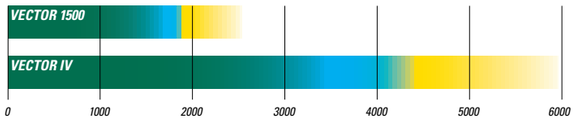
How far can you measure?

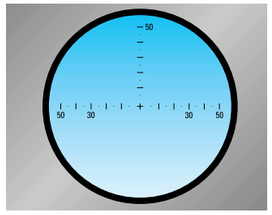
VECTOR benefits from Leica Geosystems' proprietary know-how to measure great distances at amazingly low laser output power. How far you can actually measure in practice depends on a number of factors as illustrated in the diagram.



■ ■ ■ *Distance measurement under ideal conditions*
+ Clear atmosphere, overcast sky or twilight
+ Good reflectivity of target object (smooth, bright wall)
+ Target surface roughly perpendicular to laser beam
+ Steady hold or support (to ensure that the laser beam will not miss the target)

■ ■ *Distance measurement under average conditions*

■ *Distance measurement under poor conditions*
- Snow, fog, rain, dust, high humidity, heat
- Small object (does not fill the whole aiming mark)
- Difficult object (dark, uneven, gaping such as a leafless tree)



As the electronic aiming mark only comes on when you press one of the two keys, there is no permanent reticle to obstruct your field of view. If you need a permanent reticle you can order it as an option.

Operators find it easy to measure short distances by holding VECTOR in their hands. At ranges greater than 2 km, they prefer to fix it on a Leica SST3-1 mini-tripod.

A commercial 6 V lithium battery, (type 2CR5) is sufficient for 3000 measurements, hence operating costs are minimal.

Certified Management System SQS ISO 9001
Registration n° 13795

LASER CLASS 1
Eye-save
in accordance with
EN 60825 (1991/94)

Sintrade AG
Kriesbachstrasse 30
CH-8600 Dübendorf
Switzerland
www.sintrade.ch
gps@sintrade.ch
Tel:+41-44-8220404

2 Eyes to See, 2 Fingers to Measure

MADE TO MEASURE

Leica VECTOR Rangefinder Binoculars for observation, distance and angle measurement

Wouldn't your job be easier if you had an excellent pair of binoculars capable of measuring distances and angles at the touch of a key?
LEICA VECTOR is the instrument which allows you to "point and click" to determine the position and dimensions of inaccessible objects in the field, locate targets, etc.

LEICA VECTOR is four instruments in one:

Binoculars
Superb optics in robust, water-tight, rubber-armoured housing

Laser Rangefinder
Measures from 5 m to over 4 km (depending on model, visibility and nature of target object)

Digital Compass
Displays magnetic azimuth or grid azimuth in degrees, gon or mils

Inclinometer
Displays vertical angles between –35 to +35 degrees

First class optics
The optical performance and light transmission of VECTOR rival those of the best of the classical binoculars. It offers x7 magnification and 42 mm objective aperture so you can observe clearly even in poor light conditions.

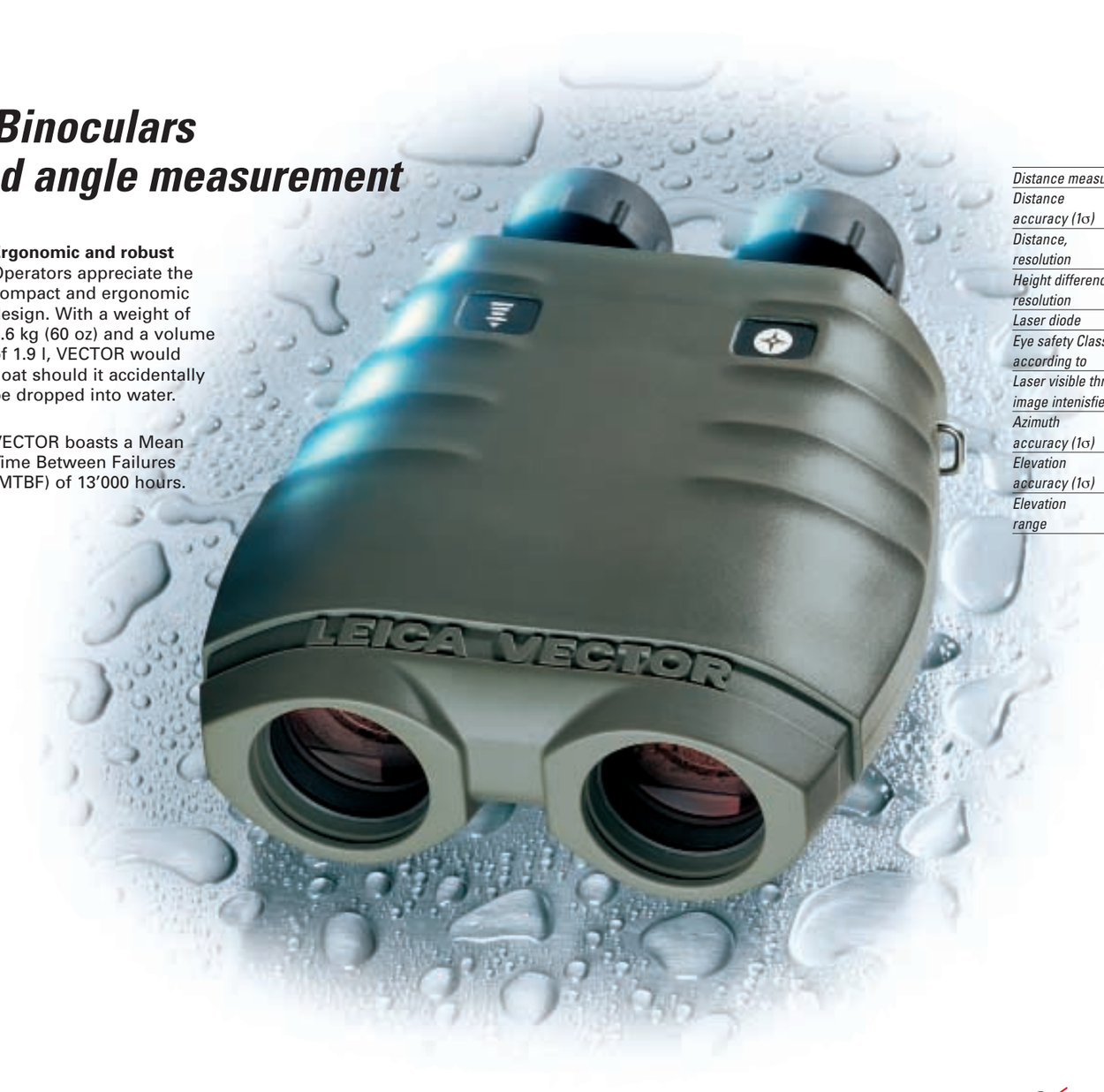
Traditional survey instruments and laser rangefinders constrain you to observe with just one eye. With VECTOR you use both eyes, see more and reduce eye strain.

