

## Model 3200 Transformer Online Condition Monitor Hydrogen DGA, Moisture and Temperature in Oil

The H2SENSE Model 3200 offers a breakthrough price / performance ratio in online DGA, moisture and temperature monitoring for oil immersed equipments in power industry.

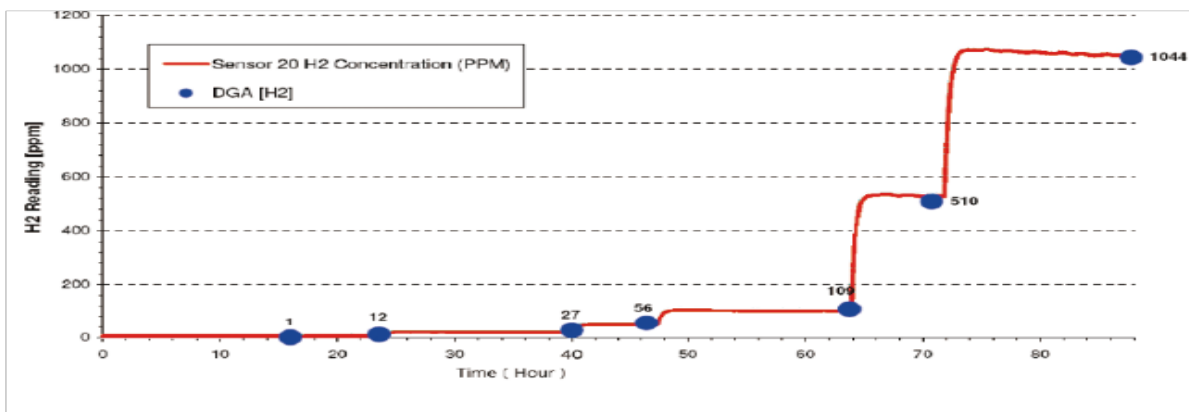
Hydrogen gas buildup in transformer oil is an early indicator of incipient transformer faults and moisture in oil can be used to determine the insulation life time. The H2SENSE Model 3200 can continuously monitor hydrogen & moisture in oil at PPM Levels directly together with a single probe.

Now for the first time, the benefits of online condition monitoring can be realized across the distribution transformer fleet to save the routine inspection work by person. It is maintenance free for long life time so will significantly reduce the maintenance cost.



### Advantages:

✓ No Membrane	✓ Compact, light weight design
✓ No Sensor Replacement	✓ Installed directly on drain valve
✓ No Consumables or Gases	✓ Network communications
✓ No Scheduled Maintenance	✓ Long life time



## H2SENSE Model 3200 Technical Data Sheet

<b>Measurement Range (H<sub>2</sub> in oil)</b>	0 ~ 5000 ppm
<b>Lower Measurement Limit (H<sub>2</sub>)</b>	20 ppm
<b>Accuracy (H<sub>2</sub>)</b>	15% of reading or 20 ppm (which is greater)
<b>Repeatability (H<sub>2</sub>)</b>	5% of reading or 10 ppm, which is greater
<b>Minimum Detection Limit (H<sub>2</sub>)</b>	2 ~ 5 ppm
<b>Response Time (H<sub>2</sub>)</b>	<60 minutes (50% of step change)
<b>Measurement Range (Moisture)</b>	0 ~ 1 aw
<b>Accuracy (Moisture) (20°C)</b>	±0.02 aw (0 ~ 0.9 aw), ±0.03 (0.9 ~ 1 aw)
<b>Response Time (Moisture)</b>	T90 < 10 mins (in still oil)
<b>Operating Temperature (Ambient)</b>	-40 ~ 55 °C
<b>Operating Temperature (Oil)</b>	-40 ~ 85 °C
<b>Oil Temperature Measurement Range</b>	-20 ~ 105 °C
<b>Operating Humidity</b>	0 ~ 95% RH
<b>Data Storage</b>	5 years (30 minutes per data input)
<b>Cross-sensitivity to Other Gases</b>	CO、CO <sub>2</sub> 、C <sub>2</sub> H <sub>2</sub> 、CH <sub>4</sub> <2%
<b>Relays</b>	Three relays in Hydrogen monitoring configuration: two user configurable, one is for self test. 30VDC / 1A, 125 VAC / 0.3A.
<b>Analog Output</b>	One way output, 4-20 mA, max. load 600Ω
<b>Serial Output and Protocol</b>	RS232 (Serial), RS485 (MODBUS_RTU)
<b>Visual alarm indicator &amp; Display</b>	3 colorful LEDs & Optional OLED display for H <sub>2</sub> & moisture
<b>Expected life</b>	10 years
<b>Installation</b>	The monitor comes with 3/4" MNPT fitting.
<b>Weight, Dimensions</b>	2.5 kgs, 160 mm (L) x 120 mm (W) x 80 mm (H, without probe)
<b>Power Input</b>	24 VDC / 1.5A
<b>Warranty</b>	1 year standard warranty with extension options
<b>Protection Level</b>	IP66
<b>Monitoring &amp; configuration software</b>	Included without additional charge
<b>Standards</b>	CE