

Lowest Total Cost of Ownership

What to consider when purchasing a total station



FlexLine



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- when it has to be **right**

Leica
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Lowest Total Cost of Ownership –

Making a long-term decision when purchasing a total station

The decision of investing in a new total station implicates finding the most appropriate timeframe to do so. One of the most important factors for getting the best value for your money is knowing your future instrument's **Total Cost of Ownership (TCO)**. This complex value summarises your investment over the entire instrument lifecycle. The TCO of a total station combines the purchasing price, the operational costs, support and service, as well as the lifetime of the instrument. When making a decision, it is crucial to look beyond the instrument's price and focus on the long-term perspective of your purchase.

What to consider when buying a total station

Aside from choosing highly reliable equipment, you will need to consider your TCO. The value includes **all direct and indirect costs** that occur when you decide to buy a new instrument. Aspects to consider are:

1. **Before purchasing:** you and your team members – users of the total station – will be doing research, comparing providers, talking to sales people. As time is money, it is crucial to allocate and include these costs when thinking of buying a total station. Choosing a reliable partner will help you shorten this phase and save money.
2. **Purchasing the total station:** the price is more than what you see at first sight (the “tree”), so you need to include further costs and savings during the instrument’s lifetime (the “roots”).
3. **Using/operating the new instrument:** this starts with the training on the new instrument, and it continues with your team’s productivity when using the instrument for daily work. This also includes the ability to rely on a support network.
4. **Maintenance cost:** always make sure you are aware of how often a visit to the service centre will be required for your total station. Check the spare part pricing and availability over time (also for older or phased-out instruments), potential repair costs, software maintenance and warranty costs.
5. **Downtime cost:** in case your instrument fails to perform or stops working, you will need to take into account extra labour cost, cost of lost production, and even unhappy customers (influencing your future projects).
6. **Product lifetime end costs:** what will happen once you no longer use the instrument? Will you be able to resell it at a reasonable/profitable price (price stability)? How high are the disposal or decommissioning costs? Your investment pays off only if your instrument has value stability.



Figure 1 – When investing in a total station, the purchasing price is much more than what you see at first sight.

“We have a really good long-term experience with Leica Geosystems equipment. The service and technical support are beyond comparison.”

- Miloš Vidulović, ABA-GEODETSKA KUČA DOO, Serbia

“We work in the deserts of the Middle East under extreme hot, humid conditions with very fine dust. Leica FlexLine solutions cost, but more importantly, over the years, they are the most reliable and cost-efficient. The design is extremely robust. We know we can trust the instruments do their work accurately and reliably under these harsh conditions.”

- Denis Meremans, Head of Survey Department at Six Construct Ltd., UAE

“In the past five years, we only took our Leica FlexLine TS06 for calibration to doublecheck the accuracy. From the cost perspective, it was a good decision.”

- Ing. Jakub Dlhý, DOF s.r.o., Slovakia

It's not all about the price

Considering all costs related to the purchase of a total station will make it easier for you to **plan your investment** from scratch. A new instrument does not just bring the ability of performing new tasks or being faster within your regular workflow, it is often correlated to your manpower. Your team might need new training or you would even be employing new team members due to an increasing workload. For you to accurately plan your **financial resources**, you will need to go as far as forecasting service centre visits, repair and maintenance costs, software updates, maybe even downtime. To lower this risk there is a single, most important factor that will help you plan your investment accurately: the **quality of your equipment**. The higher the quality, the less troubles you face during the lifetime of the instrument. Think of buying an expensive car – it is not just a pleasure to drive but also a long-term investment. **The slightly higher initial purchase price of high-quality equipment will definitely pay off over time and give you peace of mind.**



Leica FlexLine Series: Lowest TCO, highest quality

Our new Leica FlexLine total stations offer the **lowest TCO** – proven by an overall global feedback from our customers. Although the initial purchase price of alternative instruments may be lower than that of a Leica Geosystems total station, over the instrument's lifecycle, your total costs will be lower. This is taking into account all aspects of owning and using a Leica Geosystems total station. Main factors contributing to the lowest TCO of the total stations are the worldwide greatest productivity, reliability and long-term maintenance of their value.



Figure 2 – Leica FlexLine Series: The new generation of manual total stations. From left to right: Leica FlexLine TS03, TS07 and TS10.

Productivity

Leica Geosystems instruments help you increase your productivity as you are able to **measure and layout a greater number of points**. According to tests, total stations are 10-20 per cent more productive than comparable instruments. The tests have considered the time to set up a total station, to measure and stake out points.

A contributor to the faster setup time is the **AutoHeight functionality**. AutoHeight automatically measures the instrument height without the need of additional accessories. Furthermore, AutoHeight ensures an accurate and reliable height reading. Overall, AutoHeight **reduces the setup time by approximately 20 seconds** in the field and reduces the time spent in the office to do re-adjustments in case of a wrong instrument height being entered in the field.

