

GRIDSCAN™ 5000

電力變壓器油中氫氣線上檢測器

GRIDSCAN™ 5000 檢測器使用先進專有塗層的金屬薄膜來保護感測元件，使其能夠測量電力變壓器和輔助設備的油相或氣相中的氫氣濃度。

這種固態感測元件是只對氫氣反應，對其他變壓器中的氣體不敏感，可以在正常運行期間直接浸入變壓器油中，以連續測量氫氣濃度。

GRIDSCAN™ 5000 檢測器沒有耗材，感測器也沒有任何退化，不需要載氣或校准氣體來保持精度，理論上使用壽命不受限制。



GRIDSCAN™ 5000 Hydrogen Sensor Specifications

Parameter	Oil Phase	Gas Phase
Measurement Range	25 - 5,000 ppm	25 - 5,000 ppm in oil equivalent
Accuracy ¹	20% of reading or 25 ppm*	
Repeatability ²	10% of reading or 15 ppm*	
Response Time	< 60 minutes (location on Xfmr)	
Operating Temperature (Ambient)	-40°C to +70°C	
Storage Temperature	-40°C to +85°C	
Oil Temperature Range ³	-40°C to +105°C	n/a
Data Log Storage	1 Year	
Cross-sensitivity to H ₂ O, CO ₂ , C ₂ H ₂ , C ₂ H ₄ , C ₂ O, etc.	< 2%	
Serial Communications	2-Wire RS485, MODBUS RTU, DN P3.0	
Power Supply	12-48VDC, 10 Watt	
Environment	IP68 (7.62m [25ft] water for 14 days) - Marine rated Assembly (CSM equiv)	
Insulating Liquid Supported	Mineral Oil, Silicone, Natural Ester, Synthetic Ester	
Designed life Expectancy	10+ years	

* whichever is greater

¹ Accuracy of the sensor in the FIELD

² For consecutive measurements to an identical hydrogen concentration

³ Main tank bulk oil temperature

