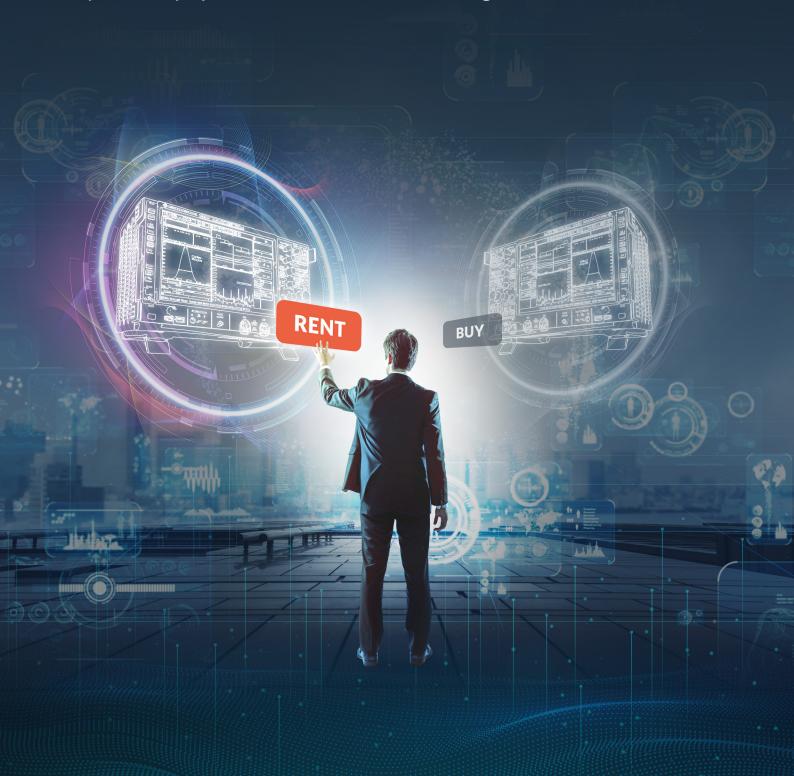


# Rent or Buy?

Why Test Equipment Rental is the Strategic Choice





# **Contents**

Introduction	
Finding the right solution	
Why rent? Only pay for what you need	
Understanding the true cost of ownership	
Understanding rental vs purchase cost comparisons	
The right solution at the right time	12



## Introduction

Accessing test equipment is essential for any technology driven organisation to grow and maintain their business. It is also a significant investment, so it is important to get it right. Choosing the right solutions to access the equipment you need can have a large impact on your bottom line, as well as improving the efficiency, which shortens project timelines and accelerates time to market.

The total value of test and measurement assets owned by businesses globally estimated at up to \$100B, but with utilisation rates of 20% or less, they are often not used efficiently. The majority of these assets are purchased outright, often through habit rather than a careful evaluation of the procurement options available. By utilising rental, and other financial solutions to access test equipment, there is a significant opportunity for many of these organisations to reduce costs and improve the efficiency of their testing operations.

Short term demands often mean equipment purchasing decisions are made in isolation, however, by taking a more strategic approach to procurement, you can make more effective purchasing decisions, aligned to the financial goals of your organisation.

Understanding all the options open to you allows you to select the right solutions for the needs of your business, driving more value from your test assets and operations. Rental solutions, in particular, are powerful and versatile tools. We will show how leveraging the right solutions at the right time can help you ensure your teams always have access to the equipment they need while minimising the cost to the business.

The total value of test and measurement assets owned by businesses globally estimated at up to \$100B, but with utilisation rates of 20% or less, they are often not used efficiently.



## Finding the right solution

To find the right solutions for your business you can start by considering some simple questions whenever you make test equipment procurement decisions.

#### How will the equipment be used?

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

#### What is the product's lifecycle?

- · Is the technology changing rapidly?
- · 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 the internal rate of return?

#### What is likelihood of change?

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

#### How do you intend to look after the equipment?

- · Will you have the resources and time to look after everything?
- · If you have multiple units going to different sites who manage all the logistics?

#### How will you manage disposal at end of life?

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

Armed with the answers to these questions you can make smarter choices and bring significant cost savings to your organisation, as well as improving utilisation and productivity. It is also important to understand the true lifetime cost of owning test assets, which can be up to twice the initial purchase price. These costs are often overlooked and not known or accounted for until long after the equipment has been purchased.

