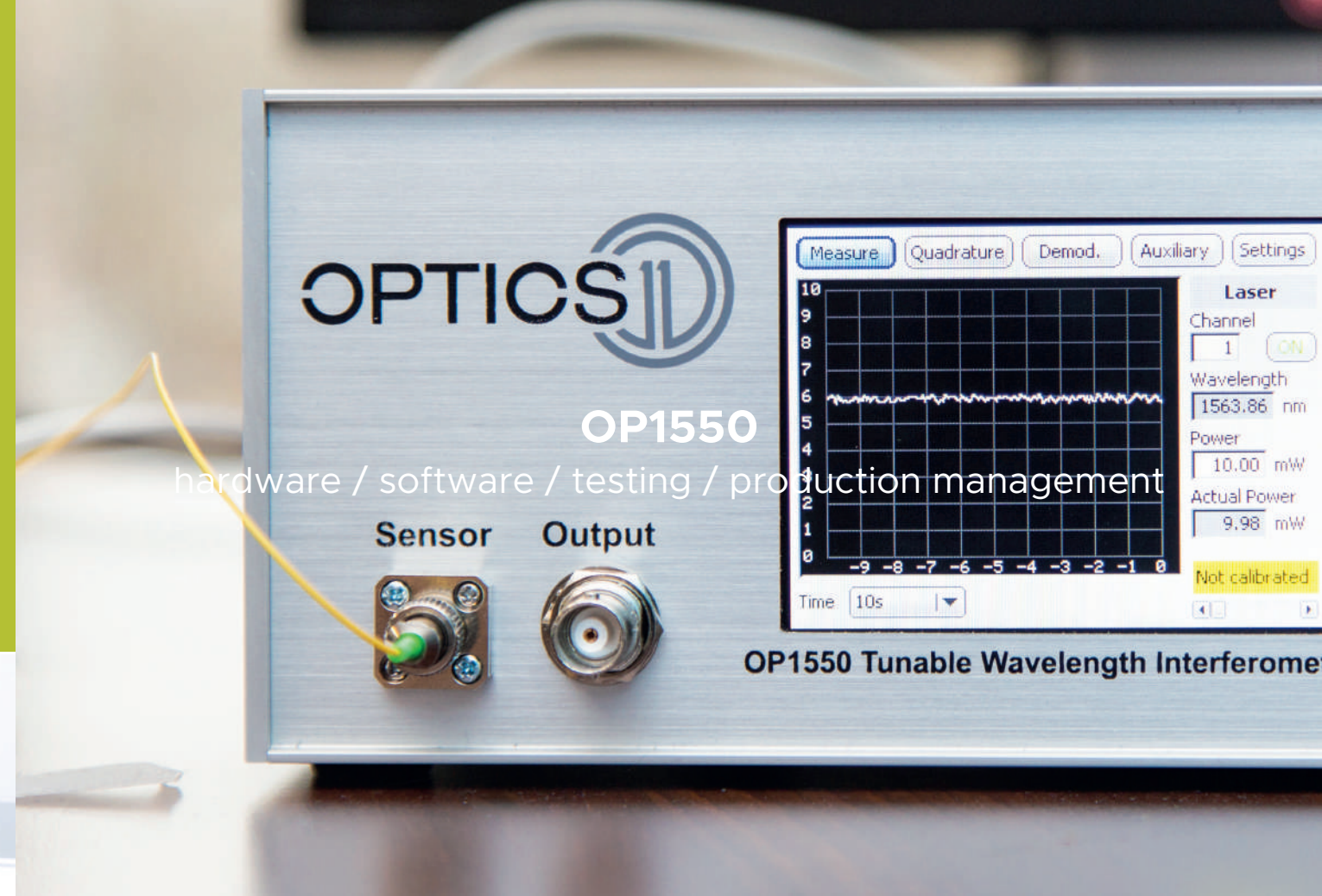# GRINN

Electronic design

for a smarter world

CASE STUDIES FOR INDUSTRY

Technology solutions for Industry 4.0

Improving nanotechnology with ultra-analytics

A new level of data monitoring for any industry demand

OP1550
hardware / software / testing / production management

OPTICS11

Measure | Quadrature | Demod. | Auxiliary | Settings

Laser
Channel
1
Wavelength
1563.86 nm
Power
10.00 mW
Actual Power
9.98 mW
Not calibrated

