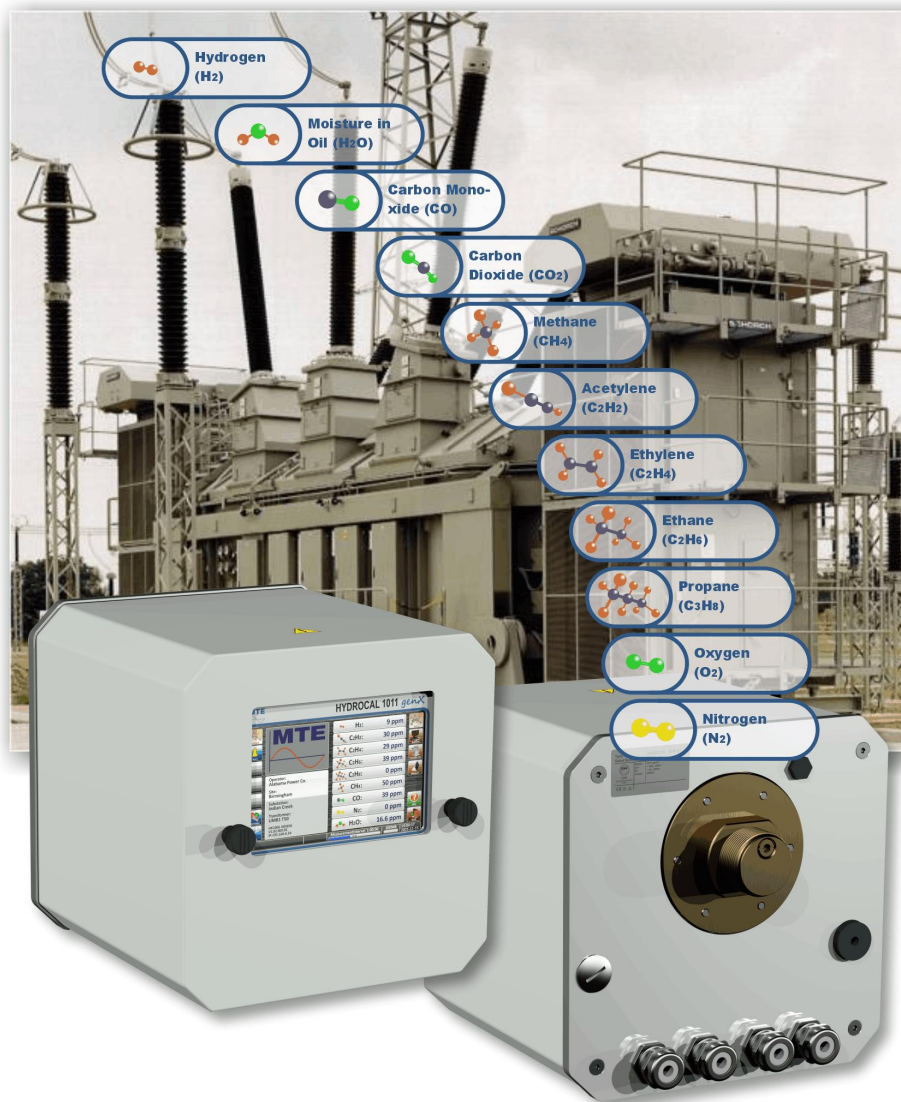


## HYDROCAL 1011 *genX*

Online Dissolved Gas Analysis (DGA) and Moisture Analysis System for Power Transformers and oil-filled electrical Equipment



The new HYDROCAL 1011 *genX* is a full-range / maintenance-free multi-gas online DGA solution combining proven near infrared (NIR) measuring technology with miniaturized gas sample production based on headspace principle (no membrane, negative pressure-proofed).

It individually measures Moisture in oil (H<sub>2</sub>O) and the key gases Hydrogen (H<sub>2</sub>), Carbon Monoxide (CO), Carbon Dioxide (CO<sub>2</sub>), Methane (CH<sub>4</sub>), Acetylene (C<sub>2</sub>H<sub>2</sub>), Ethylene (C<sub>2</sub>H<sub>4</sub>), Ethane (C<sub>2</sub>H<sub>6</sub>), Oxygen (O<sub>2</sub>), Nitrogen (N<sub>2</sub>) and Propane (C<sub>3</sub>H<sub>8</sub>) dissolved in transformer oil.

As Hydrogen (H<sub>2</sub>) is involved in nearly every fault of the insulation system of power transformers and Carbon Monoxide (CO) is a sign of an involvement of the cellulosic / paper insulation the presence and increase of the other light-weight hydrocarbon gases further classifies the nature of a fault as overheating, partial discharge or high energy arcing. Oxygen (O<sub>2</sub>) can be a sign of excessive ageing or leakages of the sealing of hermetic transformers.

### Key Advantages

- Individual measurement of hydrogen (H<sub>2</sub>), carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), acetylene (C<sub>2</sub>H<sub>2</sub>), ethylene (C<sub>2</sub>H<sub>4</sub>), ethane (C<sub>2</sub>H<sub>6</sub>), oxygen (O<sub>2</sub>), nitrogen (N<sub>2</sub>) and propane (C<sub>3</sub>H<sub>8</sub>)
- Moisture in Oil (H<sub>2</sub>O) measurement
- Easy to mount on a transformer valve (G 1½" DIN ISO 228-1 or 1½" NPT ANSI B 1.20.1)
- Easy to mount on the operating transformer without any operational interruption
- Maintenance-free near infrared measurement system with head-space gas extraction acc. IEC 60567
- Advanced software (on the unit and via PC) with intuitive operation by 7" color TFT capacitive touchscreen, WLAN and Webserver operation from any smart phone, tablet or notebook PC
- Communication interfaces ETHERNET 10/100 Mbit/s (copper-wired / RJ 45 or fibre-optical / SC Duplex) and RS 485 to support MODBUS® RTU/ASCII, MODBUS®TCP, DNP3, proprietary communication protocols and substation communication protocol IEC 61850

