

# THRUVISION (THRU.L)

## TECHNOLOGY

July 2023

31p - Market Cap: £45.2m

### SHARE PRICE (p)



12m high/low 31p/22p

Source: LSE Data

### KEY DATA

Net (Debt)/Cash	£2.8m (at 31/03/23)
Enterprise value	£42.4m
Index/market	AIM
Next news	FY results, July
Shares in Issue (m)	145.8

### TOP TEN SHAREHOLDERS

Schroder Investment Mgmt	17.5%
Canaccord Genuity	16.2%
Herald Investment Mgmt	10.4%
Lombard Odier	9.1%
Black (Thomas Joseph)	9.0%
Invesco	7.7%
Janus Henderson Investors	6.9%
Fidelity	2.3%
Evans (Colin Michael)	1.7%
River and Mercantile	0.9%

[www.thruvision.com](http://www.thruvision.com)

THRUVISION IS A RESEARCH CLIENT OF  
PROGRESSIVE

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## Gaining significant traction in core markets

### Company description

Thruvision is a leading developer of walk-through security technology, with sales and manufacturing facilities in the UK and US. The group's unique Terahertz technology is deployed internationally, and it has strong relationships within the US Department of Homeland Security, especially with its largest customer, Customs and Border Protection (CBP). Thruvision has established itself as the industry-leading solution to stop employee theft, with UK and US leading retailers such as Tesco and Next, and global logistics providers, such as GXO and CEVA.

The patented technology uses a specialist body-heat sensor to detect metallic and non-metallic items hidden under clothing, unlike traditional metal detecting and body-scanning. This removes the need for physical 'pat-downs' by guards and speeds up security screening.

Thruvision originated in the UK Government's Rutherford Appleton labs. The technology was designed for use on satellites to look for holes in the Ozone layer, before being adapted to detect suicide bomb vests.

### Investment case summary

Thruvision has a unique market position as the only company with proven technology in the UK, US and Europe, which can screen people in real-time, at walking speed. Thruvision offers exposure to growth markets with high barriers to entry. It has an established position with US Customs and Border Protection (CBP) and high-profile retailers and logistic providers. The business is at an inflexion point as the technology and capabilities are proven by its blue-chip customer base.

- The business is gaining significant traction in its core markets of Retail Distribution and International Customs Agencies.
- A recent breakthrough order with CBP underpins revenue moving forward, coupled with growing interest from international agencies.

Thruvision is expanding its product range, with its 'Dynamic Detection' AI algorithm and WalkTHRU lane, building on its leading position as the provider of walk-through security technology and increasing its share in a number of growing and established markets.

FYE MAR (£M)	2020	2021	2022	2023E
Revenue	8.0	6.7	8.4	12.4
Adj EBITDA	-1.1	-1.5	-1.7	-0.2
Fully Adj PBT	-1.2	-2.3	-2.3	-0.8
Fully Adj EPS (p)	-0.8	-1.7	-1.1	-0.4
EV/Sales (x)	4.3x	5.1x	4.1x	2.8x
EV/EBITDA (x)	-32.2x	-22.9x	-20.3x	-207.8x
PER (x)	N/A	N/A	N/A	N/A

Source: Company Information and Progressive Equity Research estimates

This publication should not be seen as an inducement under MiFID II regulations.

Please refer to important disclosures at the end of the document.

## Investor criteria – how Thruvision measures up...

What investors look for	What Thruvision offers
Large and growing market with diverse revenue streams	The global market for people screening is large and growing. The Retail Distribution market is an unregulated and potentially very large and growing market, estimated at 20,000 distribution centres (DCs) in the UK, EU and US. The International Customs Agencies market is estimated at 2,000 units worldwide, with around 500 of these with CBP.
Recurring (or repeat) business from blue-chip customers, or otherwise reliable revenue base	Thruvision has an established position with leading UK and US retailers including Tesco, Next, Boots, JD Sports and Saks, and global logistics providers including GXO and CEVA, with good repeat business (additional units and upgrades). In its International Customs Agencies division, the biggest customer is US Customs and Border Protection (underpinned by its framework agreement), while it also serves a further 11 agencies.
Defensible position with barriers to entry	Thruvision's products are built on its deep expertise in Terahertz frequency engineering. Some \$50m has been invested in R&D, with patent protection for its technology and currently no direct competition. The closest products on the market are metal detectors, which are limited to metallic objects, and airport body scanners, which are large, expensive and slow.
Strong margins	The group has returned to a post-Covid growth trajectory. Gross margins are high, and the level of overhead should support the anticipated revenue increase. Given the breakthrough CBP order and new and existing Retail Distribution demand, we forecast a significant increase in revenue in FY23, with the group nearing breakeven at the EBITDA level.
Positioned for acquisitive growth	We expect further continued organic growth as Thruvision gains traction in its core markets, adding new clients, increasing the product range and developing upgrades. Customs revenue is also underpinned by the recent CBP framework agreement. The product is proven to be very 'sticky' with strong evidence of existing customers buying more units and upgrading.
Strong ESG credentials – as a business or via products/services	While the majority of manufacturing is undertaken in the UK, Thruvision also maintains a proven outsourced capability in the US, thus negating the requirement to transport units from the UK to this major market.
Credible, strategic and experienced management team	The group is led by the highly experienced team of Chairman Tom Black and CEO Colin Evans, who delivered a tenfold return to investors when security technology specialist Detica Group PLC was acquired by BAE Systems for £538m in 2008. CFO Victoria Balchin also brings a wealth of experience from quoted industrial businesses.

