

The background features a teal horizontal band across the middle. Above and below this band are light blue geometric patterns, including hexagons and interconnected lines, suggesting a network or data structure.

ellenex solutions for agriculture and farming

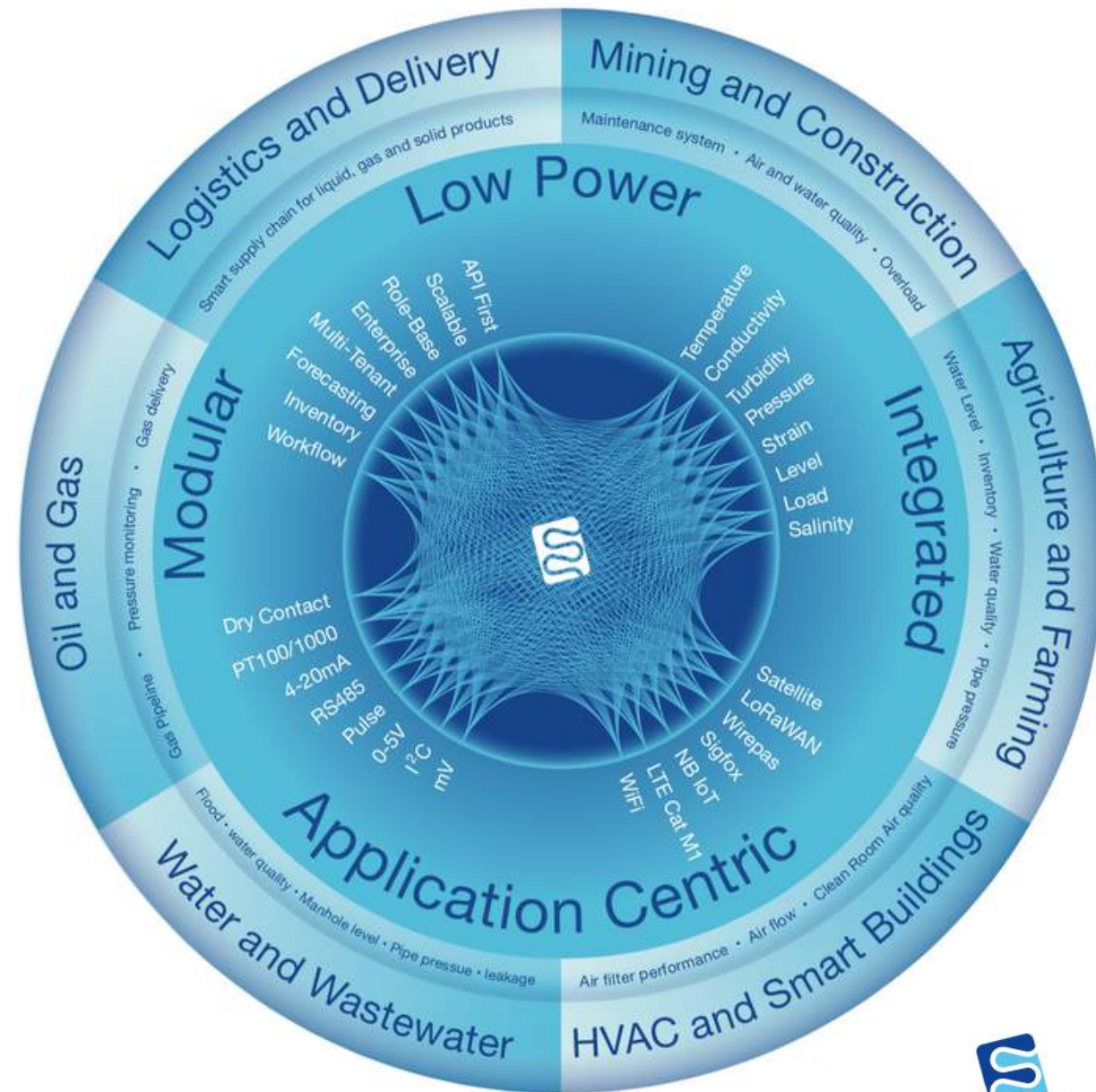
Low Power, Integrated, Composable, Application Centric

ellenex

Industrial low power IoT

At ellenex, we believe industrial IoT solutions need to be **modular, integratable** and **application centric** to make them scalable and profitable for customers. ellenex IoT framework designed to address these needs.

