

TITLE: MULTIPLE GAS MONITORING SYSTEM**DEPARTMENT: TECHNICAL SUPPORT****DESCRIPTION:**

System accepts from one to eight combustible, oxygen and/or toxic sensors, chosen from 19 different gas sensors. Each sensor provides a digitized output, allowing easy networking of multiple sensors. Together with auto-install feature and easy plug-in sensor replacement, the system is unmatched with respect to rapid deployment and efficiency of maintenance.

Sensors may be installed in any point around the rig, including, but not limited to -

Rig Floor, Mud Pit Room, Ditch or Possum Belly.

A. Specifications (Monitoring System)

BRAND:	Thermo Gas Tech
MODEL:	Model 128
SENSOR TYPES:	Toxic/O ₂ and Combustible
SENSOR INPUT:	One to eight remote sensors
POWER INPUT:	100/130 Vac 50/60 Hz, 200/260 Vac 50/60Hz
OPERATING TEMPERATURE:	-4°F to 122°F (-20°C - 50°C)
OPERATING HUMIDITY:	0 to 95% RH, non-condensing
OTHER FEATURES:	Calibration Reminder built-in Super bright LED display – quick indication of normal, fault, and alarm conditions Allows networking of multiple sensors
INSTALLATION LOCATION:	Inside mudlogging unit
APPROVALS/CERTIFICATION:	CSA Certified for non-hazardous locations; Enclosure rating NEMA 4X
OUTPUT:	RS-232 to DLS System (from DLS to Chart Recorder and all Digital Monitors).





TECHNICAL DATA SHEET

MULTIGAS MONITOR

No. SPECS-GAS-034

Rev. 0

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B. Specifications (Sensors)

<i>GAS</i>	<i>FORMULA</i>	<i>RANGE</i>	<i>SENSITIVITY / PRECISION</i>
Ammonia	NH ₃	0 to 100 ppm	1 ppm
Arsine	AsH ₃	0 to 100 ppm	1 ppm
Carbon Monoxide	CO	0 to 500 ppm	1 ppm
Chlorine	Cl ₂	0 to 10.0 ppm	0.1 ppm
Chlorine Dioxide	ClO ₂	0 to 2.00 ppm	0.01 ppm
Combustible	(Several)	0 to 100% LEL	1% LEL
Diborane	B ₂ H ₆	0 to 1.00 ppm	0.01 ppm
Fluorine	F ₂	0 to 10.0 ppm	0.1 ppm
Hydrogen Chloride	HCl	0 to 30.0 ppm	0.1 ppm
Hydrogen Cyanide	HCN	0 to 50.0 ppm	0.1 ppm
Hydrogen Fluoride	HF	0 to 10.0 ppm	0.1 ppm
Hydrogen Sulfide	H ₂ S	0 to 100 ppm	1 ppm
Nitric Oxide	NO	0 to 100 ppm	1 ppm
Nitrogen Dioxide	NO ₂	0 to 20.0 ppm	0.1 ppm
Oxygen	O ₂	0 to 30.0 % Vol	0.1% Vol
Ozone	O ₃	0 to -1.0 ppm	0.1 ppm
Phosphane	PH ₃	0 to -1.0 ppm	0.1 ppm
Silane	SiH ₄	0 to 50.0 ppm	0.1 ppm
Sulfur Dioxide	SO ₂	0 to 10.0 ppm	0.1 ppm

INSTALLATION LOCATION: Rig Floor, Mud Pit Room, Ditch or Possum Belly, Flow Line, along Sample Line (Agitated mud)

APPROVALS/CERTIFICATION: Toxic/O₂ – Class I, Groups A, B, C, D
Combustible – Class I Division 1; Groups B, C, D
(IEC Ex Division IIB + H2)

OUTPUT: RS-485 to Model 128 System

APPROVAL:

Dept. Supervisor : VICTOR SAET Date: 28th August 2002

Technical Committee : ALAN MORRISON Date: 28th August 2002