Depending on your circumstances, the known period of equipment use, and the flexibility you need, outright purchase may not be the most appropriate option. It could enter you into a high-cost commitment that you cannot reverse in the future.

Making the right purchase decision can be just as critical as the technical specifications. Knowing your options can make a huge difference both in terms of cost savings and efficiency improvements that can give you competitive advantage and minimise distractions for you or the team using the equipment.

Depending on your circumstances, the known period of equipment use and the flexibility you need, outright purchase is often not the most appropriate option.

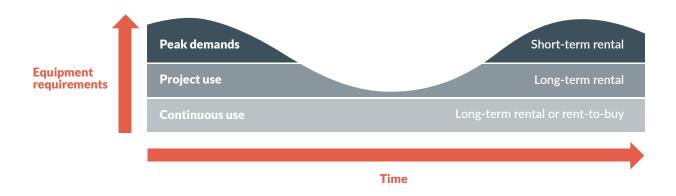


## Why rent? Only pay for what you need.

Whether you need a month-to-month agreement for a short-term project, or a long-term agreement for several years, renting in extremely flexible. It gives you continued access to the latest technology without the associated costs of long-term ownership. Short-term rentals offer maximum flexibility to meet immediate needs or unplanned needs. This makes it particularly helpful when then usage timeline is not fully known. If a longer usage period is expected, long-term rentals typically provide the lowest rates and offer a cost-effective long-term solution.

Payments can be monthly or weekly with a single manageable rate agreed in advance, so you know all the costs upfront. This makes it easy to plan budgets and ensures you only pay for what you need.

You are always free to return it early or to extend the rental if circumstances demand it and you will only pay for the actual duration of the rental. The longer you book an instrument for, the lower the rental rate. Early returns may be subject to a price adjustment to reflect the shorter rental period; however you are never locked into an expensive long term commitment.



#### **General Financial Benefits of Renting:**

- · Preserves capital and improves cash flow
- Move capex to operating cost budgets
- · Allocate costs to equipment usage
- · Fixed rentals simplify budgeting
- Tax efficiency as rentals are 100% tax deductible
- · Reduces T&M management costs
- · Avoids storage / disposal costs
- · Reduces overall cost of ownership

#### **General Operational Benefits of Renting:**

- Flexibility to exchange equipment and retain access to the latest technology
- · Calibration, maintenance & repair covered
- Technical and application advice
- · Availability against lead times
- · Sourced, pre-hire checked, delivered
- 24/7 technical support
- Protect against obsolescence
- · Improved equipment utilisation
- End of hire notification and easy extension
- · Avoid holding surplus unused assets



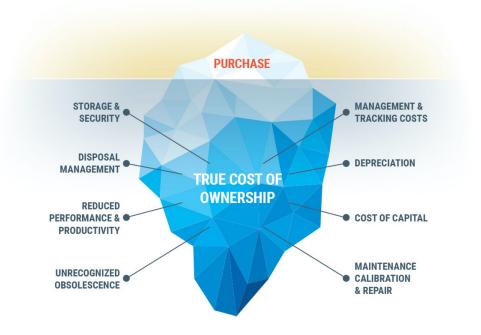
## Understanding the true cost of ownership

Many organisations don't consider all the costs of ownership when they make purchase decision and the costs only become apparent some time into the equipment's' lifecycle.

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 labour and management time for these expenses. At some point, repairs may also be needed. Out of warranty repair costs can be considerable and even repairs within warranty can bring associated logistics and downtime cost.

There will also be asset management costs, 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.

Many organisations don't consider all the costs of ownership when they make purchase decision.





## Understanding the true cost of ownership

From analysis we have carried out with a large range of companies in different sectors, we find that the true cost of equipment ownership over the lifetime of an asset is often close to double the original purchase price and can be more. The following example illustrate a typical scenario for a piece of test equipment.

Worked example of a cost of ownership calculation:

Here we use the example of purchasing a mid-range network analyser, a common piece of equipment in many R&D labs.

#### **Purchase Cost**

The cost to purchase the instrument new is \$63,000.

#### **Calibration and Calibration Management**

This is an estimate of the manufacturer's calibration charge, incurred annually. No cost has been included for downtime cover during the period of calibration. Assuming the first year is included, the approximate cost is \$700 a year. Management costs and logistics costs also need to be taken into account and from our experience, this is estimated conservatively at 1% of the unit's cost per year.