## Business model

Thruvision is an established leader in the development, manufacture and supply of walk-through security technology, addressing a growing need for mass screening of people for both metallic and non-metallic objects. The group provides its technology to a wide range of government and commercial customers, with multiple revenue streams and routes to market, and a constantly evolving product offering as the technology is updated.

The group's two key markets are International Customs Agencies and Retail Distribution.

- **Customs Agencies:** Checking travellers' for concealed contraband. Breakthrough contract with CBP underpins business performance moving forward, amid growing interest from other international agencies. CBP has 440 border crossings with Thruvision currently supplying technology to around 20 Ports of Entry.
- **Retail Distribution:** Reduces theft from warehouses by up to 80%. With employee theft rising rapidly, this is a huge opportunity, with the group's customers being a 'who's who' of retail and third-party logistics (3PLs). Currently supplying to 100 UK retail distributor centres out of potential 20,000 in the UK, EU and US.
- **Aviation:** Deterring attacks on aircraft and airports. Thruvision is proceeding with accreditation with the TSA.
- **Entrance security:** Significant opportunities exist for Thruvision although the market is very price conscious.

The group has a unique market position thanks to its proven technology.

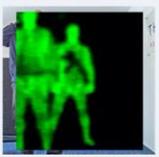
**Thruvision's model is evolving, with strong interest for 'WalkTHRU' lanes that allow mass screening (a major UK retailer has verified ROI in 6-12 months), focus on 3PLs delivering further success, and continued growth in Customs underpinned by the CBP framework. Product margins are high, with a scalable business model.**

## Illustration of product offering

**DATA SHEET**

**THRUVISION**  
PEOPLE-SCREENING  
**TAC8** Tactical Awareness Camera

**VariView**  
Variable, user-adjustable field-of-view for increased operational flexibility and detection performance



Use large field-of-view for situational awareness



Zoom in to get higher frame-rate and clearer detection of suspicious looking concealed items

**SAFE ▼ FAST ▼ PROVEN**

**High-performance people-screening camera to detect items on semi-stationary people**



**TAC8 on Fixed Stand**

**Safely detect large weapons on semi-stationary people at up to 6 metres**

**Visualizing the threat**

**DATA SHEET**

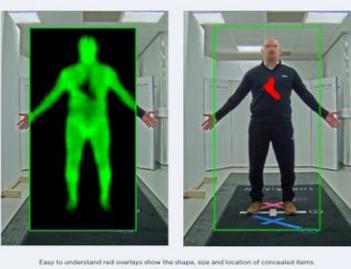
**THRUVISION**  
PEOPLE-SCREENING  
**CPC16** Check Point Camera

A completely new approach to the security checkpoint in airports

- ▼ Quick and convenient
- ▼ Contactless with no "pat-downs"
- ▼ Completely respectful of privacy
- ▼ Highly effective detection performance

**Very high performance camera, designed to meet international aviation security standards**

**DynamicDetection**  
Advanced, AI-based concealed item detection designed to meet international aviation security accreditation standards



Easy to understand red overlays show the shape, size and location of concealed items

**SAFE ▼ FAST ▼ PROVEN**

**Visualizing the threat**

Source: Progressive Equity Research / company information

## Market dynamics

Thruvision operates across several markets, all of which are substantial in global terms and forecast to grow.

