Original prisms
Maximum accuracy and range

The range of a prism results from, among other things, its coating and the glass geometry. A number of original prisms from Leica Geosystems have a special coating on the reflective surfaces – the anti-reflex coating, and a copper coating on the reverse side. Without the copper coating, the range of distance measuring, ATR and PowerSearch would be reduced by up to 30 %. The workmanship and the durability of the copper coating are decisive for a long life. The glass dimensions, the position in the holder and with it the spatial orientation, are important for measuring accuracy.

Leica Geosystems prisms are manufactured from glass of the highest quality and furnished with optical coatings so that even under the most extreme environmental conditions, a long lifetime and maximum range of the highest accuracy can be achieved.

Transparent choice
The optimal prism for your application

Leica Geosystems offers a transparent selection of prisms in various sizes for different areas of application.

PROFESSIONAL 5000

HIGHEST ACCURACY

The prisms distinguish themselves through a centring accuracy of under 1 mm and the best possible beam deviation of < 2" to achieve the maximum range.

- **Standard reflectors**
  For the most common applications. All prisms have an anti-reflex coating to provide highest longevity as well as to minimise measurement errors in close ranges.
- **Special reflectors**
  For highest precision with ingenious technology such as a precison metal housing, or those with carbon fibre strengthened prism axis.
- **Mini reflectors**
  High value, small format prisms for highest accuracy at close to medium range.

PROFESSIONAL 3000

MAXIMUM LIFETIME

Optimised for common operating distances, these prisms exhibit a beam deviation of up to 8". The special working of the optical coating, unique on the market, provides an above average lifetime.

- **Standard reflectors**
  All-rounder prism with integrated target plate for standard applications.
- **Special reflectors**
  Optimised for long-term monitoring applications. The special anti-condensation construction with a patented filter guarantees reliable measurement ranges in difficult weather conditions. Choice of high-precision reflective tapes.
- **Mini reflectors**
  Easy to handle and light to transport mini prisms.

PROFESSIONAL 1000

COST EFFECTIVE MEASURING

Despite its attractive cost-performance ration, the Professional 1000 Series fulfils the strict Leica Geosystems process controls as well as users' high demands regarding lifetime.

- **Standard reflectors**
  Round prism with optional target plate.
- **Special reflectors**
  Optimised for monitoring applications with high demands on the relative measurement accuracy. Robust metal bracket for simple and flexible assembly.

Centring accuracy
Measurement errors occur if original prism holders are not used. Substitutes are not configured according to Leica Geosystems criterion and often exhibit displacement between prism, holder and mounting stub.

Range
The beam deviation of a prism defines the maximum range. The smaller the beam deviation (measured in angular seconds), the greater the directly reflected signal strength to the sender optic.

Lifetime
In contrast to many conventional prisms, the reflective copper coating on the reverse side of original prisms consists of an adhesive coating, a copper coating, a protective coating and an overlying coat of lacquer. Working together, the copper coating and the lacquer increase the life of the prism significantly. An additional anti-reflex coating on the sensitive front surface provides a tough resistance to scratches.

Measurement accuracy
Measurement errors occur frequently at close ranges when prisms without anti-reflex coating are used, as the front of a prism always directly reflects a certain percentage of a signal.