- Simplified
- Reliable IoT solution
- Designed to reduce your operational cost



We

Cover all your industrial IoT needs



Manufacture industrial sensors

Pressure, Level, Temperature, Differential Pressure, Load, Strain, Water Quality, Air Quality



Design integrated interfaces

NB IoT, LTE Cat M1, LoRaWAN, Low Power Satellite, Sigfox, Wirepas, Low Power WiFi



Integrate microservice platform

Designed for enterprise, Role-based, API-first, Integratable, Multi-tenant, Dynamic alerting

Our global support

We are offering professional support to our partners and customers in more than 50 countries. Our technical and sales channels provide exceptional support to be sure our customers are getting the ultimate benefit from our solutions and technologies.



A photograph of a brown and white cow drinking water from a trough in a field. The cow is the central focus, with its head lowered into the water. The background shows a lush green field under bright sunlight. The text is overlaid on the image in a clean, white, sans-serif font.

ellenex solutions for

agriculture and farming

our focused sectors

we offer solutions with added value



Water is the most critical resource for agriculture and farming. We offer accurate, easy to use and low cost solutions to manage water resources efficiently.

- **Water level monitoring**

water tanks/ dams/ water channels/
water trough/ underground water wells

- **Water supply**

pump performance/ pipeline leakage/
cloud based water tank re-fill system/
water flow

- **Water quality**

turbidity/ salinity/ dissolved oxygen/
conductivity/ temperature in tanks,
troughs, and supply system



inventory management



Knowing the level of inventory for different materials (diesel, gas, food, fertilizer, ready to deliver products, etc.) in each farm, helps supply companies to provide better service with lower cost. This provides peace of mind for farmers to be sure everything will be delivered on-time.

- **Supplier smart delivery system**

diesel tanks/ gas cylinders/ cleaning chemicals

- **Storage & usage monitoring**

silos level monitoring/ pesticides and fertilizers/ leakage monitoring

- **Weighing systems**

livestock/ product pallets

Proper monitoring of the irrigation system, helps to optimise the water usage and minimise leakage and over delivery.

- **Pressurised systems**

pressure monitoring in the pipelines and the system nodes to monitor the performance and prevent leakage/
water flow monitoring

- **Open water channels**

water level and water quality in the channel/ water gates operation/ water flow monitoring

- **Pump and water supply**

temperature/ pressure/ flow/ cloud based control system



machinery maintenance

Preventive maintenance makes a significant saving in the maintenance and operation costs of agriculture machinery. Our wireless and battery-operated products make this possible at a low cost.

- **Hydraulic systems**

all the hydraulic systems in agriculture machinery should work under standard pressure.

- **Overload prevention**

low power IoT solutions have made overload prevention more achievable for agriculture machinery.

- **Usage prediction**

dosing systems performance monitoring/
chemical usage monitoring/ etc.



aquaculture and seafood production systems need to control the environment accurately to get the optimum outcome. ellenex offers a range of sensors to make this happen.

- **Temperature monitoring**

accurate water and environment temperature measurement

- **Water quality monitoring**

salinity/ dissolved oxygen/ pH/ conductivity

- **Water supply monitoring**

water level/ water flow





green house

The whole concept of greenhouse and hydrophobic system is to make the environment under control. This helps to maximise product quality and quantity. We have some unique solutions to make it happen.

- **Temperature monitoring**

maintain the temperature in the optimised point to maximise the production and minimise the energy cost.

- **Water supply**

monitor water supply across the supply chain/ water leakage

- **Water quality**

turbidity/ salinity/ dissolved oxygen/ conductivity/ etc.

Livestock sheds and aviculture areas needs to be controlled to optimise the performance. Monitoring HVAC systems, temperature, water and food supply are key parts of these systems.

- **Water supply monitoring**

monitor the water usage and water quality across the whole supply chain.

- **Temperature and air quality**

monitor the temperature, heating and cooling systems and indoor or outdoor air quality as well as air flow

- **Weighing systems**

monitor the weight and and the load in different locations to monitor the gained weight of the animal and weighing system of supplied food, etc.





dairy & food processing

Monitoring of the temperature, level and pressure are some of the most important actions in dairy and food processing systems. Getting these parameters under control is essential to make quality products and optimise the process efficiency in the large scale.

- **Liquid level monitoring**

monitor the milk level in all stationary or mobile tanks/ chemical and waste level monitoring/ wine barrels pressure & temperature/ etc.