How to operate the instrument is crucial for the overall productivity, meaning the way the user aims and measures onto a target or any surface.

The **endless drives** (horizontal on the right and vertical on the left side of the instrument) contribute significantly to the increased productivity. The drives allow to coarse and fine aim without the need to clamp anything. Furthermore, the FlexLine instruments feature a **trigger key** on the side of the instrument, which enables the operator to execute measurements. The fast and precise pinpoint distance measurement system contributes significantly to the speed of the total station. Targets can be easily measured even under difficult weather conditions (rain, sun, cold, heat, etc.).



Figure 3 – Get your instrument height by simply pressing a button with the AutoHeight feature.



Figure 4 – The 4G modem enables you to make last-minute changes of design data in the field.

The new FlexLine total stations feature a **4G modem for mobile data connectivity**. This enables the user to get remote access to cloud storage devices for data transfer from field to office and vice versa (Leica Exchange or having remote access in case of support requirements with Leica Active Assist). Last-minute changes of design data can easily be transferred into the field via the cloud. No need to drive back to the office or even redo layout work due to using outdated data. **An increased productivity will increase your income, substantiating your decision to purchase a higher-value total station.**

Reliability

The reliability and durability of Leica Geosystems instruments reduce your service costs and unplanned downtime. Should you need a service visit, you can rely on our **global network of 292 certified local service partners in more than 98 countries** to help you save time and money (faster support, including spare part exchange).

Our **Customer Care Packages (CCP)** ensure you get maximum value from your investment. When you buy a CCP from Leica Geosystems, you immediately start to benefit from instant access to our global network of professional support and service teams while you work. By purchasing our CCPs you receive a carefree package, always knowing which costs to consider. This also means:

- **Less downtime** due to the outstanding quality, reliability and durability, substantiated by the thoughtful choice of the best available materials, production and comprehensive testing for high-quality demands.
- **You won't be left alone** in case anything should go wrong. Our service partner network and spare instrument availability will keep your business running.

Our local service partners are able to **issue calibration certificates locally**. Leica Geosystems regularly audits all local service partners to ensure the same quality standards on a global scale. The need and request for calibration certificates confirming the measurement quality of survey equipment is growing constantly. This is mainly due to the fact that more and more companies are becoming ISO9001 certified and, therefore, need to periodically confirm the measurement accuracy of their equipment.

Leica Geosystems also offers **Calibration Certificates Gold** (for angle and distances) that are internationally acknowledged. The test results are directly traceable to national standards, include measurement uncertainties and are supplemented by detailed measurement reports. For Leica Geosystems within Switzerland this accreditation is in accordance with the standard ISO/IEC 17025 and is granted by the Swiss Accreditation Service (SAS), member of the International Laboratory Accreditation Cooperation (ILAC), a calibration laboratory that is accredited by the National Metrology Institute. This is unique for Leica Geosystems and cannot be offered by others.



Figure 5 – Rely on a global network of certified local service partners and just focus on your work.

Value

The value of a Leica Geosystems total station remains high during and after the product lifetime, especially when comparing to total stations from other manufacturers. To experience the true value of quality equipment, **regular maintenance** is important.

Last but not least, Leica Geosystems offers a **“Recycling Passport”** for all its total stations. This passport contains information about the re-use and the correct treatment of the used components of a total station. This way you can be sure the components, carefully selected by Leica Geosystems, fully fit into today's **global sustainability thinking**.

Summary

When you decide to purchase a new total station, there are various influences that need to be taken into account to achieve the lowest TCO. The purchasing price is more than what you see at first glance – you are making a long-term decision that goes way past that.

By making sure you consider all potential instrument purchase risk factors, you will be able to deliver your projects on time, stay away from unexpected costs and give yourself a good night's sleep.

Leica Geosystems – when it has to be right

Revolutionising the world of measurement and survey for nearly 200 years, Leica Geosystems, part of Hexagon, creates complete solutions for professionals across the planet. Known for premium products and innovative solution development, professionals in a diverse mix of industries, such as aerospace and defence, safety and security, construction, and manufacturing, trust Leica Geosystems for all their geospatial needs. With precise and accurate instruments, sophisticated software, and trusted services, Leica Geosystems delivers value every day to those shaping the future of our world.

Hexagon is a global leader in digital solutions that create Autonomous Connected Ecosystems (ACE). Hexagon (Nasdaq Stockholm: HEXA B) has approximately 20,000 employees in 50 countries and net sales of approximately 3.8bn EUR.



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Leica Geosystems AG is part of Hexagon AB. 897290en – 06.19



**Leica FlexLine
Series**
Data Sheet



**Leica FlexLine
TS03/TS07**
Data Sheet



**Leica FlexLine
TS10**
Data Sheet



**AutoHeight
Feature**
White Paper