Polysense announces 2nd generation LoRaWAN gas sensor node – the advanced WxS 8700E (enhanced) with simultaneous support of 3 pre-calibrated gases and flexible expansion

The WxS 8700E product series provides IoT service providers, system integrator and enterprise customers with pre-calibrated, flexible turnkey gas monitoring solutions, supporting 15 types of flammable, explosive, poisonous, pollutant and odorous gases.

SANTA CLARA, Calif. (PRWEB) June 19, 2019 -- Polysense Technologies Inc., (Polysense) an innovation leader in LPWA IoT solutions for wireless sensing, today introduced WxS 8700E, its flagship LoRaWAN sensor end node product family, focusing on the market for smart environment and dangerous gas monitoring.

Gas, dust, and particulate matters are today present everywhere in our daily lives – in our breathing atmosphere, in our homes, in our working environment, in our vehicles, in our manufacturing facility; there is no escape from such seemingly invisible stuff.

Many, when exposed long term over certain threshold, will cause illness or low productivity; some are simply dangerous – flammable causing fire, explosive causing fatal accidents or poisonous causing cancers. Major elements of environmental pollutions or living environment with bad odor are generated in many industrial processes, from vehicles, or just gas leaks. Therefore, it is becoming increasingly critical to be able to detect and monitor the presence and density of such type of gases, dust and particulate matters, for the safety of society and the health of human beings, thereby assuring the density level does not rise or cross the dangerous threshold levels or report timely to avoid major accidents by advanced warnings.

“After the roll out of 1st generation WxS 8700, customers worldwide requested us to further enhance the gas sensor node with more expansion flexibility,” said Will H. Yu, director of IoT solution and customer excellence. “We are excited to now announce the 2nd generation WxS 8700E. With WxS 8700E, our customers can select up to 3 gas sensors from a list of 15 supported gas sensor types, all on a single node. This greatly reduces per gas cost while offering pre-calibrated gas sensor”

Supporting pre-calibrated monitoring solutions for 15 types of gases, the WxS 8700E enables a wide range of gas monitoring IoT applications, including but not limited to:
- Smart building – offices often lack adequate air ventilation or even malfunction HVAC system, leading to bad indoor air quality and low work place productivity, even sickness
- Industrial campus safety - many industrial operations, as part of the chemical process, generate certain types of gases which may be harmful to workers, pollute the air, or even cause fire or explosion under certain conditions (temperature and pressure)
- Crowded spaces - such as subways, shopping centers, CBDs, are potentially dangerous for accidental gas leaks, fire, or terrorism attacks
- Air quality (AQI) - now a major measurement of quality of life in any city. A holistic view of the air quality consists of a number of measurements, including CO, O3, NO2, and PM 1/2.5/10

Advanced Features of the WxS 8700E:
1) 15 most common gas sensors:
- O2, O3, NO2, SO2
- CO, NH3, H2S, PH3
- CL2, H2, HCL, HF
- CO2, VOC, PM2.5/10um

A customer can choose any 3 gas sensors from the above lists on a single WxS 8700E node. For example, O2, O3, NH3 for indoor office air quality; NH3, SO2, H2S for waste treatment facility; CL2, H2, HCL for industrial environment.

2) 4 MPI interface for external connectivity:
- Each MPI – analog, digital, 4-20mA or pulse counting (MPI)
- Enabling to connect up to 4 additional voltage/current/digital external sensors

3) Integrated temperature, humidity and pressure sensors
4) Pre-calibrated gas sensor for high accuracy and reliability
5) Connectorized and pluggable gas sensor module - allowing easy field replacement or upgrade
6) Selectable RS232/RS485 interface for external sensor connectivity
7) Analog and PWM digital output for actuator control
8) 3v/5v/9v/15v power output to external devices
9) IP 67+ enclosure rating
10) Integrated internal antenna
11) 1 or 2 ‘AA’ Li-Ion Battery; 5 – 10 years of battery operational life
12) Optional DC 5V power source
13) Optional external SMA/IPEX antenna
14) LoRaWAN 1.1 compliant
15) Up to 5km reach in NLOS and up to 18km LOS environments
16) Edge computing (iEdge OS) and cloud sensor data processing and analytic (iView)

Further, a node configuration with more than 3 simultaneous sensors (such as 6) is also possible. Please contact Polysense if you have such requirement.

Combined with WxS 8800 LoRa universal sensor product family (http://www.prweb.com/releases/polysense/lora/prweb14420035.htm), Polysense WxS 8800 and WxS 8700E now offers the industry’s broadest and most flexible LoRa sensor end node product portfolio, supporting over 30 types of sensing capabilities.

Availability

Polysense's WxS 8700E universal sensor node series is in production and immediately available for ordering.

Contact Polysense for ordering and pricing: info@polysense.net

About Polysense

Located in Santa Clara, California, with offices in Beijing, Luo Yang and Shanghai, China, Polysense develops products and solutions for Industrial IoT and smart buildings, including, Wi-Fi/BLE, LPWAN LoRaWAN and NB-IoT/eMTC based wireless IoT sensors and cloud based data management and analytics platform (iView). Polysense Press Contact: Katherine Yang
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