#### Repair Provision and Repair Management

This is the cost of repairs over lifetime, plus downtime cover, spread equally. Management includes the costs of obtaining quotes, handling the movement of equipment, chasing up returns, checking and updating databases/files. Assuming a warranty and no costs in the first year, this has been estimated as 3.5% of the unit's cost per year.

#### **Asset Management**

Cost of managing activities associated with owning the equipment, calculated over it's lifetime. These include the costs of procurement and ongoing management of asset, warehousing, stock control and security, tracking, IT and other systems, disposal management, labour and associated overheads. From our studies with large test equipment users, this can be a significant cost area adding up to 10% a year and more. In this case we have used a figure of 6%, keeping to a conservative figure.

#### **Cost of Capital**

This could be considered as the interest cost or the rate of return on the capital employed to purchase the asset, or internal rate of return (IRR) also sometimes known as 'hurdle rate'. Each organisation will have a target rate of return, the amount it expects back from an investment, this would usually be higher than the return expected from an investment elsewhere, a bank for example. Typical rates can vary between 7% for low risk projects to 30% for high risk ones.

In this example we will assume a rate of 10% a year for five years life of the asset.

We find that the true cost of equipment ownership over the lifetime of an asset is often close to double the original purchase price.



# Understanding the true cost of ownership

Using the factors above, we can calculate cost of ownership as follows:

Cashflows	Year 1	Year 2	Year 3	Year 4	Year 5
Purchase Cost	\$63,000	-	-	-	-
Calibration & Calibration Management	-	\$1,330	\$1,330	\$1,330	\$1,330
Repair Provision and Management	-	\$2,205	\$2,205	\$2,205	\$2,205
Cost of Capital	\$6,300	\$5,040	\$3,780	\$2,520	\$1,260
Asset Management	\$3,780	\$3,780	\$3,780	\$3,780	\$3,780
	\$73,080	\$12,355	\$11,095	\$9,835	\$8,575
Cumulative Cost	\$73,080	\$85,435	\$96,530	\$106,365	\$114,940

Cost of Ownership Factor: 1.824 times purchase cost

Note that this cost doesn't take account of additional factors such as the reduced performance and productivity that may result from the use of existing obsolescent equipment.



## **Understanding Rental Vs Purchase Cost Comparisons**

To compare the cost of renting equipment to the cost of purchasing, simply comparing the accumulated rental cost to the outright purchase cost is not sufficient to make a valid comparison. A deeper analysis is required that considers the true cost of ownership over the lifetime of the equipment.

This analysis should consider all these factors:

- Scheduled maintenance costs, including calibration, and associated logistics costs
- · Unforeseen costs, such as out of warranty repairs
- · Timings of cash flow both positive and negative
- · VAT taxation and reclamation
- · Capital allowances and Rental Tax relief
- · Opportunity cost of using cash to purchase
- Cost of borrowing

From years of experience managing our own extensive inventory and working with a broad range of customers we have developed powerful tools to model expected costs of ownership. These tools help us to conduct detailed analysis that shows whether rental or purchase will be the most cost-effective solutions.

The following examples illustrate how our this works in practice.



## **Understanding Rental Vs Purchase Cost Comparisons**

#### Scenario 1: Equipment needed for 2 year with full utilisation

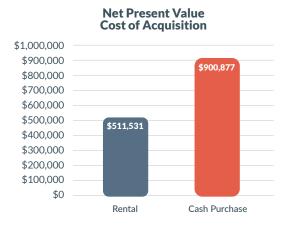
A contractor working in the telecoms sector needs a selection of test equipment for a large contract with major MNO which it has recently won. The equipment includes PIM testers, cable analysers and antenna, spectrum analysers and antenna alignment tools, and is a large investment for the organisation. The contract will last for two years, and they expect to need access to all the equipment at all times throughout the contract. However, they don't expect to need the same combination of equipment for future contracts and are concerned about what they will do with the equipment afterwards.

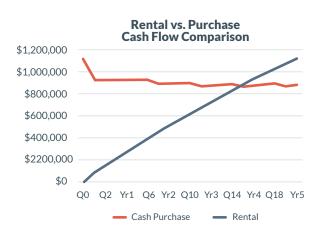
#### Rent vs Buy Analysis:

Summary of Contract Terms	Rent Payment	Cash Purchase
Purchase Date:	2 Nov 20	2 Nov 20
Cost of Equipment:	N/A	\$925,000
Rental periods:	24	
Payment frequency:	Monthly	

# Financial Assumptions

Rental per annum:	\$333,000
Discount Rate / Cost of Capital:	8%
Nominal Tax Rate*:	19%
Rental rate per quarter:	\$83,250
VAT Rate*	20.0%





Net discounted cost of Rental: \$511,531 Net discounted cost of Ownership: \$900,877

Best option: RENTAL with a net saving of \$389,345

Not only will renting help make a large saving on the cost of the equipment, they will not need to invest their limited capital or borrow to meet the costs. It also allows them to easily attribute the cost of the equipment to the contract and clearly detail this for their customer. In addition, they will have the flexibility to add or remove equipment as the needs of the contract dictate.

