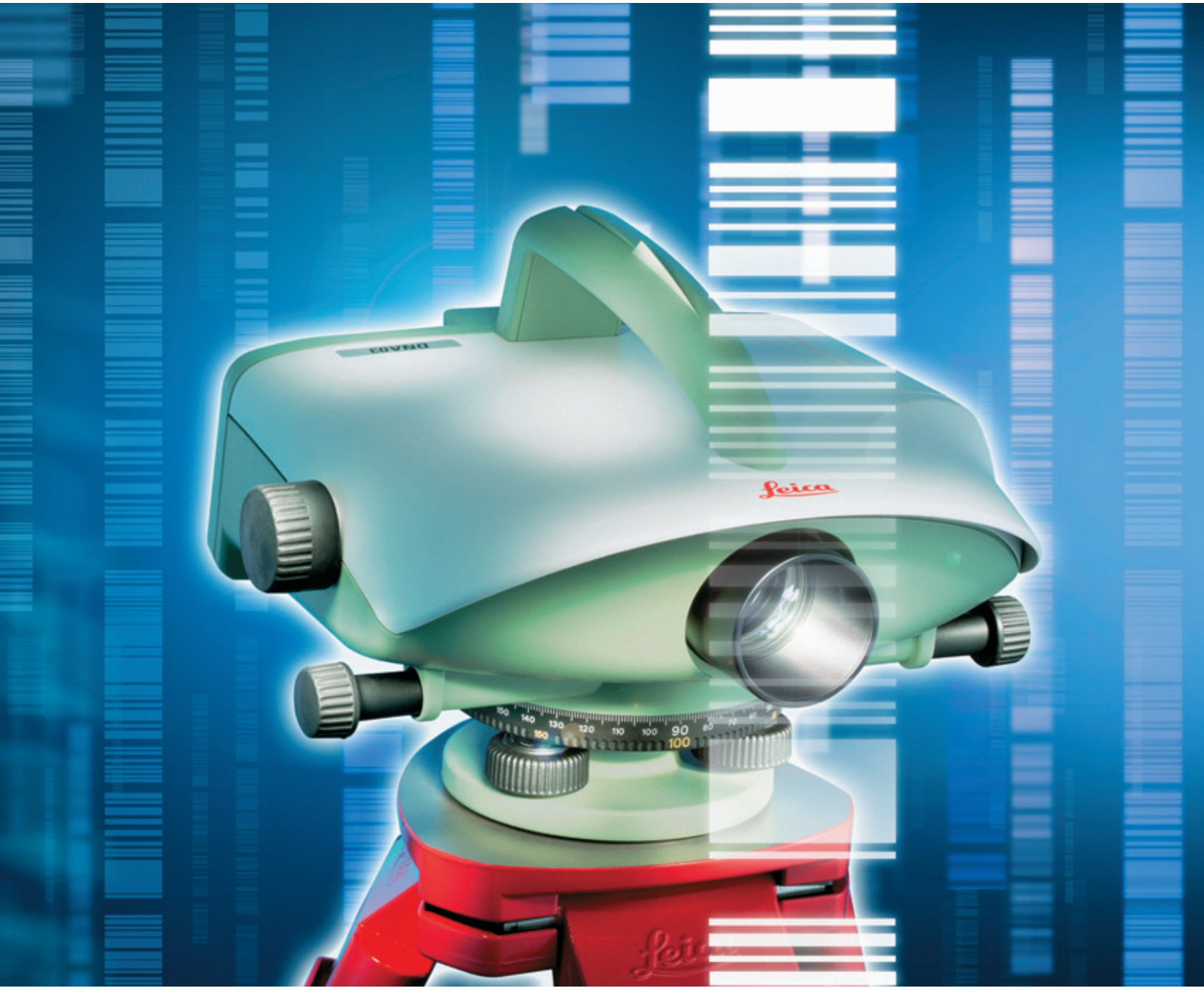
Leica DNA digital levels
Advantages that move you ahead



- when it has to be **right**

Leica Geosystems

Leica DNA digital levels –
Advantages that move you ahead

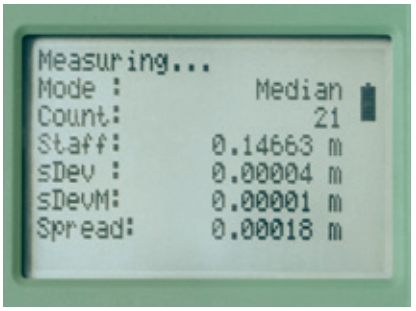
With the Leica DNA digital levels you may discover a whole new world of advantages which facilitate your daily work and save your time. The new "Meas & Rec" function lets you easily measure and record height differences, while the line levelling applications program guides you securely through the different possibilities of measuring whole level lines. Compare the closing height quickly with a known point using "Quick-Closure", or use the complete onboard Line-Adjustment to erase errors – what ever your task may be, experience the advantages of the Leica DNA digital levels.

