

VERSA 05 LOWNOX PRODUCT BROCHURE





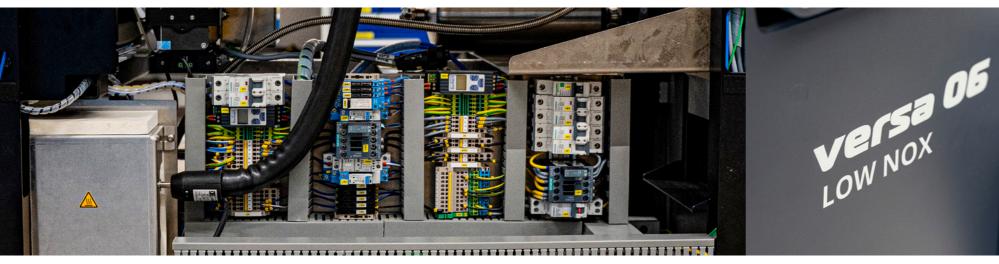
VERSA 05 LowNOx

FTIR ANALYSIS SYSTEM

As the LowNOx topic driven by various authorities around the world is getting more attention, IAG-ng Gas Analytics explored the development of an enhanced FTIR based VERSA06 to address the industry's needs. The result of this process is the VERSA06 LowNOx Bench. The primary objective was improving detection limits by 50% and noise by 40%.

The main problem for measuring lower levels of NOx in automotive exhaust streams is related to high H2O and CO2 interference of in the IR spectrum. To reduce the water content a high efficiency chiller was installed upstream of the FTIR. This configuration meets the current CFR40 Part 1065 regulations regarding NO2 penetration for the measurement of NOx. Due to the high efficiency of the chiller the water content drops below 1%, which provides for the improvement of both the NO and NO2 calibration methods. With this technique, IAG has reduced the wet detections limit of NO (1.8 ppm) to 0.9 ppm while simultaneously reducing that of wet NO2 (1.2 ppm) to 0.9 ppm.







VFS / PRE-FILTER SYSTEM

Because NH3 is also of interest while measuring low NOx (SCR application) but will be largely removed by the chiller along with the H2O, IAG can additionally integrate a TDLS based NH3 Laser into the VERSA06 cabinet such that the inlet flow is split with one half going to the chiller and the other half going wet to the TDLS measurement cell.













PRODUCT BROCHURE



IAG-ng.INC 41216 BRIDGE ST. NOVI, MI 48375 USA

+1 (248) 508-4886 r.frazee@iag-ng.com www.iag-ng.com



GAS ANALYTICS GMBH INDUSTRIESTRASSE 322 WEIKERSDORF AUSTRIA A-2722

+43 2622 41712/0 office@iag-ng.at www.iag-ng.com

