

## Heath's HDR - Intrinsically Safe & Completely Configurable

The Heath Data Recorder (HDR) is used in natural gas transmission and distribution systems which require accurate pressure and temperature recorded data that can be emailed, printed or graphed. The HDR can be used for many applications including hydro testing pipeline and/or pressure vessels and can be used with natural gas, oil, water, etc. Featuring a specially prepared powder coated aluminum IP64 housing designed to withstand the most extreme weather conditions. This is a powerful device that can be factory assembled in a variety of configurations.

The HDR is capable of recording up to three (3) pressures and up to two (2) temperature probes plus internal case temperature. HDR Host is the companion software interface to the HDR instrument. This user friendly application program provides for configuration, calibration, local and remote communication, interrogation, data collection and data processing. Three independent logs store data from one (1) second up to one (1) hour intervals. The Min/Max and Ave for Pressure 1, 2, 3, external Temperature 1, 2, internal case temperature and battery voltage can all be recorded on the historical internal log referred to as the Profiler. The larger memory allows the Profiler to store years of hourly data.

Depending on the housing type and sensor placements the HDR is suitable for wall/panel mount (bottom connect); 2" pipe mount (bottom connect) or portable (rear connect). The instrument utilizes one 1.5-volt, modular battery as its primary power source. The HDR incorporates an on board uninterruptible power supply. This consists of one factory installed "AA" lithium cell rated at 3.6 volts. The HDR also incorporates an on board battery (CR2032) for backup of RAM and its real time clock.



### Features:

- *Intrinsically Safe UL 913 and CSA C22.2, Class I, Division 1, Group D.*
- *Up to three (3) Pressures and two (2) temperatures plus ambient.*
- *Pressure ranges: 1PSIG up to 5000PSIG*
- *Continuous LCD displays Pressure, Temperature, Battery Voltage and active alarms*
- *Non-volatile Flash memory saves Calibration, Transducer Coefficients Configuration & Site info if all power is lost.*
- *Multi-Drop to several instruments from one modem.*
- *Measures & records all connected sensors every second.*
- *Single Alkaline "D" battery provides power for up to 4 years.*
- *Call-out upon alarm and SMS alerts.*
- *HDRHost is compatible with Windows 10, 8, 7, Vista and XP.*

**See back for specifications and ordering instructions**

# Specifications

## Mechanical

Housing:	Aluminum; IP64 powder coated over chromate surface preparation
Dimensions:	7.25" x 6.25" x 4.25"
Weight:	5 lbs (including battery and on pressure transducer)
Mounting:	Wall, pipe or portable
Pressure Connections (3):	¼" NPTF
Temperature Probe (2):	¼" O.D. x 6" probe x 6' armor; ¼" NPTM slip fitting
Security:	Lockable stainless steel hasp
Display Scroll:	Push button switch/LCD displays: Pressure 1, 2, 3 and Temp 1, 2; case temp. main and backup battery voltages and active alarms

## Electrical

Primary Power Pack:	1.5 volt; 1 D cell alkaline battery with IS protection board
Back Up Power:	3.6 volt field replaceable lithium cell
Transducer:	10 millivolt per volt excitation; 12 point polynomial compensation
Pressure Ranges (shown as PSIG):	1, 3, 6, 15, 30, 60, 100, 150, 300, 500, 1000, 2000, 3000, 5000
Temperature Sensor (gas and air):	Integrated circuit type
Display:	Eight digit continuous LCD
Communication/Protocol:	Two RS 232, multi-drop addressable, native Sandia and Modbus ASCII and RTU

## Performance

Sensor Sample Rate:	All sensors are sampled every second
Accuracy:	+/- 0.5% of reading inclusive of linearity, hysteresis, repeatability, long term drift & temperature
Temperature:	-40°F to + 170°F
Humidity:	5 - 95% non-condensing
Primary Power Pack Life:	Up to 4 years based on 1 second wake-up interval
Back Up Power Life:	Up to 1 year based on 1 second wake-up interval
External Power Connection:	10-15 VDC (if needed)

## Options

Inputs:	Digital pulse input with electronic recording of counts
Outputs:	Pulse/call-out upon alarm or pulse counting/ repeating
Communication:	RS232 serial port/Internal 2400 baud "land line" modem, multi-drop harnesses, radio modem, cell modem, IP modem, surge protector

## Operating Software

HDR Host software allows configuration, calibration, report generation, local and remote polling plus live monitoring. This software is compatible with Windows 10, Windows 8, Windows 7, Windows Vista and Windows XP.

## Certifications

Intrinsic Safety:	UL 913 and CSA C22.2, Class 1, Div 1 Group D
CE:	EMC directive EN 61326-1
Corrosion Resistance:	MIL-STD-810F

Heath Consultants Incorporated operates under a continual product improvement program and reserves the right to make improvements and/or changes without prior notification.



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