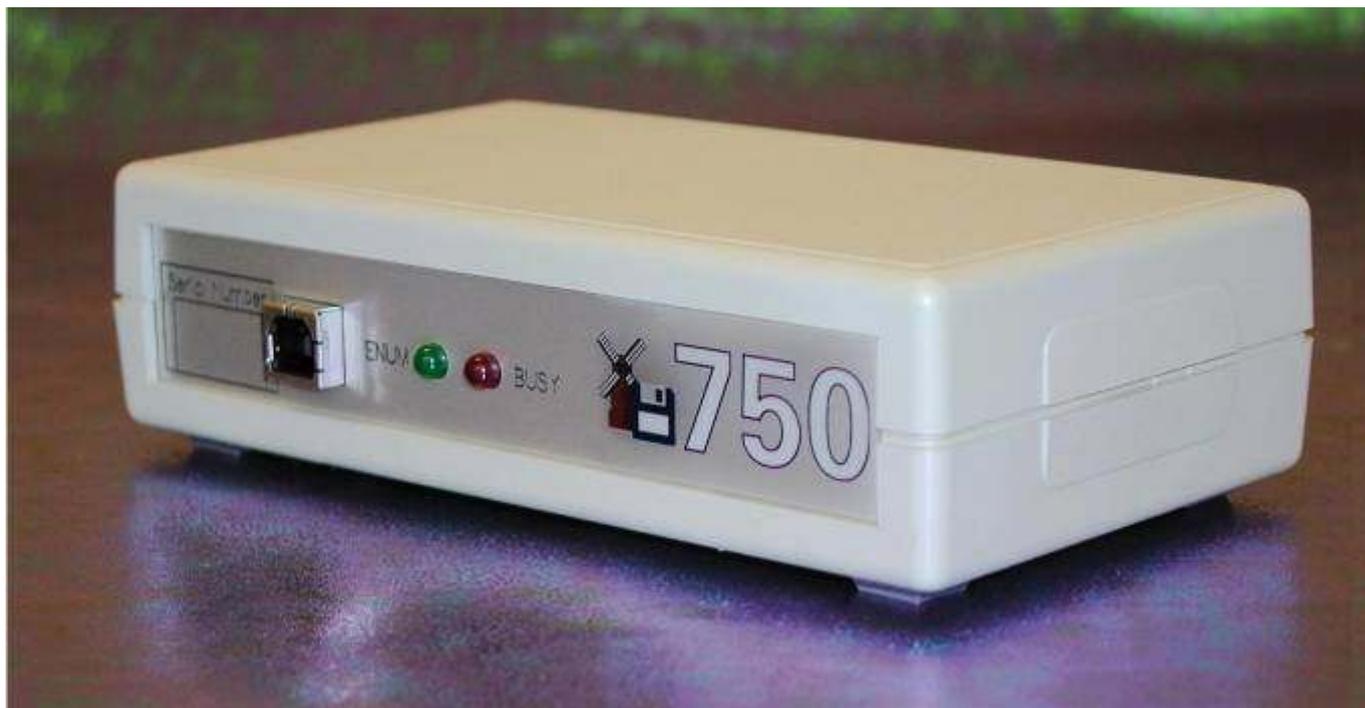


# Microlink USB data-acquisition systems

\* EURIAS \*

+ affordable + versatile + compact + easy to use +

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A range of low cost systems utilising the USB bus for data-acquisition and control applications offer an exceptional price/performance. Currently, four models suite most common sensor types, channel configurations and speed requirements.

The 700 series devices are small compact bus powered units, and thus require no power supply. The USB port enables quick and easy installation to notebook and normal PC's.

To get your measurement application running in *no-time*, we have bundled all systems with a Windmill application software suite. This package comprises a Logger to record measurement data on disk, a Charting program to display signals in a curve window, control panels to switch digital outputs individually or grouped, and a DDE panel enabling other Windows programs to read real time measurement data and control outputs using Dynamic Data Exchange (DDE). To get familiar with the features of Windmill, download the demonstration software from :

**Configure IML Hardware**

Hardware Device

- Device 0 :- Microlink 751 USB Analogue Inputs
- Device 0 :- Microlink 751 Unit - Digital Ports
- Device 0 :- Microlink 751 Unit - Event Counters