Time 10s

Sensor   Output

OP1550 Tunable Wavelength Interferomet

Sensor   Output

OP1550 Tunable Wavelength Interferometer

Power

Nanotechnologies rely upon the most incredible level of detail. Only Grinn could reach those exacting standards to enhance and augment the interferometers used in our client's laboratories. We d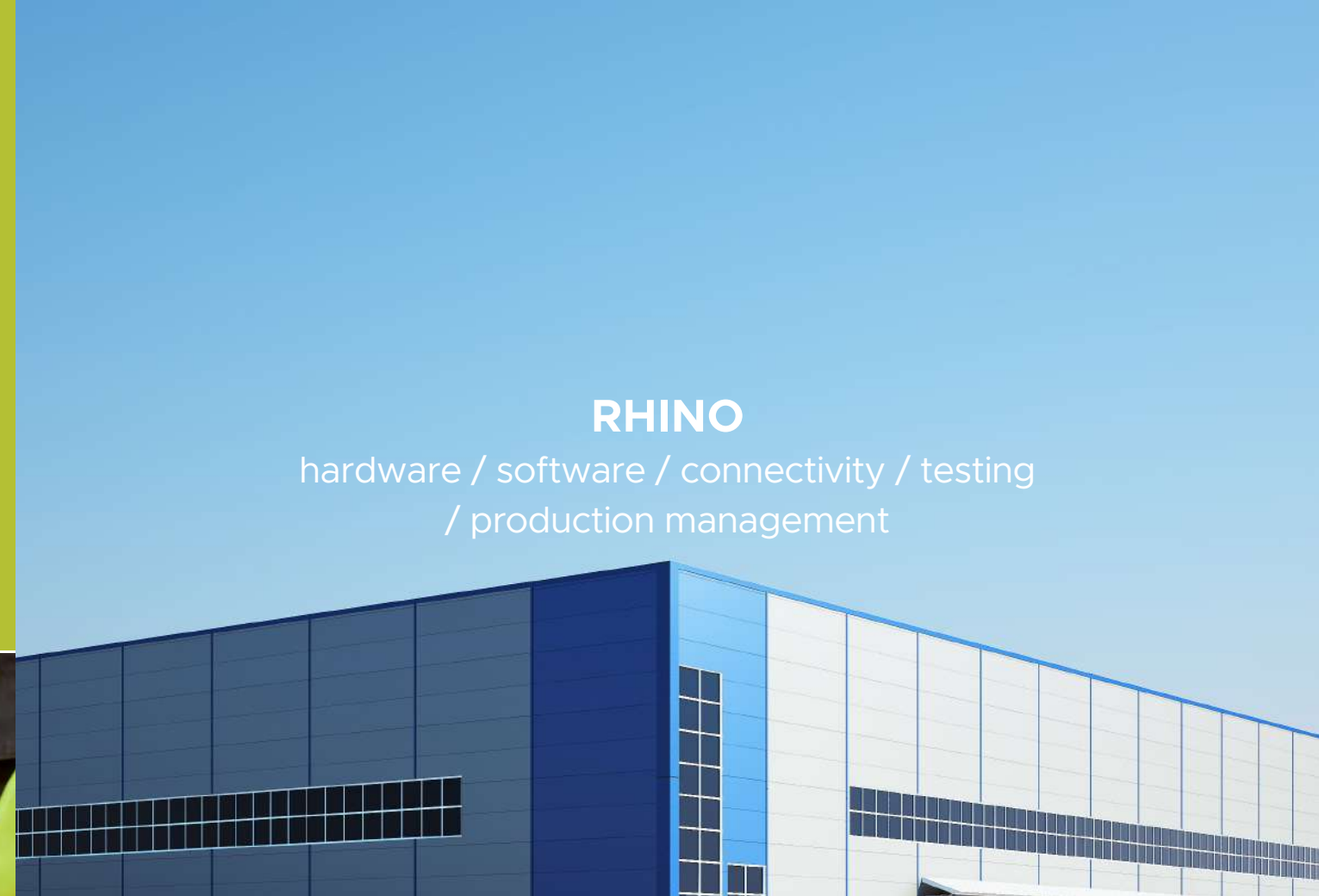eveloped an industry-leading device around the client's sensor tool, providing PCB, visualization software and device firmware.
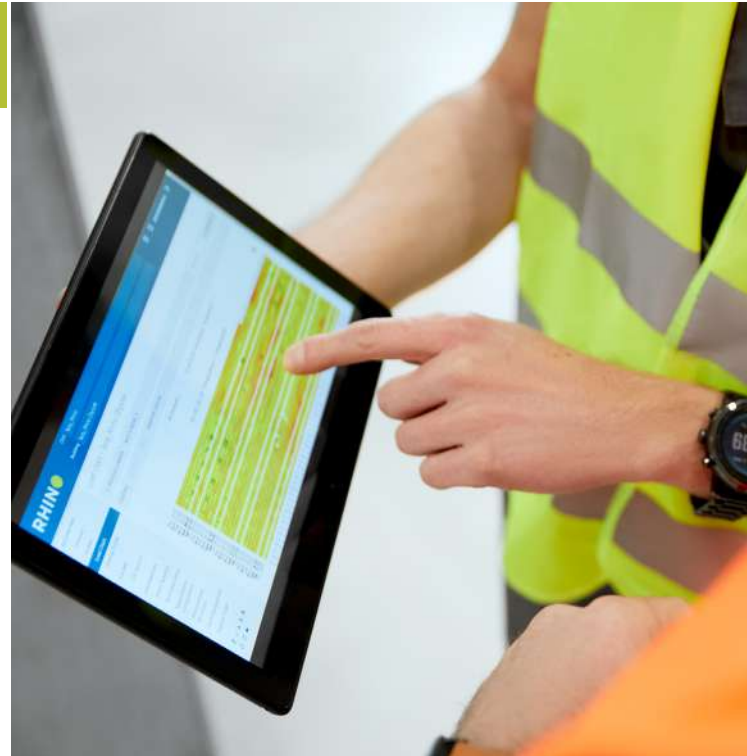
www.optics11.com

