# *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, rubberarmoured housing

# Laser Rangefinder

Measures from 5 m up to 12 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.

Special software enables VECTOR to communicate with Rockwell Collins PLGR/SPGR so that target grid coordinates are displayed by the GPS receiver.

## You will use VECTOR instinctively after minimal training, and operate it confidently even when wearing eye glasses, gloves or full NBC protection.

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 I, VECTOR would float should it accidentally be dropped into water.

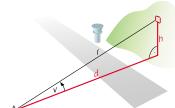
VECTOR boasts a Mean Time Between Failures (MTBF) of 13'000 hours.

range

Distance measurement ±1 n Distance ±2 m accuracy (1o) Distance. resolution Height difference, resolution Laser diode Eye safety Class 1 according to Laser visible through image intensifier Azimuth accuracy (1o) Elevation accuracy (1o) Elevation

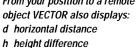
VECTOR measures the polar vector from your position to the object you sight:

- r range (slope/slant distance) a azimuth (bearing, angle
- between north and object)
- v vertical angle (inclination, elevation)

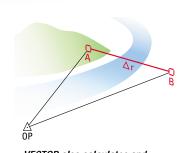


From your position to a remote object VECTOR also displays: d horizontal distance

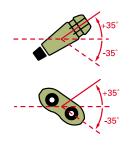








VECTOR also calculates and displays relative values between two remote objects A and B: ∆r slope distance



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.



| Choose the right VECTOR for your job |             |                           | NEW                       |
|--------------------------------------|-------------|---------------------------|---------------------------|
| VECTOR 1500 GMD                      | VECTOR 1500 | VECTOR IV                 | VECTOR 21                 |
| 5 m to >2 km                         |             | 5 m to >4 km              | 5 m to 12 km              |
| ±1 m (50 m to 500 m)                 | ± 2 m       | ±2 m (50 m to 2 km)       | ±5 m                      |
| ±2 m (<50 m/>500 m)                  |             | ±3 m (<50 m / >2 km)      |                           |
| 0.5 m                                | 1 m         | 1 m                       | 1 m                       |
| 0.1 m                                | 1 m         | 1 m                       | 1 m                       |
| 860 nm                               |             | 1550 nm                   | 1550 nm                   |
| IEC 60825-1 Ed 1.2 : 2001            |             | IEC 60825-1 Ed 1.2 : 2001 | IEC 60825-1 Ed 1.2 : 2001 |
| ANSI Z 136.1 (2000)                  |             | ANSI Z 136.1 (2000)       | ANSI Z 136.1 (2000)       |
| yes                                  |             | no                        | no                        |
| ±0.6°, ±10 mils                      |             | ±0.6°, ±10 mils           | ±0.6°, ±10 mils           |
| ±0.2°, ±3 mils                       |             | ±0.2°, ±3 mils            | ±0.2°, ±3 mils            |
| <i>–35° to +35°</i>                  |             | −35° to +35°              | -45° to +45°              |

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 medium range observation, reconnaissance and surveillance.

# VECTOR 21

Under ideal conditions this latest model ranges up to 12km. It matches the range performance of the "10km rangefinder category", yet retains the ergonomy, superior optics and intelligent features of VECTOR 1500 and VECTOR IV.





