

## Overview

The Magson data loggers (MDL) were primarily developed for fast E-Field measurements on the sea floor, but can be used for all kinds of low voltage measurements. On demand, the unit can be equipped with an atomic clock (MDL-AC) for time synchronous measurements of several data loggers without direct cable connection. The LINUX based data logger provides a TCP/IP interface.



## Features

- Low-noise variable gain input amplification
- 18 bit analog to digital conversion with 640 kHz
- Up to 3 channels possible
- Galvanic decoupling of analog measurement unit
- FPGA internal averaging with 10 kHz output
- Optional atomic clock time base
- ARM9 based LINUX controller board with TCP/IP interface
- Standard SD card for data logging
- FTP server

## Applications

- Low noise voltage measurements
- High precision, time synchronous measurements of independent logger units

## Technical Data

Supply voltage:	5 – 9 V (nominal)		
Power:	~20 mA (140 mW)	<i>Sleep mode</i>	
	188 - 196 mA (1316 - 1372 mW)	<i>Logging</i>	

Gain	1	2	3	4
Range in mV	± 167	± 83	± 40	± 20
Noise @ 10 kHz in nV	440	330	150	140