OPTICS11

**Clever
benchmarking
helps understand
spaces as assets**

RHINO
hardware / software / connectivity / testing
/ production management

Actionable insight
creates sustainable,
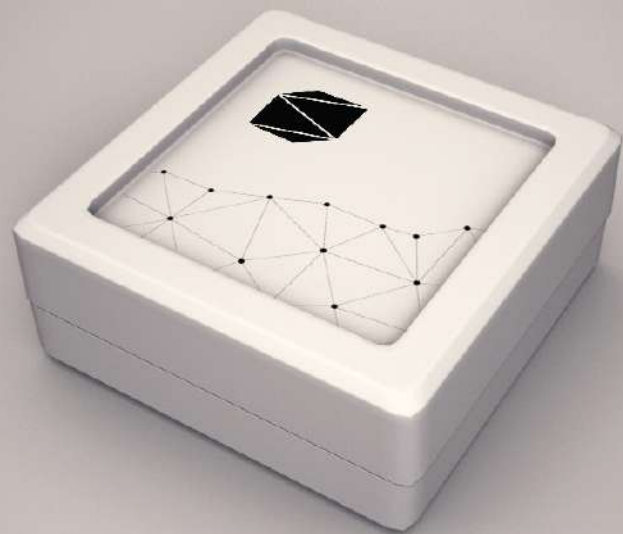cost-effective buildings

Grinn's own building management system—
allowing centralized management of multiple
premises—combines climate control with
remote monitoring. We prove that it is possible
to reduce energy consumption and increase
productivity, while ensuring safety.

Grinn delivers to industries like no other
solution.

www.rhino.energy

RHIN●

It's not just productivity we measure for better industrial spaces

GRINN AQM SENSOR
hardware / software / connectivity / testing / production management

Real-time monitoring and analysis of the very air that you breathe
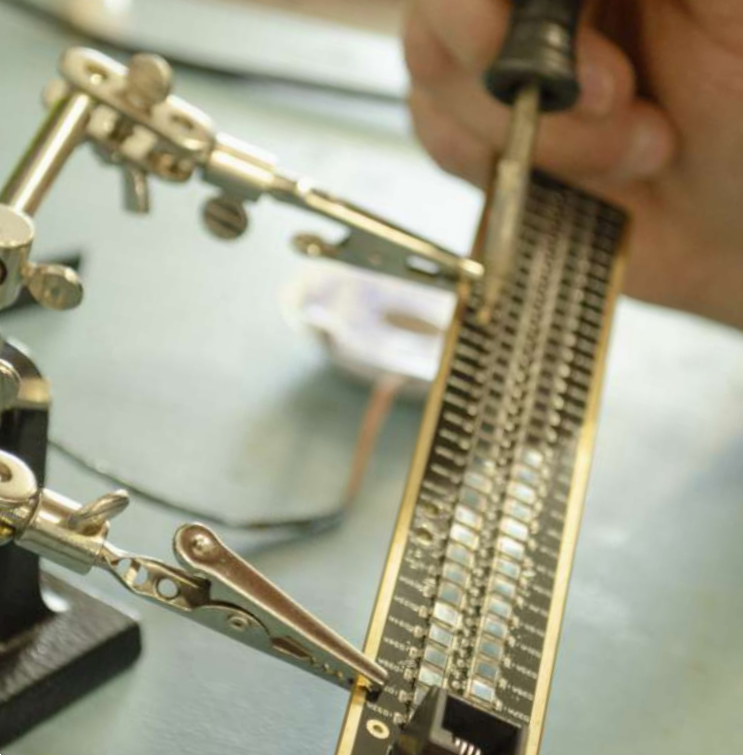
Our AQM Sensor system measures the air temperature, humidity, atmospheric pressure, and level of suspended particulate matter (PM2.5 and PM10, VOC) and CO_2. Smart sensors monitor the air quality and warn of dangerous pollution levels. Driven by legal regulations, designed for better working environments.

