

## Your Applications



### industrial internet

- measurement of CO<sub>2</sub> concentration during foods and beverages production
- CO<sub>2</sub> emission control in agriculture & farming
- CO<sub>2</sub> emission control in refrigeration and cooling
- quantification of liquid CO<sub>2</sub> used as solvent in pharmacy, chemical processing
- welding control in automotive industry
- methane concentration control in natural gas, oil extraction fields, coal mines
- methane concentration control in biogas production plants
- methane emission control of agricultural objects
- plastic thickness measurement
- paper moisture control
- moisture control of wood, constructional materials
- moisture control of agricultural products
- water in oil and oil in water quantification in cut-oil/oil products
- definition of ratio of light and heavy hydrocarbons



### smart city

- environmental CO<sub>2</sub> concentration monitoring
- CO<sub>2</sub> emission control in HVAC systems
- methane concentration monitoring along the pipelines, local gas networks
- methane leakage monitoring in gas filling stations



### smart home

- measurement of CO<sub>2</sub> concentration indoors
- methane emissions control in household applications



### connected car

- engine combustion control
- measurement of CO<sub>2</sub> concentration in car cabin
- methane leakage monitoring in vehicles running on gas fuel
- quantification of water in fuel



### intelligent shopping

- express analysis of food – defining correspondence with required parameters, (for example, measurement of water, fat, proteins content in milk)

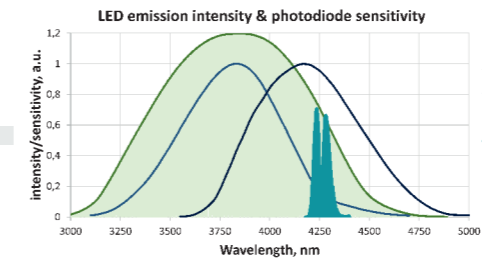


### healthcare & wearables

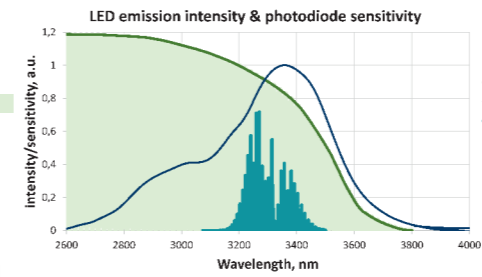
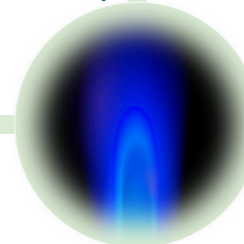
- capnography (CO<sub>2</sub> concentration measurement in breathed out air)
- methane concentration measurement in gastrointestinal treatment
- analysis of biomaterials for medical purposes – concentration of sugar in blood, urine, etc. (for example, for remote patient monitoring)
- analysis of alcohol in breath

## Our solutions

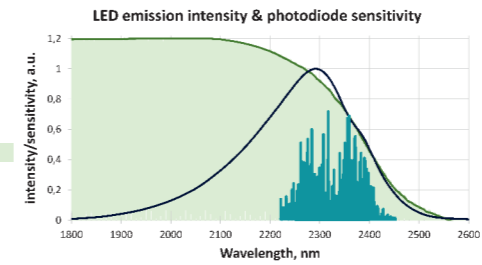
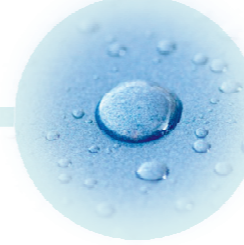
CO<sub>2</sub>



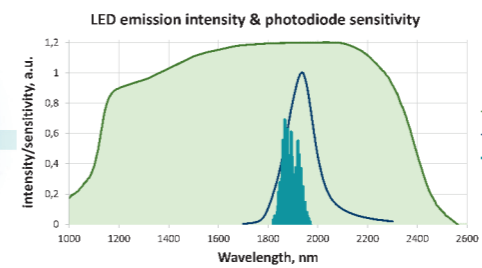
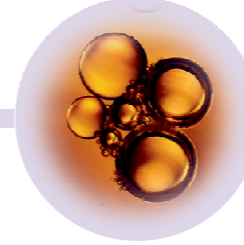
CH<sub>4</sub> & HCs



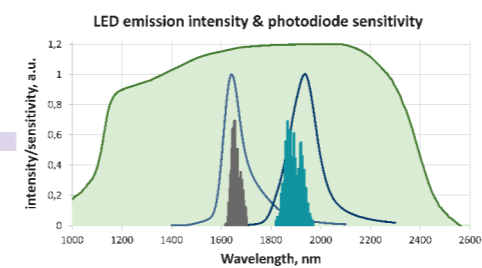
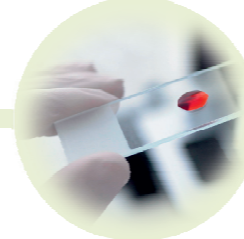
moisture



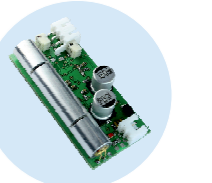
oil + water



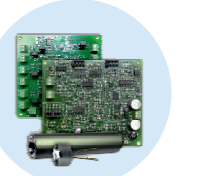
other



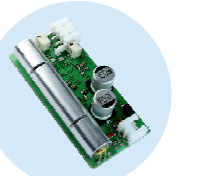
CO<sub>2</sub> sensor prototype (under development)



Evaluation kits and systems



MDS-4 methane sensor module

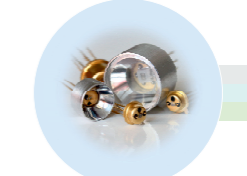


LA-1T LED Analyser prototype



Custom designed LED Analyser

LED-PD optopairs



LED array & PD

