

HYDAC INTERNATIONAL

Portable Data Recorders HMG 1000 & HMG 2020

FEATURES AND BENEFITS

The HMG 1000 and HMG 2020 are advanced versions of our successful portable test units, incorporating many advanced features.

MULTIPLE CAPABILITIES

The HMG 1000 and HMG 2020, along with various transducers, comprise a highly versatile system for measuring and recording pressure, temperature, flow and more. From transducers mounted permanently or temporarily on operating equipment, multiple values can be collected simultaneously and stored in memory.

Portable, battery-driven processors incorporate a programmable menu, which enable the user to select the types of readings and displays, as well as the format of printed reports.

COMPREHENSIVE REPORTING

The unit can print reports directly from on line measurements or from extensive internal memory. The HMG 2020 can produce reports in both graphic formats, with values plotted on a curve, and in tabular format. Data can be transferred to a variety of printers, or to a PC for further analysis via the HMGWIN software. The data can be exported to standard packages like Lotus 1-2-3™ or MS-EXCEL™.

INTEGRATED SYSTEM

The central processing units and sensors are designed and manufactured by HYDAC so as to ensure a high degree of system reliability and compatibility.



HMG 2020 shown with optional components

BROAD APPLICATION

Typical applications include:

- **Preventive Maintenance** - to record hydraulic system performance and highlight unfavorable trends
- **OEM Quality Programs** - to test and document equipment parameters before shipment
- **Troubleshooting** - to help both users and OEM's identify and correct problems in the field

The systems are especially valuable in troubleshooting because they can detect very rapid pressure spikes:

- **HMG 1000** – 2 millisecond
- **HMG 2020** – 1 millisecond

COMPONENTS

1	Central Processing Unit* A/B Sensor Cable Universal Adapter Power Supply
2	Pressure Transducers
3	Flow Rate Sensors
4	Temperature Transducer

*Refer to **HYDAC** price schedule for HMG Kit configurations

GENERAL TECHNICAL DATA		
	HMG 1000	HMG 2020
Total Sensor Inputs	3	5
Analog Sensor Inputs	4-20 mA	4-20 mA 0-10V/ 4-20mA
Digital Input	-	0.3-30,000 Hz
Fastest Measuring Rate	2 ms	1 ms
Digital Resolution	10 Bit	
Memory Capacity:		
Total Measurement Values	7,500	250,000
Maximum No. of Tests (Graphs, Reports)	1	50
Number of Triggers	-	2
Printer Port	Centronics & RS232	
PC Port	RS232C Selectable baud rates	
Typical Battery Life (Between Recharging)	10 Hours with 2 sensors	
External Power Supply	12-30V DC	
Relative Humidity	0 - 70%	
Operating Temperature	32 - 122°F (0 - 50°C)	
PC Software	HMGWIN 1.0	



SENSOR DATA*			
TYPE	SERIES	PRESSURE	FEATURES
Solid-State Pressure Transducers	HDA3700	HDA 3000 series 11 pressure ranges from 6 to 600 bar	0.5% Accuracy (3700)
	HDA3800		0.3% Accuracy (3800)
	HDA 4400	HDA 4000 series 8 pressure ranges from 150 to 9000 psi	1.0% Accuracy (4400)
	HDA 4700		0.5% Accuracy (4700)
Temperature Transducer	ETS4144	8,700 psi (600 bar) Maximum	-13°F to 212°F -25°C to 100°C
Turbine Flow Meters	EVS 3100-1	5,800 psi (400 bar) Maximum	1.6 -15.9 GPM (3100-1) 6 - 60 LPM
	EVS 3100-3		4 - 80 GPM (3100-3) 15 - 300 LPM
	EVS 3100-2	4,600 psi (315 bar) Maximum	10.6 - 159.0 GPM (3100-2) 40 - 600 LPM

*Refer to HYDAC product catalogs and price schedule for more detailed information, pricing, and preassembled packages.