Efficient data acquisition
Measured data are displayed in the field of view and you can send them via the VECTOR's RS232 interface to a computer, data terminal or recording device.

You will use VECTOR instinctively after minimal training, and operate it confidently even when wearing eye glasses, gloves or full NBC protection. You can link VECTOR to a GPS receiver or a data terminal

Ergonomic and robust
Operators appreciate the compact and ergonomic design. With a weight of 1.6 kg (60 oz) and a volume of 1.9 l, VECTOR would float should it accidentally be dropped into water.

VECTOR boasts a Mean Time Between Failures (MTBF) of 13'000 hours.



Choose the right VECTOR for your job

	VECTOR 1500 GMD	VECTOR 1500	VECTOR IV	VECTOR AERO
Distance measurement	5 m to >2 km		5 m to >4 km	
Distance accuracy (1σ)	±1 m (50 m to 500 m) ±2 m (<50 m / >500 m)	± 2 m	±2 m (50 m to 2 km) ±3 m (<50 m / >2 km)	
Distance, resolution	0.5 m	1 m	1 m	
Height difference, resolution	0.1 m	1 m	1 m	
Laser diode	860 nm		1550 nm	
Eye safety Class 1 according to	EN 60825 (1991) ANSI Z 136.1 (1993)		EN 60825-1 (1994) ANSI Z 136.1 (1993)	
Laser visible through image intensifier	yes		no	
Azimuth accuracy (1σ)	±0.6°, ±10 mils		±0.6°, ±10 mils	
Elevation accuracy (1σ)	±0.2°, ±3 mils		±0.2°, ±3 mils	
Elevation range	–35° to +35°		–35° to +35°	–30° to +60°

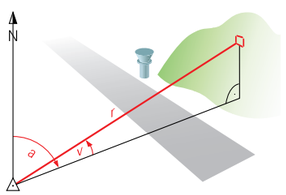
Having produced over 7'000 Rangefinder Binoculars, Leica Geosystems can now offer a range of products optimized for the requirements of specific user groups. Their key features are shown in the above table.

VECTOR 1500 GMD
For rapid field data collection. This Gap Measuring Device offers the decimeter resolution required by engineers.

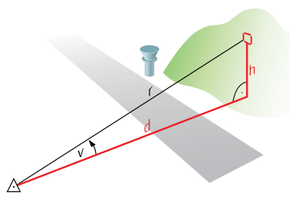
VECTOR 1500
The basic model for tough, professional applications in civilian, paramilitary and military organizations.

VECTOR IV
For forward observers, reconnaissance and surveillance.

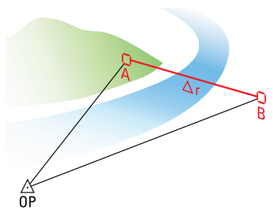
VECTOR AERO
This VECTOR features a greater elevation measurement range. It enables you to measure to low-flying aircraft and verify if they observe the prescribed ground height regulations.



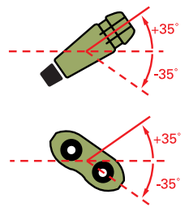
VECTOR measures the polar vector from your position to the object you sight by means of the red square aiming mark:
r range (slope/slant distance)
a azimuth (bearing, angle between north and object)
v vertical angle (inclination, elevation)



From your position to a remote object VECTOR also displays:
d horizontal distance
h height difference



VECTOR also calculates and displays relative values between two remote objects A and B:
Δr slope distance



A traditional magnetic compass must be held level so that its needle can swing and point to north. The digital compass inside VECTOR gives you correct bearings even when tilted by as much as 35 degrees.