

Prologger Data Logger 7001D

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

The Prologger 7001D is high capacity and high resolution data logger for demanding applications requiring very accurate measurement and data logging.

It is packaged in the same robust enclosure as the Starlogger range but with twice the accuracy, eight times the resolution, and sixteen times the dynamic range.

All Prologger analogue and digital inputs are processed with 16 bit resolution.

The sixteen inputs 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 large 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. Modbus is supported using the 6543A Modbus interface. 4-20 mA inputs are supported and FTS accessory provides many interface options



Specifications

Material:	Grey, high impact, rigid PVC
Size:	211mm x 108mm x 81mm (HxWxD)
Weight:	2kg (including battery)
Operating temperature:	-20°C to 60°C. Not affected by humidity
Scan rate:	0.125 seconds to 5 minutes - programmable
Log interval:	0.125 seconds to 1 week - programmable
Memory:	Low power CMOS RAM 1Mb standard
Time clock:	Crystal regulated, ±10 seconds per month
Analog inputs:	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
Counters:	4 channels, 16 bit resolution. DC to 20kHz potential free contacts Accepts 0 to 12V DC digital inputs (0 to 1 threshold = 5V)
STARBUS:	2 x high speed serial lines with eight channels on each. 16 bit, bi-directional, synchronous data and clock
SDI-12:	Up to ten SDI-12 sensors are supported. SDI-12 Standard V1.3
Controls:	2 channels, 1 CMOS output. 1 uncommitted open collector output
Computer Input/Output:	Full duplex serial RS232C. Baud rates: 300/1200/2400/4800/9600/19200/38400/76800
CPU:	80C31 microcontroller, 14.7456 MHz
Battery life:	Alkaline 1 year (typical)
Flat battery shutdown:	5.6 Volts
Power:	5V DC reg. 100mA, 6.5V unreg. 1mA cont., 10V DC reg. 100 mA prog. duty cycle (PDC), 12V DC unreg. 200 mA (PDC), -12V DC unreg., 50 mA (PDC)