Powered by H2scan ADVANCED HYDROGEN SENSING

HV Assets

Basic Care

Condition-Based Maintenance (CBM)

MAXIMUM RELIABILITY

The Basic Care sensor combines four critical measurements: hydrogen, humidity, pressure, and temperature.

The Basic Care sensor opens new possibilities in transformer monitoring, being the first on the market to combine four critical measurements: hydrogen, the main gas present in most defects, humidity, pressure, and temperature. It provides continuous and real-time data, alerting asset managers about abnormal transformer conditions that can lead to catastrophic events.

It is recognized in the industry as the “gold standard” and carries an exclusive 10-year warranty. It provides true set-and-forget monitoring (no more monitoring the monitor), allowing maintenance teams to focus on distressed assets identified by the sensors, reducing OPEX while extending the life of critical assets.

H2scan, our partner, is the only company in the industry that can attest to the sale of over 15,000 sensors worldwide, without calibrations or after-sales services performed since 2012.

HV Assets offers flexible solutions, enabling the monitoring of virtually your entire fleet of transformers.

Application

Suitable for a wide temperature range and marine exposure, the sensor is installed directly on the transformer, in both mineral and vegetable oil, and can withstand the most severe industrial applications.

Key Features

- The only transformer sensor that combines hydrogen, humidity, pressure, and temperature measurement
- Market leader for the ranges of supported environmental operating conditions (hot/cold/salty/submersible water)
- Detects pressure drops associated with ballistic damage
- Meets IP68 protection degree
- Ideal for an IoT sensor deployment strategy across the entire fleet of transformers
- **10-year warranty on the hydrogen, standard 3-year warranty on the product**

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Imagine knowing the condition of all your transformers. Not just the few selected ones. Imagine knowing, based on real data: Where to focus your Capital and O&M expenditures? And imagine achieving this without increasing your maintenance budget? The Basic Care sensor makes this a reality by combining hydrogen, humidity, pressure, and temperature measurements in a reliable, long-lasting, and maintenance-free monitoring package.

Certifications: Meets all relevant global monitoring standards for transformer installations.

Operating Conditions

Insulating Liquid Temperature	
Operating	-40° C to +105° C
Survival	-40° C to +135° C
Supported Liquids	Mineral oil, silicone, natural ester, synthetic ester
Environment	
Operating Temperature	-40° C to +70° C
Storage Temperature	-40° C to +85° C
Ambient Humidity	0 to 100% RH, condensation
Oil Humidity	0 to 95% RH, without condensation
Protection Degree	P68 (7.62 m of water for 14 days)
Marine Grade	Salt water condensation (IEC60068-2-11)
Altitude	Up to 3000 m above sea level
Pressure	0.1 to 2 bar absolute (1.45 to 30 psia)
Mechanical	
Dimensions (H x W x D)	19,4 x 8,8 x 6,7 mm (7.63 x 3.47 x 2.65 in)
Weight	1.82 kg
Electrical	
Power Supply	12-30 VCC, 12 W
Others	
Designed Life Expectancy	10+ years
Maintenance/ Calibration	N/A
Certifications	IEC 60068-2, IEC 60068-2-30, IEC 60529, EN55011, EN 61000-4, EN 61326-1, FCC Part 15, IEC 61010.

1 Whichever is greater

Sensor Specifications

Hydrogen	
Measurement Range	25 - 5.000 ppm
Accuracy	±20% of reading or ±25 ppm[1]
Repeatability	±10% of reading or ±15 ppm[1]
Response Time	<60 minutes (transformer location)
Cross Sensitivity	<2% (other gases)
Humidity	
Measurement Range	0 to 95% RS
Accuracy	±2% RS
Repeatability	±2% RS
Pressure	
Measurement Range	0 to 205 kPA (0 to 30 psia)
Accuracy	±2% FS
Repeatability	±0.6 kPa (±1 PSI)
Temperature	
Measurement Range	-40° C to 125° C
Accuracy	±0.1° C
Repeatability	<2° C

Unit: in