

## SPECIFICATIONS

**Operating Range:** -20 to +60°C  
**Resolution:** 16 bits  
**Processor Speed:** Up to 33 MHz  
**Sampling Rate:**

Minimum period: 1 second  
Maximum period: 24 hours

Note: Each sensor's sampling rate can be individually set

**Number of Channels:** 200

**Additional Analogue/Low-speed Counter Inputs:** 10

**High-speed Counter Inputs:** 2

**Memory:** 500,000 date and

time-stamped readings. Note:

Circular buffer automatically

overwrites oldest entries for

continuous data storage

**Standard Output:** RS232

**Data Format:** Plain text CSV file

**Optional Outputs:** RS422, RS485

**Internal Clock:** Real time & date

**Display:** Two-line LCD

### Power requirements:

**Battery Type:** 6 V, 7 Ahr

sealed lead acid

**Current Drain:**

Communications: 13 mA

Logging mode: 0.6 mA

**Charging Supply:** 8-40 V DC

unregulated

### Communications:

**Software:** HyperTerminal

**Baud Rate:** 600 to 115200 baud

(9600 optimum range)

**Data Bits:** 8

**Stop Bits:** 1

**Parity:** 0

**Cable:** 2 m length - D9 pin plug

### Enclosure & mounting:

**Enclosure:** LH3 logger housing

**Mounting:** MK6 Lower Mast,

MK7 Free Standing Base, MK5

Upper Mast, MK9 Cross Arm

### Logger dimensions:

**Dimensions:** 145 x 170 x 90 mm

**Weight:** 2.5 kg

### Related products:

**DM** Memory Module

**DS1** Docking Station

**AN2** Anemometer

**WD2** Wind Direction Sensor

**TA1** Air Temperature Sensor

**HU1** Relative Humidity Sensor

**BP1** Barometric Pressure Sensor

**SR2** Solar Radiation Sensor

**PR1** PAR Radiation Sensor

**RG5** Tipping Bucket Rain Gauge

**LW2** Leaf Wetness Sensor

**TL1** Leaf Temperature Sensor

**TS1** Soil Temperature Sensor

# Smart Logger

ICT International's SL5 Smart Logger uses state-of-the-art electronics and an operational concept not available in any other system.

For nontechnical users, the "plug and play" capability provides a simple but powerful user-friendly system.

For researchers, the Smart Logger provides all the in-built simplicity yet the ability to customise data collection criteria for specific projects.



## Easy to use "plug and play" logging

The Smart Logger is designed to operate with ICT's range of "Smart Sensors" and offers true "plug and play" capability.

Every Smart Sensor has an integrated microprocessor with embedded software that contains the sensor's custom profile. When it is connected to a Smart Logger and a search of the DataBus is initiated, the preset sensor profile is recognised by the logger and logging automatically commences at industry standard intervals.

Should the operator need to change the logging parameters, the embedded software program offers a full range of pre-programmed and user-defined options, with many available from single key strokes.

## Sophisticated virtual sensors

The Smart Logger can automatically perform complex calculations and equations in real time by using data input from attached physical sensors. The results of these calculations or "virtual sensors" can be logged and viewed directly on the logger's LCD display.

Virtual sensors inside the Smart Logger include evapotranspiration (ET), dew-point for frost alarm, animal stress index, and battery voltage.

## Communications and software

Windows HyperTerminal is used to access a simple menu system within the Smart Logger, providing the user with complete control over each individual sensor's setup. HyperTerminal ensures compatibility between the logger and any IBM compatible PC using any version of Microsoft Windows operating systems from 3.11 to XP.

Standard access to the logger is achieved through direct RS232 communications. However, a number of remote communications options are available. These include a memory module or data shuttle, landline telephone modem, wireless GSM and CDMA modem, and unlicensed radio telemetry packages.

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