ClearSkies News

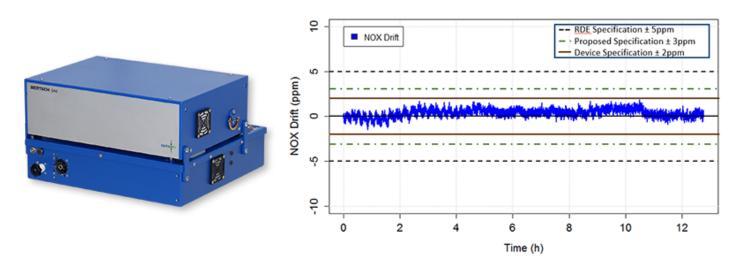


Volume 38 | March 2022

In This Issue:

- Sensors, Inc. introduces the latest in NO_X measurement solution
- New SEMTECH® Distributor in China
- New SEMTECH® Distributor in Latin America
- Upcoming Events

Sensors, Inc. Introduces New NO_X Measurement Solution



Sensors, Inc. introduces the NEXT BIG THING in PEMS – with demonstrated lowest drift in the market, our next generation SEMTECH NO χ measurement solution. In addition to meeting all EPA and RDE regulatory requirements at ranges up to 1500 ppm NO and 1000 ppm NO2, our latest PEMS NO χ analyzer delivers exceptional measurement accuracy and repeatability below 100 ppm, even under severe thermal cycling conditions.

SEMTECH[®] NO χ is capable of zero drift less than 2 ppm total NO χ under -15 °C to 50 °C operation, at ramps of up to 3 °C per minute, without need for additional cooling equipment and over prolonged test periods (upwards of even 12 hours tests). The light source, folded-path gas cell, detector, and all associated optics are built into a strong but lightweight precision optical assembly which maintains optical alignment under vibration and rapid thermal cycling. NDUV2.0 delivers excellent accuracy and zero drift in a lightweight PEMS unit, all while maintaining the simple user interface of the previous generation NDUV. These significant improvements in performance are the result of several years of design and development, culminating in the release to manufacturing today.

For reliable testing in harsh environments, Portable Emissions Measurement Systems (PEMS) instrumentation must be capable of operating at ambient temperatures as low as -10 °C and as high as 50 °C. Furthermore, the instrument should not be disturbed by either fast temperature changes (such as transitioning between a temperature-controlled garage and a very cold or very hot environment) or slow temperature changes (such as weather varying during the course of the test).

This poses a significant challenge for PEMS. As parts of the analyzer heat up or cool down, there can be shift in the path of light through the optical analyzer, as well as changes in the intensity of the light source and sensitivity of the light-detecting element. This typically introduces a small offset in the measurement value, such as reporting 5 ppm of a gas when, in fact, there is zero gas present. This "zero drift" creates an undesirable measurement bias. While there are multiple potential causes of zero drift in a PEMS device, temperature tends to be the most challenging for optical gas analyzers.

Zero drift is particularly critical with NO χ analyzers, because in a properly-operating engine and aftertreatment system, NO χ tailpipe emissions tend to demonstrate long periods of effectively zero NO χ , punctuated with significant NO χ production on engine events such as engine start and large speed and load changes. Consistently misreading <1 ppm NO χ as 5 ppm NO χ , for example, would introduce a large cumulative error and significantly change the conclusions of the test. Regulations for on-road emissions measurement have historically dealt with this by anticipating a certain amount of drift over a test, and permitting a larger emissions allowance to account for the resulting uncertainty in cumulative NO χ emission – a European Commission "conformity factor" or an EPA "measurement allowance." Reducing this measurement allowance is possible only if PEMS units can deliver extremely low zero drift under real-world conditions. With NDUV2.0, Sensors, Inc., can deliver this level of performance.

NDUV2.0 is capable of zero drift less than 2 ppm total NOX under -15 °C to 50 °C operation, at ramps of up to 3 °C per minute, without need for additional cooling equipment.

» To read more about our specifications and upgrade options «

New SEMTECH® Distributor in China

Shenzhen Anche Technologies Co., Ltd.

Sensors, Inc. is pleased to announce Shenzhen Anche Technologies Co., Ltd. as their newest distributor of SEMTECH® products in the People's Republic of China (PRC). "Chinese markets offer tremendous opportunities for growth in our core business segments," says Robert Wilson, Vice President Marketing and Sales. "We have worked closely with Anche in the development of products for the Motor Vehicle Inspection markets over the past three years, and today we extend our collaboration to the distribution of our Portable Emissions Measurement Systems (PEMS), the SEMTECH® product line. Anche is uniquely qualified for this role, with a sales and service network that assures our Chinese customers the very best in sales, service and support."

China has contributed significantly to Sensors' growth over the past fifteen years and remains a key PEMS market, with continuing opportunities in the Light Duty (LD) and Heavy Duty (HD) engine market segments. More importantly, the Chinese Ministry of Environment (MOE) is implementing PEMS requirements for the Non-Road Mobile Machinery (NRMM) market segment in the near term, coupled with the promise of a new series of regulations (China 7) over the next 4-5 years.

"Anche has identified the engine manufacturers as a target for growth, and is investing in the development of products and services for this market," states Tony Sun, Anche Managing Director. "Sensors has a reputation for innovation and product quality that is unmatched in this market space, allowing Anche to quickly expand its reach into this important market segment. It nicely complements some of our more recent acquisitions."

For information contact:

http://www.anche.cn/

Shenzhen Anche Technologies Co., Ltd 35 / F, United Headquarters Building High Tech Zone No. 63 Xuefu Road Nanshan District Shenzhen, China PH: +1 572-879-8602 http://en.anche.cn/

New SEMTECH® Distributor in Latin America

Mazará Engenharia, Consultoria e Representacoes, LTDA.

Sensors, inc. is pleased to announce that it has come to an agreement with Mazará Engenharia, Consultoria e Representacoes, LTDA. to represent its SEMTECH® product line in Latin America.

Recent regulations in Brazil mirror those elsewhere, creating an opportunity for Sensors to meet the needs of its global customers with operations in Brazil, as well as importers, research and academic institutions and Tier 2/3 manufacturers.

Ronaldo Mazará Jr., principal of the firm, comes to Sensors, Inc. with a wealth of industry experience with a range of vehicle manufacturers. He has been focused on vehicle certification and homologation for several vehicle importers and is very familiar with the regulatory process and with emissions measurement operations and instrumentation.

Mazará Engenharia is trained and equipped to provide sales, sales support and service to all Latin American customers.

For information contact:

Mazará Engenharia, Consultoria e Representacoes, LTDA. Rua Luiz Spiandorelli Neto, 30 - Salas 606/607 Edifício Araucária - Jardim Paiquerê Valinhos - SP CEP 13271-570, Brasil PH: +55-(19)-9-9210-1292 https://mazara.eng.br/

Upcoming Events

32nd CRC Real World Emissions Workshop

March 13-17, 2022 | San Diego, CA

11th Annual International PEMS Conference

March 17-18, 2022 | Riverside, CA

4C Conference

April 6-8, 2022 | Austin, TX