MicroLog Solution

Specifications

MicroLog Solution Models

MicroLog EC600 — Temperature plus external sensor
MicroLog EC650 — Temperature, relative humidity plus external sensor
MicroLogPRO EC700 — Temperature plus external sensors
MicroLogPRO EC750 — Temperature & humidity plus external sensors

Built-in Sensors

MicroLog Temperature
Range: -30 to 50 ℃
Resolution: 0.5 ℃
Accuracy: 0.6 ℃

MicroLog Humidity
Range: 10 to 90 %
Resolution: 0.5 %
Accuracy: ± 3 %

MicroLogPRO Temperature
Range: -40 to 80 ℃
Resolution: 0.2 ℃ (-40 to -20 ℃)
                 0.1 ℃ (-21 to 50 ℃)
                 0.2 ℃ (51 to 80 ℃)
Accuracy (all ranges):   ±0.2 ℃
Software calibration is possible

MicroLogPRO Humidity
Range: 5 to 95 %
Resolution: 0.1 %
Accuracy: ±2 %
Software calibration is possible

Output

- **MicroLog Display:**   2 digit 7-segment LCD
- **MicroLogPRO Display:** 4 digit 7-segment LCD with decimal point

Communication
- MicroLog IR - interface to portable HP printer
- RS232 communication to the PC with 19,200 kbps with MicroLog and MicroLogPRO
- USB 1.1 (MicroLogPRO)

Memory
- **MicroLog:**   16,000 samples
- **MicroLogPRO:**   1 sensor - 52,000 samples
                       2 sensors - 26,000 samples
                       3 sensors - 16,000 samples

Power Supply
- **Internal lithium battery:** 3.6 V TL5902
- **Battery life:** Approximately 2 years (depending on sampling rate)

Sampling Rate
User defined: From 1 every 10 seconds to 1 every two hours

Dimensions
- **Thickness:**   22.9 mm
- **Diameter:**   72 mm
- **Weight:**   55 gr

Standards
- Water and dust proof IP65 standard compliance, for EC600 and EC700 models
- CE and FCC standard compliance
- FDA Title 21 CFR Part 11 Compliance

MicroLab Software

- Runs on Windows® 95/98/2000/XP/Vista
- Fast data download from the MicroLog
- Graphic visualization of the MicroLog data
- Data displayed in graphs and tables
- Data Export to EXCEL
- Graphic analysis tools such as Markers, Zoom
- Data Map allowing the users to easily see many MicroLog data loggers in one screen
- MicroLog SETUP windows, for setting up the MicroLog sample rate, sensors and alarm level
- MicroLog sensor calibration
- Display of MicroLog battery level
- Showing daily reports of a fleet of data loggers
- Visual alarm levels on the graph and table

Minimum PC requirements

- Windows® 95 or later
- Pentium 300 Mhz or higher
- 32 MB RAM
- 6 MB available disk space
- CD ROM drive for software installation
- Available communication port

Ordering Information

AC004	Infrared printer for data print-out
11199	Calibration certificate
PC-KIT	PC Kit (MicroLab Software CD and Com. Cable)
PC-KIT-750-USB	PC Kit for EC750 (MicroLab software CD and Mini USB Com. Cable)
SFTMCL025A	DatPass for MicroLab (DatPass software CD and USB security dongle)

Microlog & MicroLogPRO Comparison Table

	MicroLog		MicroLogPRO	
	EC600	EC650	EC700	EC750
Sampling resolution	8-bit		10-bit	
Internal range	-30 to 50 ℃/-22 to 122 ℉	-30 to 50 ℃/-22 to 122 ℉ (T), 0 to 100 % (RH)	-40 to 80 ℃/-40 to 176 ℉	-40 to 80 ℃/-40 to 176 ℉ (T), 0 to 100 % (RH)
Temperature accuracy	±0.6 ℃ / ±1.08 ℉		±0.2 ℃ / ±0.36 ℉	
Humidity accuracy	N/A	±3 %	N/A	±2 %
Resolution	0.5 ℃ (-30 to -29 ℃)/0.9 ℉ (-22 to -20 ℉) 0.4 ℃ (-28 to -22 ℃)/0.76 ℉ (-18 to -7 ℉) 0.3 ℃ (-21 to 22 ℃)/0.54 ℉ (-5 to 71 ℉) 0.4 ℃ (23 to 32 ℃)/0.76 ℉ (73 to 89 ℉) 0.5 ℃ (33 to 39 ℃)/0.9 ℉ (91 to 102 ℉)	0.5 %	0.2 ℃ (-40 to -20 ℃)/0.36 ℉ (-40 to 4 ℉) 0.1 ℃ (-21 to 50 ℃)/0.18 ℉ (-5 to 122 ℉) 0.2 ℃ (51 to 80 ℃)/0.36 ℉ (123 to 176 ℉)	0.1 %
Memory capacity	1 sensor -16,000 samples 2 sensors - 8,000 samples 3 sensors - 5,312 samples		1 sensor - 52,000 samples 2 sensors - 26,000 samples 3 sensors - 16,000 samples	
Sampling rate	Minimum - 1 per 10 seconds Maximum - 1 per 2 hours			
LCD display	Two digit, 7-segment LCD		Four digit, 7-segment LCD with decimal point	
LCD units/icons	℃, ℉, % RH, Ext		℃, ℉, % RH, pH, V, mA, AL-H, AL-L	
RS-232	Cable connection to the PC with 19,200 kbps			
USB - optional	N/A	N/A	USB 1.1 Option for quantities over 200 units with low water & dust protection	USB 1.1
Infrared printout	Minimum, maximum and duration up to 30 days Wireless report to portable thermal printer HP82240B		Minimum, maximum and duration up to 30 days OR Real-time data print-out up to last 128 values OR Wireless report to portable thermal printer HP82240B	
Power supply	Internal Lithium battery 3.6 V, 1/2 AA, 1.2 AH			
Battery life	Approximately 24 months (may vary with number of sensors connected and the sampling rate settings)			
Dimensions	72 mm diameter, 22.9 mm thickness			
Weight	55 g		55 g	

fourier