**Windmill Logger - SIGGEN.IMS**

File Inputs Settings DataFile Help

Data File:	sn23901.wl	Start	Stop	Pause	Resume
15:48:49	16.6996	59	7.62937	13.5614	
15:48:54	15.9697	57.9819	7.71237	12.1694	
15:48:59	16.2665	57.0534	7.56099	13.62	
15:49:04	16.082	56.2286	7.52376	12.4736	
15:49:09	15.8919	55.5195	7.44731	13.0057	
Time	T1	T2	Gflow	Wflow	
15:49:12	volts	°C	dm3/hr	dm3/hr	

Running C:\TESTDATA Interval: 5.0 seconds

<http://www.eurias.nl/download/Windmilledemo.exe>

The MICROLINK 770 includes the Windmill Streamer software which is designed to collect sampled data at speeds up to 100.000 measurements per second, including pre-trigger data. Like Windmill, Streamer includes the finished front panel applications to control your MICROLINK system. The programming has already been done for you. Although you can analyse smaller data files from Streamer with Microsoft Excel, we recommend to purchase the imc FAMOS program together with a MICROLINK 770 package. FAMOS can read Streamer data files of any size and perform complex mathematical calculations on it.

<b>Hardware features :</b>	<b>Microlink 750</b>	<b>Microlink 751</b>
Number of analogue inputs	16, single ended	16, differential
A-D converter	SAR type, 12 bits	Integrating, 12 . . 18 bits adjustable
Maximum sampling speed	Up to 10 Hz / 80 samples per second	Up to 10 Hz / 80 samples per second
Analogue input ranges	± 10 Volts	Selectable per channel to ± 10 Volts, ± 1 Volts, ± 100 mVolts, ± 10 mVolts, or automatically selected
Measurement accuracy, ( ± 10 Volts input range, 10 – 40 °C )	0.1 %	0.06 % or better @ 15 bits resolution
Optional thermocouple conditioning	-	Types B,E,J,K,N,R,S,T ( 593 adapter )
Optional strain gauge conditioning	-	¼, ½, and full bridge 120 Ω or 350 Ω
Number of digital channels *	16 ( 2 groups of 8 channels )	32 ( 4 groups of 8 channels )
Dimensions (width * depth * height)	155 * 85 * 42 mm.	190 * 140 * 30 mm.
Weight	300 g.	400 g.
Current consumption from USB	500 mA max.	500 mA max.
Signal connections	DSUB-37, plug included	2 * DSUB-37, plugs included

<b>Hardware features :</b>	<b>Microlink 752</b>	<b>Microlink 770</b>
Number of analogue inputs	16, differential	16, differential
A-D converter	Integrating, 12 . . 18 bits adjustable	SAR type, 16 bits
Maximum sampling speed	Up to 10 Hz / 80 samples per second	Up to 100.000 samples per second
Analogue input ranges	Selectable per channel to ± 10 Volts, ± 1 Volts, ± 100 mVolts, ± 10 mVolts, or automatically selected	Selectable per channel to ± 10 Volts, ± 1 Volts, ± 100 mVolts.
Measurement accuracy, ( ± 10 Volts input range, 10 – 40 °C )	0.06 % or better @ 15 bits resolution	0.05 % or better
PT100 sensors / resistance	Up to 8 channels (2 inputs per sensor)	-
Optional thermocouple conditioning	Types B,E,J,K,N,R,S,T ( 593 adapter )	Types B,E,J,K,N,R,S,T ( 593 adapter )
Optional strain gauge conditioning	¼, ½, and full bridge 120 Ω or 350 Ω	¼, ½, and full bridge 120 Ω or 350 Ω
Number of digital channels *	24 ( 3 groups of 8 channels )	Ext. Trigger, clock
Number of analogue outputs	2	-
Analogue output range	0 - 10.24 Volts or 0 - 20.48 mA	-
Dimensions (width * depth * height)	190 * 140 * 30 mm.	180 * 120 * 42 mm.
Weight	400 g.	500 g.
Current consumption from USB	500 mA max.	500 mA max.
Signal connections	2 * DSUB-37, plugs included	DSUB-37 DSUB-15, plugs included

<b>Digital I/O features :</b>	
Number of counter inputs	8, shared with digital inputs
Counting frequency range	up to 160 Hertz
Counter resolution	16 bits, ( 0 – 65535 )
Digital signal level	TTL or 5 Volts CMOS

The digital signals lines have configurable functionality. Any group of eight lines can be used as inputs or outputs. Additionally, one group can count pulses on the same digital inputs. You can choose either a totaling mode counting up to 65535 (16 bits) or auto-clear, which reads the number of pulses between readings. In output mode, each digital output can be used as an alarm output, set or reset depending on the threshold level of an analogue input, or programmed mode.