Tabletop Gas Analyzer

Portable / Tabletop Model: GA - 150



Protects Personnel, Plant & Assets



TECHNOLOGY

HNL's GA - 150 is a rugged, portable, easy-to-use gas analyzer that monitors purge gases and the cooling gas in hydrogen-cooled turbine generators. It measures hydrogen in air & hydrogen in CO₂ as well as CO₂ in air during maintenance purging of hydrogen rooted turbine generators. Switch selectable ranges on the instrument make it easy to choose the measurement required.

Minimize Costly Downtime: To minimize downtime, it is important for the 2 - step purge process to proceed quickly and effectively. The GA - 150 helps achieve those objectives. During the first stage of maintenance purging, the unit monitors the changing H₂ / CO₂ mixture. This allows operators to know the earliest moment to begin the second stage (air purge). This also saves money by minimizing CO₂ usage. During the second stage, the GA -150 monitors air-in-CO₂, which helps you decide when workers can begin maintenance.

APPLICATIONS 1) Before workers can perform periodic maintenance inside a hydrogen-cooled turbine generator, the hydrogen (H₂) cooling gas must be purged and replaced with a breathable atmosphere (air). However, air / H₂ mixtures are potentially explosive, so a maintenance purge is used that proceeds in two stages. First, carbon-di-oxide (CO₂) is used to purge out the H₂. Then, in the second stage, air purges out the CO₂.

2) Spot check hydrogen purity during normal generator operation.

SPECIAL FEATURES

- Portable, rugged, lightweight
- Sealed reference cell, no need for a flowing reference support gas
- Uses no consumables and is virtually maintenance free
- Proven thermal conductivity detector
- Switch-selectable gas for easy choice of desired measurement
- Large, easy to read readout for observing rate of change (trending) of purge gas mixtures

BENEFITS

- · No installation required
- Minimizes costly maintenance downtime
- Saves money by avoiding needless waste of CO₂ purge gas
- Assures optimum efficiency by detecting air contamination

Tabletop Gas Analyzer

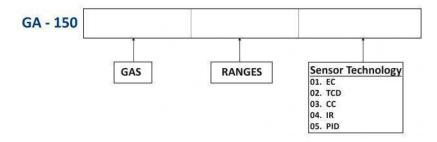
Portable / Tabletop Model : GA - 150



SPECIFICATIONS

Type	Portable
Detectable gases / parameters	H2, O2, CO2 (Binary gaseous mixture)
Electronics / processor	Micro-controller
Power supply	Rechargeable battery & 230 V AC
Display	Graphic display
Output	RS 232
Technology	TCD
Resolution	0.1% H ₂ , Air and CO ₂
Accuracy	± 2 % FS
Response time	less than 10 sec
Operating temperature	0 - 55 °C
Sampling / input	Inbuilt pump
Housing / case	Plastic
Included accessories	Battery charger, flow meter, leather carry case
Optional accessories	Datalogger, Integral printer, sampling pump,
	air filter
Range	A) 0 - 100 % H ₂ in air
	B) 0 - 100 % CO ₂ in air
	C) 0 - 100 % H ₂ in CO ₂ (optional)
Drift Rate	Less than 1% (range)
Flow Rate	0.1 ~ 0.5 lpm (0.5 - 30 psig)
Wetted Parts	Brass, SS, Aluminum, Teflon, Nylon
Gas Connections	1/4 " Tube
Enclosure	NEMA - 4 x PET Plastic Housing

ORDERING INFORMATION



Note: Specifications and Features will vary with application. There may be changes overtime due to continuous developmet process.

@ 2017