- **Waste water**

monitor key parameters in the waste water treatment plants and released water to the environment.

- **Product delivery monitoring**

temperature monitoring across the supply chain/ weight monitoring/ etc.



ellenex products

our key products for agriculture industry



PT52

for pipeline
pressure and
tank level
monitoring



PLS2

for precision
level
monitoring



CSD2

for
conductivity
and salinity



TTS2

for water
temperature
monitoring



CTR2

for water
turbidity
checking

level measurement

- Water tank
- Diesel tank
- Chemical and fertilizer
- Dam water
- Water channels and rivers



pressure measurement

- Water pipelines
- Water tank level monitoring
- Hydraulic systems
- Spraying systems
- Gas cylinder level monitoring



water quality

- Conductivity
- Salinity
- Turbidity
- pH
- Dissolved oxygen



temperature measurement

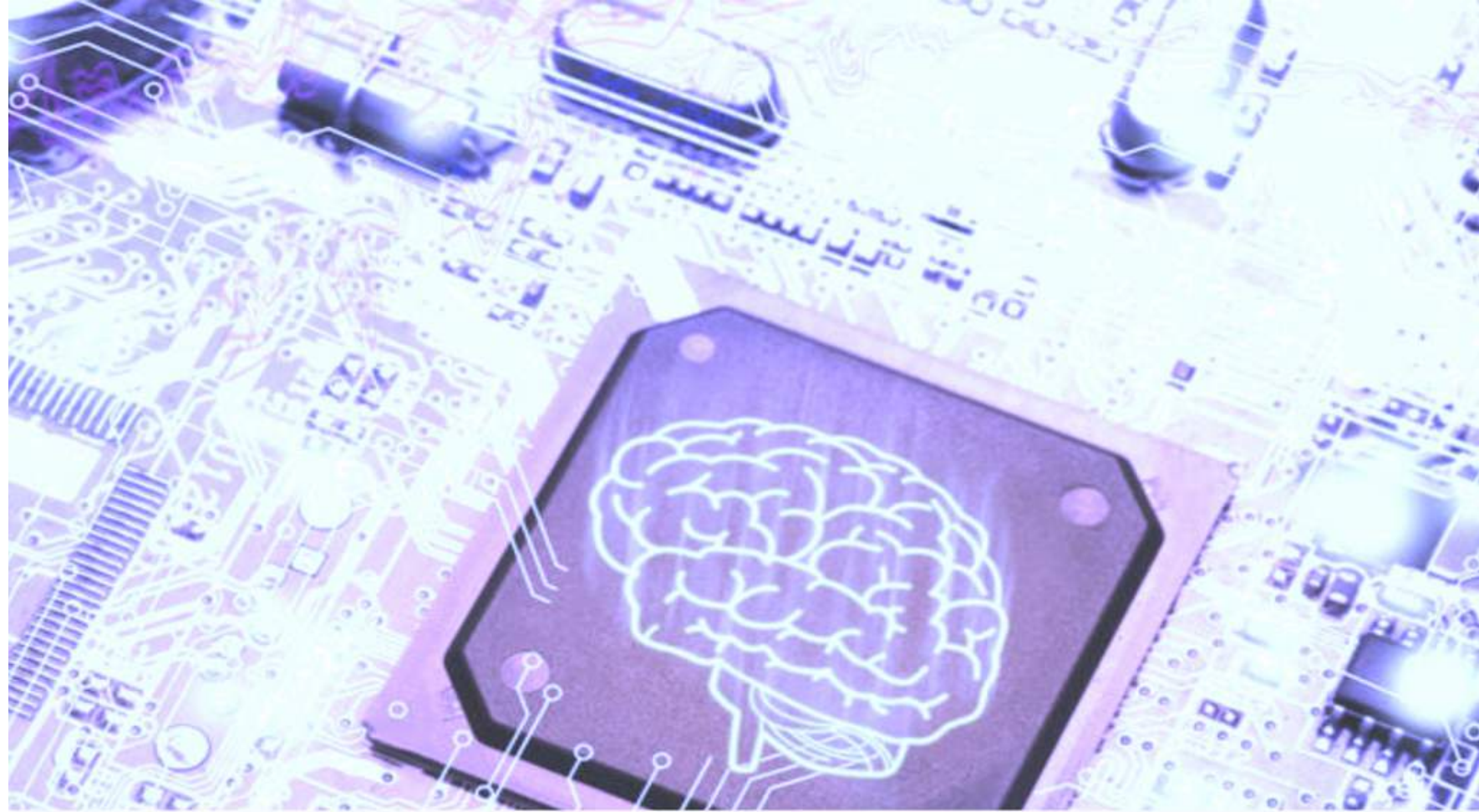
- Fish farms
- Chicken farm
- Hydraulic systems
- Food processing
- Green house



Our electronic interfaces ...

