

# 8007WDP

# Water Depth Logger

**Rugged steel construction**

**Digital telemetry interface**

**Compatible with STARLOGGER**

**Excellent linearity and long-term stability**

**Wide temperature range**

**Cost effective**

The 8007WDP Water Depth Logger is an enhancement of the 8007B Micrologger Water Depth Recorder. It can measure water depths of 10m to 200m 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.

RS-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.

## Specifications

<b>Operating Range:</b>	10, 20, 50, 100, 200 metres of water
<b>Operating Temperature:</b>	0 to 50 deg C
<b>Battery Power:</b>	Internal, 2 x C Lithium cells
<b>Operating Life:</b>	5 years (at 1 hour measurement interval)
<b>External Power (optional):</b>	6V to 15VDC, 60mA measuring, 25uA standby
<b>Pressure Sensor:</b>	Piezo-resistive silicon strain gauge bonded to 316 stainless steel diaphragm.
<b>A/D Conversion Resolution:</b>	16 bit
<b>Mathematical Precision:</b>	32 bit floating point
<b>Overall Accuracy:</b>	0.1% FS
<b>Reproducibility:</b>	0.05% FS
<b>Overpressure:</b>	3 times FS
<b>Dimensions:</b>	40mm diameter 600mm long
<b>Weight:</b>	2.1kg
<b>Casing Material:</b>	Marine grade stainless steel (AISI 316)
<b>Vented cable:</b>	8.7mm OD, black polyurethane jacket, braided screen
<b>Data Logger:</b>	Fully programmable STARLOG MicroLogger
<b>Auxiliary Measurements:</b>	Water temperature and Battery voltage



40 Ladner St  
O'Connor WA 6163  
Australia  
Tel: +618 93318600  
Fax: +618 93318611  
<http://www.unidata.com.au>  
ACN 009 077 356