

# REDUCING THE COST OF TEST EQUIPMENT

Save Time, Improve Utilization,

and Shorten Purchasing Cycles with Smart Sourcing.

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## Save Money and Speed Time-To-Market

With so many variables to consider, obtaining modern test and measurement equipment can sometimes be challenging. Sorting through more than 100,000 products from 300 manufacturers and assessing the relative merits of how to obtain equipment and whether to buy, rent, or lease requires thoughtful consideration. Estimating ownership expenses, arranging for asset management, and evaluating labor and equipment utilization rates may also be part of the equation.



Many organizations mitigate risk and uncertainty in this area by taking expert advice to save time and money, shorten procurement cycles, increase labor utilization, and avoid unnecessary spending. With cost-effective strategies for the acquisition and optimization of test assets, and a full understanding of the choices available, leaders can make more informed decisions while ensuring continual access to the latest equipment and technology.

There are a variety of acquisition methods to consider. Depending upon needs, there may be more than one procurement option to meet company objectives. Customized sourcing programs feature a mix of methods to lower costs while retaining the flexibility to exchange or upgrade equipment should circumstances change. By leveraging the right information, R&D managers, test engineers, program managers, and procurement departments can choose the best combination of equipment and sourcing methods on a case-by-case basis—without the need for compromise. Customized sourcing programs feature a mix of methods to lower costs while retaining the flexibility to exchange or upgrade equipment should circumstances change. By leveraging the right information, R&D managers, test engineers, program managers, and procurement departments can choose the best combination of equipment and sourcing methods on a case-by-case basis-without the need for compromise.

Many organizations mitigate procurement risk and uncertainty by considering some simple, but essential questions prior to making decisions.

#### WHAT IS THE ESTIMATED USE TIMELINE?

- How long will the equipment be needed?
- · Is it for sporadic use or continuous use?
- · Is it for a specific project or initiative?
- · Is there guaranteed use beyond the intended period?

#### WHAT IS THE PRODUCT LIFECYCLE?

- · Is it a new product with likelihood of change or an established product?
- What is the risk of obsolescence?
- Are there frequent upgrades?

#### WHAT ARE THE FINANCIAL PRIORITIES?

- Is capital limited?
- · How important is cash flow?
- · What is the cost of borrowing or internal rate of return?

#### WHAT IS THE LIKELIHOOD OF CHANGE?

- Is the environment dynamic?
- Do you need flexibility to respond to changing market conditions

#### HOW WILL EQUIPMENT BE TRACKED, CALIBRATED, AND MAINTAINED?

- Will regular calibration and maintenance be performed? By whom?
- If you have multiple units in operation at different sites, who will manage the logistics?

#### HOW WILL ASSET DISPOSAL BE MANAGED AT END OF LIFE?

- How will you dispose of unwanted or obsolete equipment?
- · Can you free cash for new investments by selling obsolete equipment?

Making informed purchasing decisions can be just as critical as technical specifications. In many cases, the true cost of ownership is simply overlooked. It is only later, when audits are undertaken, that it becomes apparent that money was spent unnecessarily. Knowing the answers to these questions can lead to smart choices—with cost savings and increased flexibility. In fact, making informed purchasing decisions can be just as critical as technical specifications. In many cases, the true cost of ownership is simply overlooked. It is only later, when audits are undertaken, that it becomes apparent that money was spent unnecessarily.

Many studies, including those from industry analyst Frost & Sullivan, as well as those that manage test equipment show that a great deal of equipment is purchased each year to satisfy current needs without considering future, longterm requirements—including the resources to track, manage, and maintain the asset, the ability to change equipment if standards change, and the option to upgrade to the latest technology.

Unfortunately, many companies find themselves with a surplus of high-cost equipment that no longer fits requirements and is costly to track and maintain. This can occur because asset purchase is considered a default option or due to a misconception that purchasing is the only viable option.



While asset purchase is sometimes appropriate, it represents a long-term commitment that cannot be reversed if standards or protocols change, new technologies arise, or equipment needs evolve. Understanding the options prior to purchase can result in significant cost savings and efficiencies and can minimize procurement distractions for the teams using the equipment.

