



Innovonics MD4 data recorders allow you to monitor and trace any process, machine or environment when you can't be there. The MD4 is rugged, miniature, self-contained and battery powered.

MD4 units will record data from situations as varied as exhaust temperatures in heavy vehicles, temperatures and humidity in a ship freezer to water levels submerged down a bore hole.

One and two channel units are available for measurement of voltages, currents, pressures, temperature, humidity and more.

Event and pulse counting units allow recording of shaft speeds, vehicle monitoring, rainfall, flow rates and gas or electricity usage.

All recorders report in calibrated engineering units.

Features

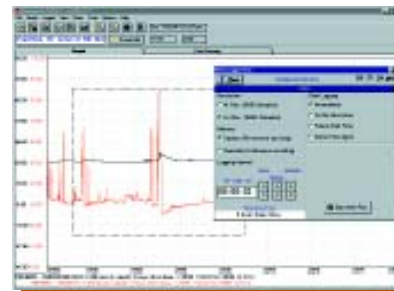
- Record from once per second up to once per day
- Memory capacity of 16,000 measurements. Record from days to years
- Internal Crystal Accuracy Clock Calendar. Start recording immediately or at some time and date in the future
- Retrieve data or monitor recordings at any time without interrupting recording in progress
- External computer connector, communicate with unit at any time. Do not open case.
- Rugged weather resistant case

Software



The Innovonics Data-i software is an easy to use Windows-based application that controls all MD4 functions. Using Data-i, operators can easily configure the MD4 and extract recorded data.

Data-i includes powerful tabular and graphical reporting functions as well as a data calibration export features.



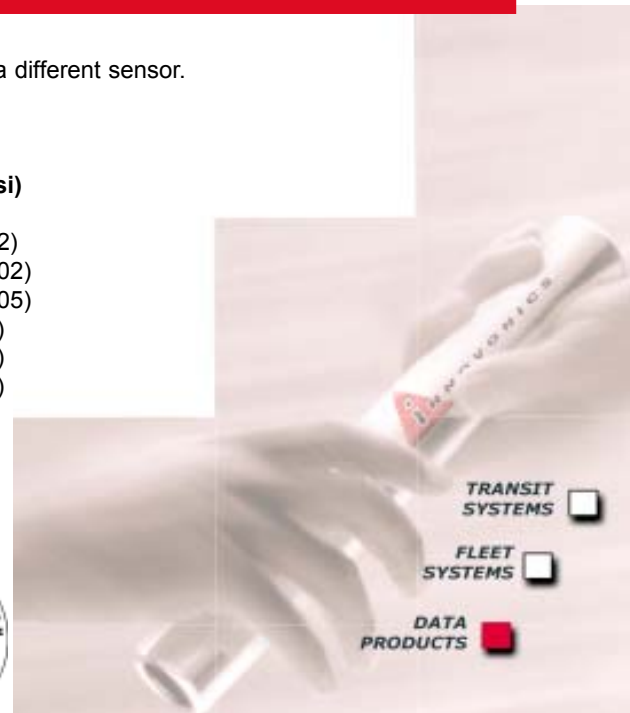
Specification

MD4P PRESSURE LOGGER

- PRESSURE RANGES**
- Specify when ordering. Each range requires a different sensor.
 - Resolution:
 - Standard: 0.4% of range
 - High: 0.1% of range
 - Resolution is user configurable.

Pressure Range kPa (psi)	Resolution kPa (psi)	
	standard	high
0 to 103 (15)	0.4 (0.06)	0.1 (0.02)
0 to 172 (25)	0.7 (0.1)	0.17 (0.02)
0 to 350 (50)	1.4 (0.2)	0.34 (0.05)
0 to 700 (100)	2.8 (0.4)	0.7 (0.1)
0 to 1380 (200)	5.4 (0.8)	1.4 (0.2)
0 to 3500 (500)	13.7 (2)	3.4 (0.5)
0 to 7000 (1000)	28 (4)	6.8 (1)
0 to 13800 (2000)	54 (8)	14 (2)
0 to 35000 (5000)	140 (20)	34 (5)

ACCURACY Pressure within +/- 1% of range as supplied



Specification (cont.)

MD4E EVENT LOGGER

OPERATING RANGES
EVENT INPUT AND CONNECTION

Events per interval: 255 or 65535 max
- Event: input pulled low
- Max count rate: 15 events in any one second
- Min time between pulses: 40 ms
- Min pulse width: 1ms
- Cable entry: water resistant plastic gland
- Internal connection: screw terminals

MD4ET EVENT TIME LOGGER

OPERATING MODE
EVENT INPUT AND CONNECTION

Records the time and date of each event
- Event: input pulled low
- Max count rate: 1 event in any one second
- Min pulse width: 25ms
- Cable entry: water resistant plastic gland
- Internal connection: screw terminals

MD4V VOLTAGE LOGGER

VOLTAGE RANGES

Voltage Range (mV)	Resolution (mV)		Range and resolution both user configurable
	Low	High	
0 to 1250	5	1.2	
0 to 2500	10	2.5	

ACCURACY

- Voltage: within 0.5% of range as supplied
- Reference stability: 20ppm per °C

MD4K THERMOCOUPLE LOGGER

TEMPERATURE RANGES
AND RESOLUTION

Temperature Range (deg C)	Resolution (deg C)		Range and resolution both user configurable
	low	high	
-50 to 50	0.4	0.1	
0 to 100	0.4	0.1	
0 to 250	1.0	0.3	
0 to 500	2.0	0.5	
0 to 1000	4.0	1.0	
0 to 1200	5.0	1.3	

MD4Pt100 TEMPERATURE LOGGER

TEMPERATURE RANGES
AND RESOLUTION

Temperature Range (deg C)	Resolution (deg C)		Range and resolution both user configurable
	low	high	
-50 to 50	0.4	0.1	
-50 to 150	0.8	0.2	

ACCURACY

Temperature within +/- 0.4deg C as supplied

MD4RHT RELATIVE HUMIDITY AND TEMPERATURE LOGGER

TEMPERATURE AND
HUMIDITY RANGES

Temperature Range (deg C)	Resolution (deg C)		Resolution	Range and resolution both user configurable
	low	high		
-50 to 100	0.6	0.15		

Humidity Range (%RH)	Resolution		Resolution	Range and resolution both user configurable
	low	high		
Temperature within +/- 0.3% as supplied				
Humidity: Delivers accuracy of the humidity sensor used				

ACCURACY

MD4W WATER LEVEL LOGGER

WATER DEPTH RANGES

Water depth Range (m)	Resolution (mm H2O)
0 to 3	Resolution is user configurable (Software)
0 to 10	
0 to 20	
0 to 70	
0 to 140	

Specify the range when ordering as this is not user configurable

MD4I CURRENT LOGGER

Low Resolution Mode: 0.08 mA, (0.4%)
High Resolution Mode: 0.02 mA, (0.1%)
Accuracy:
Within 0.2% of range as supplied

Software utility supplied allows the user to set engineering units and scaling

MD4EL ELECTROLYSES LOGGER

Voltage Range	Resolution	
	Low	High (mV)
-8V to 1V	40	9
-2.5 to 0.5V	12	3
+/- 150mV	1.2	0.3