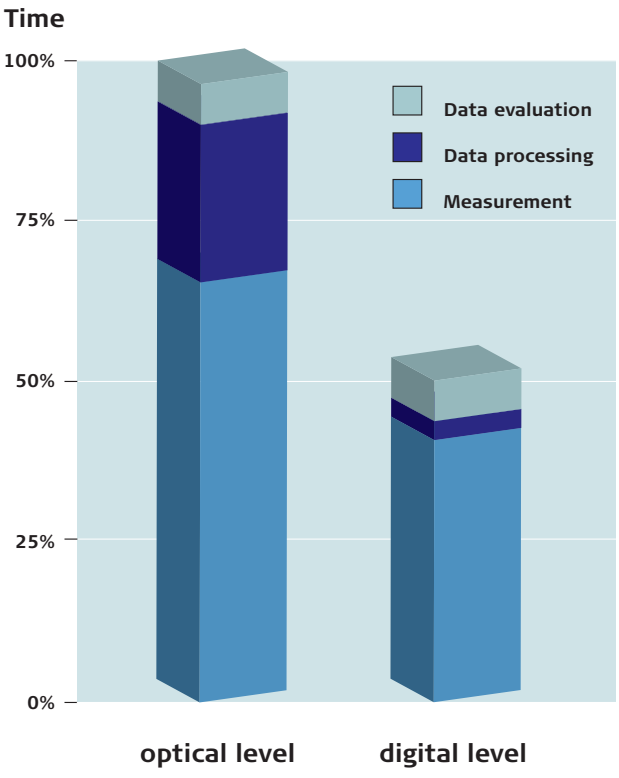
Advantages in numbers
Save up to 50% in time

Experience shows that with Leica digital levels there is up to a 50% time saving when compared with conventional levels. The main reasons are the faster data capture as well as the shorter time and safer means of data processing, thanks to saving measured data on storage devices.

Measuring without mistakes or fatigue

Leica digital levels measure and save the height and the distance to the staff at the press of a button, and calculate the height of the point. Advantage: no readings required, no copying or writing down and no calculation by hand.





Leica DNA digital levels – Practical advantages

Leica digital levels DNA10 and DNA03 cover the entire range of applications from the construction site to the 1st order levelling tasks. The practice oriented solutions in the integrated measurement programs, the large liquid crystal display and the alphanumeric keyboard help to keep track of your work, make it faster and more productive.

Area levelling

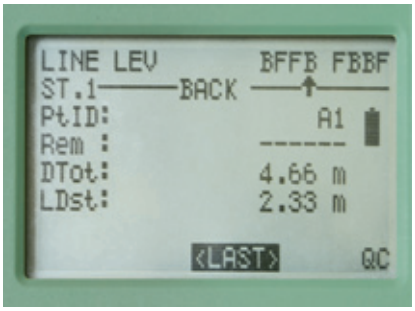
All components required for appropriate levelling jobs are at your disposal. The program "Meas & Rec" is suited for elementary staff reading and distance measurements or to survey a lot of points.

Land surveys and line levelling

Thanks to the extensively automated processes, the observer has been relieved of much of the work at the keyboard. Adjustable tolerance checks for the measured data add safety to the measurements taken. In addition the Quick Code function provides for measurement and point coding by simply entering the Quick Code number.

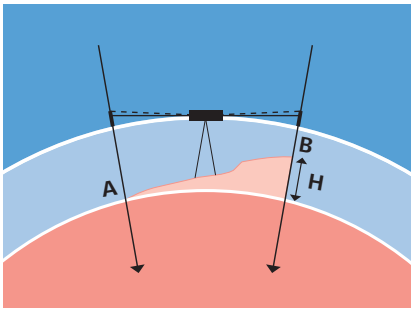
Levelling at construction sites

Height determination and stake out: Thanks to the easy-to-use measuring program "Meas & Rec" the experienced construction site operator can quickly and reliably measure height differences, perform line levelling or stake outs. The display "Point to Point" continuously provides the height difference between each measured point if profile points or many intermediate points are measured.



Advance at a glance

During line levelling the clear menu guidance is outstanding. Important measured data are displayed immediately which allows easily to check the rightness of the data and the progress made.



Earth curvature correction

If this is activated in a Leica DNA digital level, then the measurements made are automatically free of the influence of the earth's curvature.

More practical advantages

Correction of collimation error: Can be reliably determined and saved using the four integrated Check and Adjust procedures or it can be entered manually.

Measurement modes: Leica DNA digital levels can make: single measurements, average or median out of multiple measurements with a definable standard deviation and repeated single measurements.

Reduced field of view: For a fine measurement a field of view of about 1.1° is required. This corresponds to 38 cm staff code per 20 m of target distance.