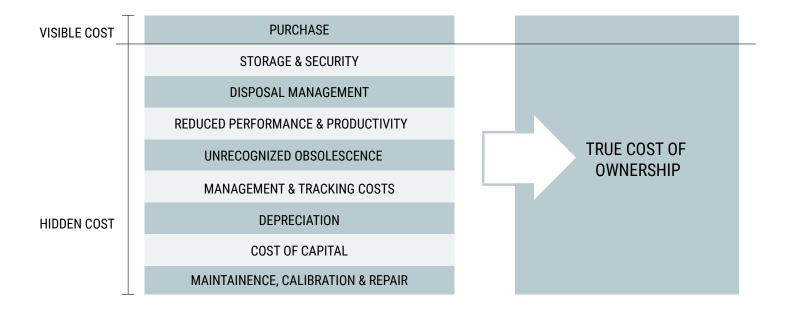
## Understanding Real Cost of Ownership

The reality is that the up-front purchase price is only half the story. When you consider all the costs of ownership, the real cost becomes apparent.

- First, there is the cost of capital and financing. As with any capital asset, depreciation starts immediately.
- Each year, there will be additional costs for calibration and maintenance, as well as the associated labor and management time for these expenses. At some point, repairs may also be needed.
- Each year, there are costs for asset management, including sourcing, procurement, tracking, inventory control, logistics, security, and storage.
- If the equipment becomes obsolete or no longer meets project requirements, additional funds may be needed to upgrade or buy another unit.

When you take these factors into account, the real cost of ownership is often close to twice the original purchase price.

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# **Purchase Considerations**

#### **UP-FRONT COST**

- Cost of capital
- Internal rate of return

#### **CALIBRATION AND DOWNTIME**

- Calibration cost needs to be accounted for beginning in year two.
- · The cost of downtime is about two weeks.

#### **REPAIR AND DOWNTIME**

- The cost of repairs during the useful life, assuming a warranty and no cost in year one.
- Repair at 9% of list price per incident.
- The annual failure rate estimated at 7.3% (one failure every 13.6 years, on average).
- The cost of downtime is about 5 weeks.

#### **PROPERTY TAX, WHERE APPLICABLE**

• In most U.S. states, assets are taxed at the local property tax rate.

#### SALES TAX (ESTIMATED)

 A 7% sales tax paid when the equipment is purchased. (Tax on rentals is paid monthly.)

#### TAX DEDUCTION ON DEPRECIATION (ESTIMATED)

- U.S. corporate entities can file a tax deduction on the depreciation of assets.
- Typically, an accelerated depreciation schedule is used.
- We assume the corporate nominal tax rate is 21%.

Many leading telecommunications, semiconductor, and auto manufacturers find that actively managing this process improves their profitability.

# Conclusion: The Right Solution at the Right Time

For companies that need multiple pieces of test equipment for a wide range of projects and timelines, customized sourcing solutions may offer the best balance of cost and flexibility.

At one end of the scale, when the need is continuous, as on a production line, or when the product is established and unlikely to require updates, an outright purchase or long-term lease may be appropriate. At the other end, when the equipment need is for a period—even up to several years or more—renting can represent significant savings. More importantly, renting offers the flexibility to return, change, or upgrade the equipment at any time if needs change.

Many leading telecommunications, semiconductor, and auto manufacturers find that actively managing this process makes a difference to their profitability. However, too many companies still incur unnecessary costs due to habit or through the notion that asset ownership is always preferable. When the equipment need is for a period—even up to several years or more renting can represent significant savings. More importantly, renting offers the flexibility to return, change, or upgrade the equipment at any time if needs change.

	EQUIP REQUIREMENETS	PEAK DEMANDS	SHORT-TERM RENTAL	
		PROJECT USE	LONG-TERM RENTAL	
		CONTINUOUS USE	LEASE / LEASE with SERVICES	
		CONTINUOUS USE	BUY PRE-OWNED TESTED / NEW	
			TIME	

## Rental

Whether you need a month-to-month agreement for a short-term project, or a long-term agreement for several years, renting ensures continued access to the latest technology without the associated costs of long-term ownership. Short-term rentals offer maximum flexibility for an immediate or unknown timeline. If a longer timeframe is known, long-term rentals typically provide lower rates from the outset.

