

# Prologger 7001B

The PROLOGGER sets new standards in accuracy and input range. It is packaged in the robust enclosure so familiar to STARLOG users with twice the accuracy, eight times the resolution and sixteen times the dynamic range. It is the ideal upgrade from its predecessor the 7000 Macro Logger. All PROLOGGER analogue and digital inputs are processed with 16 bit resolution. The sixteen inputs now support the following ranges:

- ±5.000V (155uV/bit resolution)
- ±500mV (15.5uV/bit resolution)
- ±50mV (1.55uV/bit resolution)
- ±5mV (155nV/bit resolution)

The superior accuracy of the new design means that input voltages will be converted to better than 0.05% of full scale over the full operating temperature range, and 0.1% in the 5mV range.

The PROLOGGER's memory capacity means you can acquire more data or increase the period between downloads. The unit also includes all the familiar STARLOG features such as SDI-12 instrument support, modem command/dial-out support, universal battery pack, continuous power source, scheme control of power supplies and field upgradable control firmware.



## Specifications

<b>Material:</b>	Grey, high impact, rigid PVC.
<b>Size:</b>	211 x 108 x 81 mm (HxWxD).
<b>Weight:</b>	2kg (including battery).
<b>Operating temperature:</b>	-20° to 60°C. Not affected by humidity.
<b>Scan rate:</b>	0.125 seconds to 5 minutes - programmable.
<b>Log interval:</b>	0.125 seconds to 1 week - programmable.
<b>Memory:</b>	Low power CMOS RAM 512k standard.
<b>Time clock:</b>	Crystal regulated, ±10 seconds per month.
<b>Analogue inputs:</b>	16 channels, 16 bit resolution on all channels. Unipolar or bipolar, differential or single-ended. Voltage input in four programmable ranges: -5.00V to 5.00V, 155u V/bit resolution. -500mV to 500mV, 15.5uV/bit resolution. -50mV to 50mV, 1.55uV/bit resolution. -5mV to 5mV, 155nV/bit resolution.
<b>Counters:</b>	4 channels, 16 bit resolution. DC to 20kHz potential free contacts. Accepts 0 to 12VDC digital inputs (0 to 1 threshold =5V).
<b>STARBUS:</b>	2 x high speed serial lines with eight channels on each. 16 bit, bi-directional, synchronous data and clock.
<b>SDI-12:</b>	Optional 1200 baud instrument channel.
<b>Controls:</b>	2 channels, 1 CMOS output. 1 uncommitted open collector output.
<b>Computer Input/Output:</b>	Full duplex serial RS232C. Baud rates: 300/1200/2400/4800/9600/19200/38400/76800.
<b>CPU:</b>	80C31 microcontroller, 14.7456 MHz.
<b>Battery life:</b>	Alkaline 1 year (typical), or rechargeable NiCad.
<b>Flat battery shutdown:</b>	5.6 Volts
<b>Power:</b>	5VDC reg. 100mA, 6.5V unreg. 1mA cont., 10VDC reg. 100mA prog. duty cycle (PDC), 12VDC unreg. 200mA (PDC), -12VDC unreg., 50mA (PDC).

## 7001B

- Very accurate - 16 bit resolution
- Wide input signal range
- Large memory capacity
- 64 character display
- Long battery life
- SDI-12
- Cost effective

