

# 8007DWLR Digital Water Level Recorder



The 8007DWLR Digital Water Level Recorder is an enhancement of the 8007B Micrologger Water Depth Recorder. It can measure water depths of 5m to 50m in standard ranges.

The unit is comprised of a digitally corrected pressure sensor connected to a UNIDATA Micrologger. The entire instrument is housed in a rugged stainless steel casing.

An integral cable contains a vent tube for barometric compensation and a Kevlar™ support member for longitudinal stability.

The cable is secured to the casing with a heavy-duty marine grade polyurethane moulding. Individual signal wires are epoxy sealed into the casing to provide additional protection against water ingress.

RSS-232 and SDI-12 signals are available for communication and unloading recordings from the STARLOG compatible data logger.

Temperature drift and the non-linearity of the pressure sensor are corrected using a ten term polynomial fitted over the operating temperature and pressure ranges.

The data logger included with the unit is fully programmable and has all the STARLOG features. These include event and time interval recording, programmable measurement and recording intervals, signal processing such as average, max, min and computations including flow conversions and rating tables.

Easily connect GSM / CDMA data modems to telemeter your instrument, or download your data by direct cable connect. Unlike other probes there is no need to remove the instrument from the borehole to download your data, saving you time in the field.

Ask your nearest Unidata representative for more information today.

## Specifications

Operating Range:	10, 20, 50, metres of water.
Typical Resolution:	1.0mm.
Operating Temperature:	0 to 50° C.
Battery Power:	Internal, 2 x C Lithium cells.
Operating Life:	5 years (at 1 hour measurement interval).
External Power (optional):	6V to 15VDC, 60mA measuring, 25uA standby.
Pressure Sensor:	Piezo-resistive silicon strain gauge bonded to 316 stainless steel diaphragm.
A/D Conversion Resolution:	16 bit.
Mathematical Precision:	32 bit floating point.
Typical Accuracy:	0.25% full scale.
Typical Long Term Stability:	0.25% of full scale/year.
Typical Repeatability:	0.1%.
Overpressure:	3 times full scale.
Dimensions:	40mm diameter. 600mm long.
Weight:	2.1kg.
Casing Material:	Marine grade stainless steel (AISI 316).
Vented Cable:	8.7mm OD, black polyurethane jacket, braided screen.
Data Logger:	Fully programmable STARLOG Micrologger.
Auxiliary Measurements:	Water temperature and battery voltage.
Memory Capacity:	60,000 recordings.
Communication:	RS-232 and SDI-12, Data modem and GSM support.

## 8007DWLR

- Rugged stainless steel construction
- Digital telemetry interface options
- Compatible with STARLOGGER
- Excellent linearity and long-term stability
- Wide temperature range
- Cost effective
- Atmospheric pressure compensated
- Temperature compensated
- Australian made

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