The cost of maintenance and calibration is covered by all rental agreements. Optimize utilization by renting only what you need when you need it. Return, upgrade, or exchange equipment as circumstances change. Avoid disposal headaches at end-of-life.

- · Save time and money
- Retain access to the latest technology
- Eliminate ownership expenses
- Maintenance and calibration costs are covered
- · Idea for short-term projects or to fulfill urgent needs
- Substitute for equipment in calibration or repair
- Use OpEx instead of CapEx; free cash for other investments
- Flexibility: return, change, upgrade, or downgrade at any time
- Try new equipment; reduce risk of buying the wrong equipment
- · Better cost control and financial predictability
- Immediate availability, worldwide coverage

#### Lease

For long-term needs, consider an operating lease, which provides a long-term rental agreement with tax benefits and the lowest monthly cost. Or consider a finance lease, which offers a long-term payment plan and the option to buy the equipment at the end of the term. Renting ensures continued access to the latest technology without the associated costs of longterm ownership. Short-term rentals offer maximum flexibility for an immediate or unknown timeline.

## **Certified Pre-Owned**

Gain access to tested and inspected quality, pre-owned equipment with the Certified Pre-Owned (CPO) program. We offer carefully selected instruments, including former rental units that have been maintained throughout their life, as well as quality units sourced from blue-chip companies whose test assets we manage. All CPO products must pass a rigorous 23-step process to ensure they are ready for operation. To provide reassurance, CPO includes a 14-day, no-questions-asked return policy, a one-year warranty, and ongoing customer support.

## Sell and Dispose

Companies can sell unwanted and surplus test equipment, freeing valuable funds and increasing floor space. To get started, give us a call or send us your list of test equipment. Once we connect, we will plan to view your inventory, make an offer, and handle the shipping and logistics.

## Asset Optimization

While modern test assets enable projects to be completed in an efficient and timely manner, asset optimization solutions help companies reduce costs, increase visibility and accountability, track and manage assets, eliminate redundant assets, and increase utilization.

Our Asset Optimization software allows clients to quickly and easily access critical asset information and status on their entire test and measurement portfolio, giving them the information to make more informed decisions on assets and costs.

Using the latest evolution of Bluetooth® low energy solutions, beacons with a battery life of four to five years can be affixed to each asset. These devices transmit low-energy signals that are recognized by an application on the user's mobile device or by static readers. Many leading telecommunications, semiconductor, and auto manufacturers find that actively managing this process makes a positive difference to their profitability. With a smartphone, tablet, or PC, engineers, product managers, and finance teams can gain access to a real-time view of all equipment. They can track, reserve and schedule assets, costs can be allocated to projects, and assets can be evaluated quickly and easily.

#### **BENEFITS OF ASSET OPTIMIZATION**

- Track assets and monitor utilization
- · Manage maintenance, repair, and calibration schedules
- Approve use requests and estimate delivery times
- · Make informed rent vs. buy decisions
- Eliminate unnecessary purchases
- · Arrange sale of lightly-used or no-longer-used equipment
- · Free up capital for newer, higher demand test assets

### Services

For more than 50 years, Electro Rent has been providing advice and consultation to leading companies in telecommunications, aerospace and defense, automotive, energy, education, semiconductor, and consumer electronics sectors. With an independent, third-party perspective, the company's rental, lease, sale, and asset management solutions support the sourcing, management, and optimization of electronic test and measurement equipment. Our goal is to lower the cost of test by helping clients deploy equipment when and where it's needed rather than paying for whole life use.

## **Contact Us Today**

Contact us today to learn more about our complete portfolio of cross-industry testing products.

You can reach us at **1.800.553.2255** or email **sales.na@electrorent.com**. Our experts are available to assist with your product testing and financing needs.



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