www.grinn-global.com

GRINN

**Rhino finds
ways to cut
costs in places
you never consider**

RHINO RDM
hardware / software / connectivity / testing
/ production management

Structural load
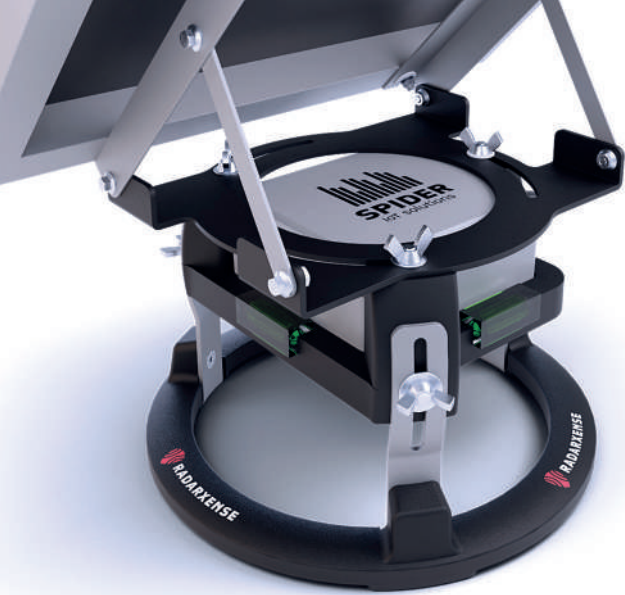monitoring for a safer
workplace with less
maintenance

Rhino does not just work inside your industrial space, it can measure any parameter that can cost your business time and money. Load on your roof structure from things like snow, as well as leaks that emerge over time, pose a safety threat and come at a high price.

With constant monitoring and electronic safety alerts, Rhino takes the load off your mind.

www.rhino.energy

RHIN●

Agricultural inventory management and stock control slash costs

Radar IoT technology improves stock control and livestock health

SILO SPIDER
software / hardware

Silo Spider is a simple concept that has become a revolutionary IoT solution. Mounted on agricultural silos, it measures levels of feed to help farmers order to demand and free up cash. Designed for purpose and durability; a smart device with software and hardware that can withstand even the harshest conditions.

www.spider-iot.net

SPIDER
IoT solutions

**Advanced
module technology
for production
cost optimization**

TRAX ELEKTRONIK
hardware / software / testing / production management

chiliSOM cuts the
product implementation
process down to size

Grinn products cross industries with the same focus on technology. When Trax Elektronik - designer of advanced and state of the art traffic management systems challenged us with developing variable message signs to inform drivers of traffic conditions, warn of threats and suggest detours, our chiliSOM, low-power module didn't just become part of the solution, it became an industry-leading technology.

www.traxelektronik.pl

TRAX elektronik ®

Connected device networks open up aggregate savings opportunities

A compact device
to optimize the efficiency
of pole or cabinet
light mountings

GATEWAY ECO-SYSTEM
hardware / software / testing
/ production management

The Gateway ECO-system is an intelligent data bridge between the cloud and individual lighting units. Data is communicated via a secure protocol, assisted by the Gateway, and sent to users. The ability to view the performance and cost of a single unit and the network as a whole is where network technologies bring vast industrial differences.

www.seneco.dk

seneco

Electrical safety is the start point from which all else follows

SONEL
hardware / software / testing / production management

Meters with an intuitive user interface guarantee safety and keep business running

The digital meter is designed to measure the basic safety parameters of electrical devices, such as conductor and insulation resistance, continuity of connections, leakage, and power. Once a business knows that its devices are working safety, it can get down to the business of providing value to customers.

www.sonel.pl

Sonel®

OUR CLIENTS

OPTICS1

SPIDER

TRAX elektronik ®

seneco

Sonel ®

OUR PARTNERS

Telit

NXP

WE WÜRTH ELEKTRONIK

TEXAS INSTRUMENTS

Infineon

MICROCHIP

LET'S GET STARTED

Our team of consultants, designers and engineers is ready to get started on your project. With a flair for problem-solving, a global outlook and a flexible approach, we're committed to delivering outstanding solutions fast.

e-mail: office@grinn-global.com
call: +48 71 716 40 99
www.**grinn-global**.com