I2C
mV
mV/V
Pulse
RS485
4-20mA
0-5/ 0-10V
Dry contact
PT100/ 1000

Multi-channel



NB-IoT



SATELLITE



LoRaWAN



SIGFOX



WIREPAS



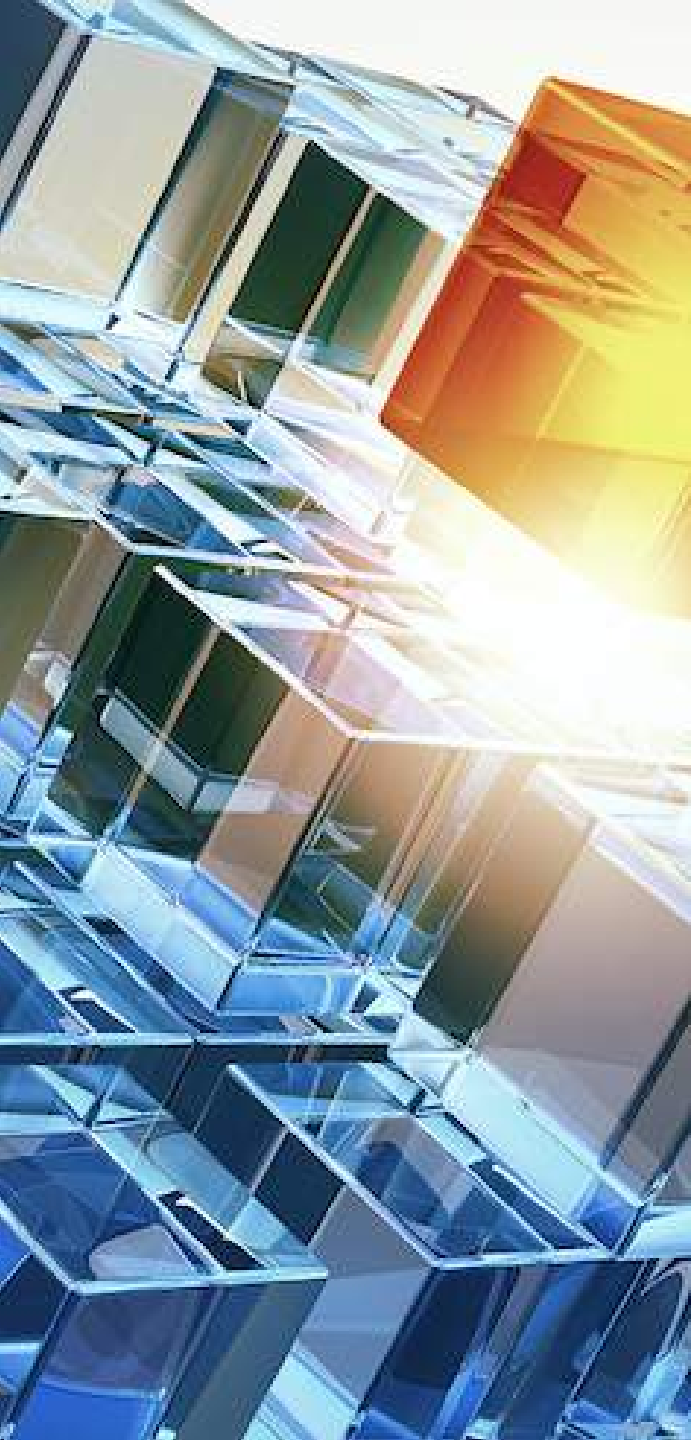
Wi-Fi



Our software platform ...

- Designed for enterprise
- Role-based access control
- API-first
- Simple and scalable
- Custom workflow engine
- Custom device parameters
- Multi-channel alerting





If you are a farm owner ...

If you sell products to farmers ...

or if you provide services to farms ...

we may have some great solutions for you.

Just send an email to sales@ellenex.com and we will contact you to discuss your application.

Thank you



IoT Solutions in Action

E: sales@ellenex.com

W: www.ellenex.com