Data output format: For printouts similar to those used in field books. Up to four user formats can be stored in the instrument. User-definable formats bring outstanding flexibility into the data export. Generate your own protocol files or create import formats for your PC postprocessing software.

Staffs and accessories: Leica Geosystems offers a rich palette of staffs and other accessories.

External control: The DNA10 and DNA03 models are suited for mobile or stationary measurement configuration, where an external field computer collects and processes the data. External commands configure the instrument and trigger measurements.

Office and evaluation software

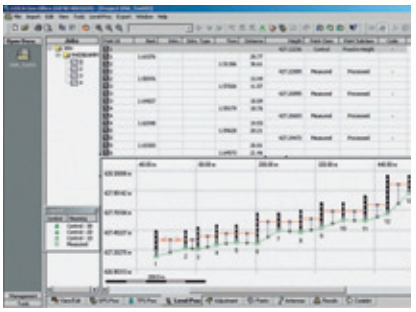
Leica Geo Office Tools

This program is included in the delivery. It controls data exchange, the configuration of the instrument, creates code lists and stake out height lists and maintains the system software. A special feature is the creation of user-defined output formats for a field book like data export.

Leica Geo Office

The level option processes your levelling data in a professional manner. The optional program contains functions such as line calculation, adjustment and the creation of reports.

A second level option allows to adjust a complete Level Line Network.



Technical data	LEICA DNA03	LEICA DNA10
Area of use	– Quick measurements of heights, height differences and stake outs	– Quick measurements of heights, height differences and stake outs
	– I. and II. order levelling	– Cadastral levelling
	– High precision measurements	– Precision measurements
Accuracy	Standard deviation height measurement per 1km	
	double-run (ISO 17123-2)	
Electronic measurements:		
with Invar staffs	0.3 mm	0.9 mm
with standard staffs	1.0 mm	1.5 mm
Optical measurements	2.0 mm	2.0 mm
Distance measurement (standard deviation)	(electr.) 1 cm/20 m (500 ppm)	
Range		
Electronic measurement	1.8 m – 110 m	
Optical measurement	from 0.6 m	
Electronic measurement		
Resolution height measurement	0.01 mm, 0.0001 ft, 0.0005 inch	0.1 mm, 0.001 ft
Time for single measurement	typically 3 seconds	
Measurement modes	Single, average, median, repeated single measurements	
Measurement programs	Measure & Record, staff height/distance, intermediate BF, aBF, BFFB, aBFFB, onboard adjustment, quick closure, stakeout	
Coding	Remark, Free code, Quick code	
Data storage		
Internal memory	6000 measurements or 1650 station	
Backup	PCMCIA card (ATA-Flash/SRAM/CF)	
Online operations	GSI format via RS232	
Data exchange internal memory	GSI8/GSI16/XML/flexible formats	
Telescope magnification	24x	
Compensator		
Type	Pendulum compensator with magnetic damping	
Slope range	±10'	
Compensator setting accuracy (standard deviation)	0.3"	0.8"
Display	LCD, 8 lines at 24 characters	
Battery operated		
GEB111	12 h operation	
GEB121	24 h operation	
Battery adapter GAD39	Alkaline battery, 6x LR6/AA/AM3, 1.5 V	
Weight	2.8 kg (incl. battery GEB111)	
Environmental conditions		
Working temperature	–20° C to +50° C	
Storage temperature	–40° C to +70° C	
Dust/water (IEC60529)	IP53	
Humidity	95%, non condensing	

Leica DNA digital levels – Advance at a glance

Keep all information in sight
The generous LC-display presents all important measured data at a glance and shows the next step to take. You always have the workflow under control.

Double your data safety
From now on, save your work automatically in the internal memory and additionally, after the measurements have been taken, on a PC-card. In this way, measured data can easily be loaded into a computer.

Optimal operating comfort
The alphanumeric keyboard and the operating concept provide the highest levels of efficiency at work, optimum comfort and rapid familiarization.

Extensive range of applications and reliability in two classes of accuracy
The DNA10 and DNA03 provide a solution for all jobs of height determination for topographic and construction surveys, up to first order levelling and monitoring.

Whether you want to determine heights of fix points, roads, tunnels or buildings, or you want to stake out height differences – Leica Geosystems' surveying instruments provide the right solution for every application.

They unite reliable results with easy operation and user-friendly applications. They are designed to meet your specific requirements. Modern technology enables you to work fast and productively, thanks to the straightforward and clearly structured range of functions.

When it has to be right.

TQM
ISO 9001 / ISO 14001

Total Quality Management – Our commitment to total customer satisfaction

Ask your local Leica Geosystems dealer for more information about our TQM program.

Leica SmartStation
Product brochure

Leica GPS1200
Product brochure

Leica System 1200 Software
Product brochure

Leica TPS1200
Product brochure

Leica Geosystems AG
Heerbrugg, Switzerland
www.leica-geosystems.com

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