<sup>\*</sup> The application of Nominal tax and VAT rate may vary from countries.



## **Understanding Rental Vs Purchase Cost Comparisons**

#### Scenario 2: Equipment needed for 5 years with 50% utilisation

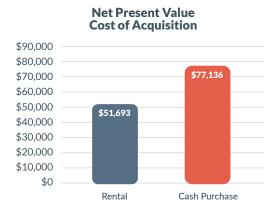
A satellite manufacturer requires a high-performance network analyser for a 5-year project to deliver a series of small satellites for their customer. Although they will need access to the instrument for various periods throughout the project (therefore 50% utilisation over 5 years), they estimate that they will only need it for a total half of the length of the project.

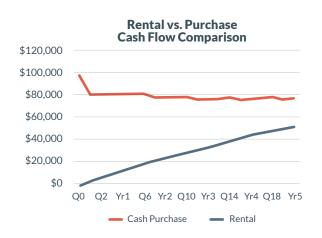
#### Rent vs Buy Analysis:

Summary of Contract Terms	Rent Payment	Cash Purchase
Cost of Equipment:	N/A	\$80,750
Rental periods:	30	
Payment frequency:	Monthly	

# Financial Assumptions

Rental per annum:	\$30,600
Discount Rate / Cost of Capital:	8%
Nominal Tax Rate*:	19%
Rental rate per quarter:	\$7,650
VAT Rate*	20.0%





Net discounted cost of Rental: \$51,693 Net discounted cost of Ownership: \$77,136

#### Best option: RENTAL with a net saving of \$25,443

As well as the considerable saving on the cost of the instrument, they can use their operational budget, freeing CAPEX to invest elsewhere in the business. In addition, the flexibility of rental means they can easily respond to the changing needs of the project, and even upgrade to a new model if required.

These examples are representative of client scenarios we regularly come across. We have used typical rental rates for these examples; however, rates will vary depending on the particular requirements of each customer. Every customer situation is unique and often complex. We carry out individual analysis and offer a bespoke set of choices and recommendations to meet the needs of each customer.

<sup>\*</sup> The application of Nominal tax and VAT rate may vary from countries.



## The right solution at the right time

Any organisation that uses test equipment can reduce cost and improve flexibility by accessing that equipment in the most effective way, whether they need a single piece of equipment or manage a portfolio of thousands of test assets.

Organisations requiring multiple pieces of equipment can benefit greatly from a mixed rental solution, utilising short- and long-term rental, and rent-to-buy. For shorter term, or project-based needs, rental is almost always the most effective solutions, offering the right balance of flexibility and cost. Peak demands can be met with short term rentals, avoiding the need to purchase and hold additional equipment in stock to meet those needs.

We work with a broad range of clients and through our detailed analyses, in many cases we find that rental is the most cost-effective solution. When these cost savings are combined with the added flexibility of rental it becomes a compelling solution, and more and more of our customers are choosing to rent. By actively managing their equipment procurement processes and making strategic decisions based on effective analysis, companies make a big difference to their profitability and efficiency. Ultimately this boosts their competitiveness and puts them on a stronger footing to grow their business and respond to the challenges and opportunities ahead.

By actively managing their equipment procurement processes and making strategic decisions based on effective analysis, companies make a big difference to their profitability and efficiency.



Smarter Solutions for Testing & Technology

### **About Us**

Electro Rent is a leading global provider of test and technology solutions that enable customers to accelerate innovation and optimize asset investments. Our rental, leasing, sales, and asset optimization solutions serve innovators in communications, aerospace and defense, automotive, energy, education, and electronics industries, and we have been doing so since 1965.

# **Contact Us Today**

To learn more about asset our optimization solutions, request a demo or see how we can help you grow your business faster,

visit us on the web:

or call us at:

electrorent.com

400 819 2800 (CHINA)

+60 4 614 6000 (SEA)

+91 124 4831 400 (INDIA)

+886 905 367 292 (TAIWAN)