

TECHNICAL SPECIFICATION REQUIREMENT FOR DGA TEST KIT (Make: GE/Energy Support/Qualitrol)

Sr. No	Specification	Yes/ No
1	Portable Dissolved Gas Analyzer with fully automatic measurement procedure.	
2	<u>Application</u> – Dissolved Gas Analysis of Mineral Insulation Oil and able to measure direct gas samples from Buchholz relay or Transformer headspace.	
3	Having facility to detect and measure Hydrogen (H ₂), Carbon Monoxide (CO), Carbon Dioxide (CO ₂), Methane (CH ₄), Acetylene (C ₂ H ₂), Ethane (C ₂ H ₆), Ethylene (C ₂ H ₄).	
4	<u>Measurement Principle</u> – Photo Acoustic Spectroscopy (PAS) or Gas Chromatography method.	
5	Built-in Diagnostic features which include Duval’s Triangle, Rodger’s Ratio and IEEE key gas analysis.	
6	Oil sample & Buchholz gas injection to the kit through syringes.	
7	Measurement accuracy +/- 5%.	
8	The unit shall have internal memory with a capacity to store DGA results of previous samples.	
9	For on-site and laboratory analysis.	
10	Enclosure: Rugged case – waterproof for extreme environmental conditions. IP67 & IP20	
11	The kit shall have a built in display preferably with color touch screen LCD technology.	
12	The unit shall have embedded thermal printer to provide hard copy of the DGA analysis results. The printer must not need any additional cartridge, ink, ribbon or any such accessories whatsoever.	
13	Dimensions – compact and easy to handle; weight – within 15 kg	
14	PC interface - USB	
15	Operating voltage: 115 to 230V AC	
21	Detection Ranges	
	H ₂	5 - 5,000 ppm
	CO	1 - 50,000 ppm

	CO ₂	2 - 50,000 ppm	
	CH ₄	50,000 ppm	
	C ₂ H ₂	0.5 - 50,000 ppm	
	C ₂ H ₄	1 - 50,000 ppm	
	C ₂ H ₆	1 - 50,000 ppm	