

HZ-DGA-300



Hertzinnno DGA-300 Monitor system(PAS) is an advanced online device for monitoring gases in transformer oil, Utilizing MEMS technology and exclusive patented features, it has the capability to analyze 3 type of gases in a single operation.

Distinguished by its high sensitivity and durability, the device can support uninterrupted continuous use for over 10 years without the need for maintenance. It supports H_2 , CH_4 , C_2H_2 as well as monitoring of trace moisture, relative growth rate, and absolute growth rate.

It supports online software, which can be deployed on a server, with a browser, the client can monitor and analysis the data easily.

Key Feature

- Highly sensitive, detects 3 type gases and moisture
- Long-term measurement stability through autocalibration and MEMS IR reference measurement
- Oil sampling with vacuum gas extraction
- No carrier or calibration gases to monitor or replace
- Secondary chamber design, enhances detection sensitivity and avoids contamination of optical window
- Measurement cycle less than 30min (typical 1h)
- Supports Mineral oil and Synthetic ester liquid
- Operation temperature from $-40^{\circ}C(-40^{\circ}F) \sim 70^{\circ}C(158^{\circ}F)$
- Support Duval Triangle Analysis

■ Specification

Model	HZ-DGA-300	
Monitoring Components	H ₂ , CH ₄ , C ₂ H ₂ , H ₂ O	
Gas Monitoring	Measure Range* (PPM)	Accuracy
H ₂	1 ~ 5000	1ppm or ±5%
CH ₄	0.5 ~ 3000	0.5ppm or ±5%
C ₂ H ₂	0.5 ~ 3000	0.2ppm or ±5%
H ₂ O	0 ~ 100	0.1ppm or ±5%
Repeatability	±3%	
Temperature	-40°C ~ +70°C/-70°C ~ +70°C*	
Humidity	5 ~ 95%	
IP Protection	IP65	
Atmospheric Pressure	70kPa ~ 110kPa	
Communication protocol	MODBUS, IEC61850,DNP3.0	
Stability (Measurement Deviation)	Under the same experimental conditions, the monitoring results for the same oil sample should not deviate by more than 3% (at moderate concentrations).	
Data storage	≥ 10 years	
Electrostatic Discharge Immunity	Level 4, ±8kV ~ ±15kV	
Resistance to Electrical Fast Transient Pulses	Level 4, ±4kV	
Surge (Shock) Immunity	Level 4, ±4kV	
Weight	25 kg	
Dimensions	340*130*500 mm	
Power Supply	AC220 V ±30%, 50Hz ~ 60Hz AC110 V ±10%, 50Hz ~ 60Hz(Optional)	

*Supports customization of devices with different precision levels

■ Applications



Factory



Rail Traffic