



Dear Customer,

many thanks for your interest in our products.

We would like to present you in a short and essential way our entire range of electronic levels and invite you to visit our website www.microplan-group.com, in particular the section Products / Electronic levels http://www.microplan-group.com/pagine/prodotti_gb/le_gb.htm

Our range of **electronic levels** includes different models in order to supply any kind of need concerning the measurement of inclination, ensuring a high metering precision and sensitivity.

The main features of the different models are the following:

Electronic Level mod. LE 101



It is composed by a sensitive device (immersed in oil*) fixed on a linear base of granite 100 or 200 mm (or a square of 200 mm) connected to a reading device - VA110 - that includes a galvanometer reading analogically the error of inclination. This model is particularly suitable for a distal utilisation, for applications in which it is necessary to place the sensitive device at hardly accessible or inconvenient places for the direct reading of the display. Furthermore it is possible to connect the reading device VA110 to a further sensible device in order to use the Master/Slave function. The optional port RS-232 enables a direct connection to a PC.

Electronic mod. LE201



This electronic level is based on microprocessors and comprises an integrated alphanumeric display. Thus, the sensitive device is consolidated with a digital reading device. The optional WPLAN software enables a direct connection between the level and the PC via an appropriate cable in order to collect the data of measurement and processing. Also, there are provided linear bases of 100 or 200 mm or squares of 200 mm for this model.

Electronic Level mod. LE301



It is the subsequent model of the model LE201 and preserves the digital reading of the error, allowing the access to the main functions of the menu via a infrared remote control that ensures an absolute stability during the zero setting and the collection of the measurement data. The privilege of this instrument is the **possibility of saving the data of measurement** collected and to transfer the data automatically to the PC afterwards.

The integrated menu guides the user through all functions :

- Collection of measurement data (free, linear, simple grate and complete grate)
- Zero setting (relative zero, absolute zero)
- Parameter (scale unit – setting off – selection of the language – register)

The model LE301 – like its previous model - facilitates a Master/Slave function with a further identical model or with the LE201.

Electronic Level mod. LE401



The evolution of the electronic level has been concentrated in this new instrument, LE401 where inclination values are transmitted through a **radio connection**. The instrument is composed by: a **digital readout unit** (VD410), and a **pendulum unit** (LE401). The pendulum unit, as for the other models of electronic level provided by Microplan Group, uses the oil-bath system for shock damping, while the digital read-out unit is used for the transmission/reception of data from the sensible unit, without any cable. In the same unit, the ON/OFF button, the PC and battery charger connection and a command keyboard are located. The two units can communicate with a maximum distance of 100 m: the VD410 unit can read the signals from 1 up to 10 pendulum units at the same time.

The digital and graphic display gives you the exact value of inclination, along with the inclination direction; a complete range of values can be stocked by the VD410 unit and can be then transmitted to the PC through an apposite connection cable and **WPLAN ©MICROPLAN Software**: the data elaboration follows 4 different methods:

- Straightness
- Easy-grid flatness
- Complete-grid flatness
- Parallelism

The operator can also select or change the following parameters:

- Measure Unit ($\mu\text{m}/\text{m}$; arc seconds; microrad)
- Zero Setting (Absolute or easy)
- Time-out

Resolution is $0,5 \mu\text{m}/\text{m}$. Rechargeable batteries with status indication. The complete instrument is provided in ABS valise with accessories, battery charger, user's guide and **WPLAN©Microplan Software** on CD-R.

Electronic Level mod. LE051 – Analogue Version



This analogue model it is particularly appropriate for the control of machine tools and the analogical reading device is contained in a solid and stabilised structure of cast iron. The weight comprises the mechanics immersed in oil and the grip of wood facilitates an easy handling without any thermal impact due to contact; the commutation switch enables the selection between three measuring scales (starting from the less precise to the most precise; the potentiometer enables the zero setting. The spirit level for the cross section levelling is inserted at the upper part having a sensitivity of 400 seconds.

Electronic Level mod. LE051 Digital and Analogue Readout



This model is the last improvement of electronic levels. Particularly appropriate for the control of machine tools , this new model keeps all the technical properties of the previous analogue one: the main feature is a digital display perfectly integrated in the cust iron structure. The commutator switch enables the selection between 5 measuring scales (from 250 $\mu\text{m}/\text{m}$ a 1 $\mu\text{m}/\text{m}$); the potentiometer enables the zero setting. The spirit level for the cross section levelling is inserted at the upper part having a sensitivity of 400 seconds.

General Remarks:

All levels of Microplan are delivered in a handy suitcase of ABS including all requested accessories, instruction manual (also available at our web page http://www.microplan-group.com/pagine/download_gb.htm) and test reports with reference to our main instruments used for the calibration and the final checking. All models comprise the innovative solution of our **mechanics immersed into oil**: it ensures a longer operating life of the level since it is protected from accidental collision, furthermore the measurement of the repeatability keeps up with the time in a more precise and stable way.

WPLAN FLATNESS SOFTWARE

W-PLAN
Flatness Software



Through the WPLAN Software, it is possible to process the data gathered from the level in order to obtain the data for the calculation of the surface profile, which is then shown as a graphic. It is possible to select the operating language (Italian – English – French – German), to print the graphic of the collected data and the calculated data with the new version 3.1.

A demo version can be downloaded for free from our web page at the following link: (http://www.microplan-group.com/pagine/download_it.htm). The software will be delivered on a CD-Rom with a instruction manual and a hardware protection key, for USB or a LPT port.

For any further information, do not hesitate to contact us!

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