The group's main markets are International Customs Agencies and Retail Distribution:

- International Customs Agencies. This is a huge global market. Following a successful pilot programme, CBP has moved onto strategic roll-out of 'passive body scanners' for the detection of illegal contraband coming into or departing the US. The quantum of CBP spend is large, with the two recent orders totaling £8.7m (\$9.7m). Once delivered, CBP will have deployed over 100 of Thruvision's latest high-performance cameras. Total CBP spend with Thruvision for the last US Government fiscal year was \$14m, indicating the scale of the opportunity. Earlier in 2022, CBP made public its intentions to acquire 500 'passive body scanners' over the next five years.
- Retail Distribution is also a huge global market. Existing customers in the UK continue to invest as they understand the in-year return on investment. The group is signing new customers including Clarins and Saks in US, and recently signed another major international 3PL. The focus on 3PLs has delivered success. In addition to CEVA, a global supply framework has been signed with another major 3PL group. Management estimates that there are over 20,000 DCs across the UK, US and Europe, representing a huge strategic opportunity.
- Other. Range extensions of existing technologies drive entry into new markets, and recurring upgrade revenue. This was demonstrated by WalkTHRU, developed in partnership with Next Plc. The process of getting TSA aviation accreditation from the US government will open up the US aviation market.

Thruvision has a technological advantage in that the platform hardware is modular in construction, making it extremely scalable and repeatable in manufacture, with differing image processing applications to meet different customer requirements.

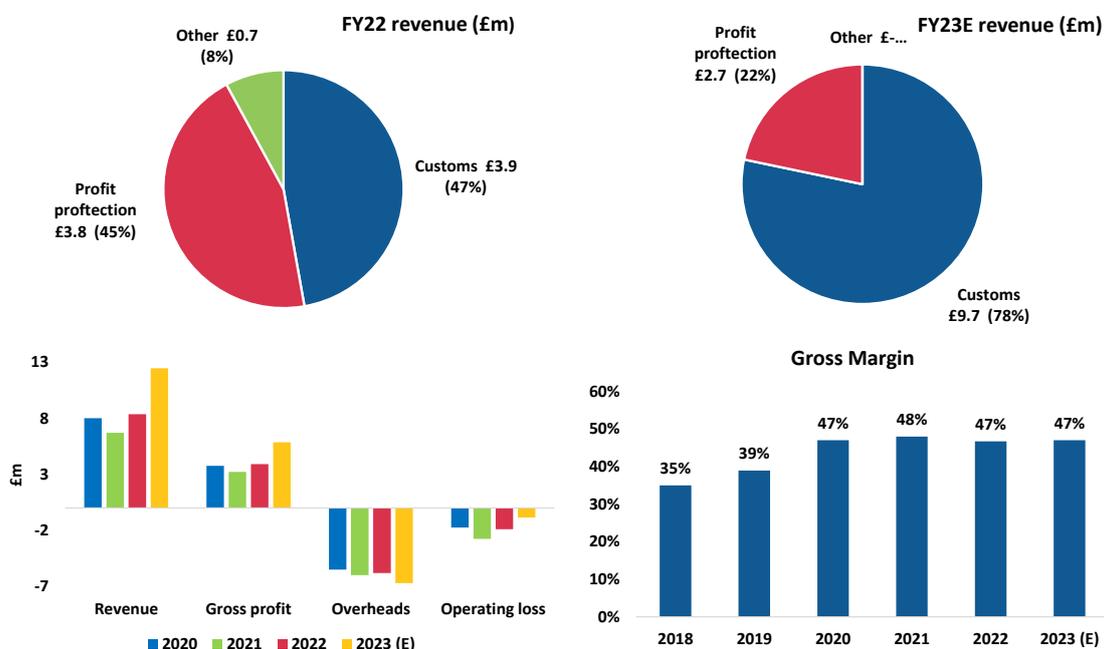
## Customer examples

Thruvision has a good depth of market penetration, with FTSE 100 names like Tesco and Next, large international logistics providers GXO and CEVA, well-known brands JD Sports and Morrisons, and blue-chip international firms Saks Fifth Avenue, Clarins, Samsung and Diageo, as well as strong relationships with some key global government agencies. In the international customs market, its biggest customer is US Customs and Border Protection (CBP).



Source: Progressive Equity Research / company information

## Financial performance



Source: Progressive Equity Research / company information

## Business catalysts

- We believe that Thruvision is a well-managed and high-quality business, active in several large and growing markets. Combining development, manufacturing and marketing seems to be an effective strategy for IP monetisation, delivering long-term growth at good margins, with no direct competition.
- The global pandemic led to an increase in the demand for 'safe distance' people screening. Employee theft has increased significantly with wage inflation pressures. Thruvision has reacted quickly, positioning the business to take advantage of demand in the Retail Distribution market. The rate of customer acquisition has been strong, with blue-chip clients such as Next Plc upgrading their hardware and software add-ons.
- Thruvision gives UK investors the opportunity to invest in unique, proven technology, as well as pointing a way to potential eventual exit via M&A once the group has built additional scale. The deal with US Customers and Border Protection (CBP) has the potential to bring in c. \$15m of revenue per year for the next four years, and Retail Distribution remains a large and rapidly growing large addressable market with an estimated 20,000 distribution centres (DCs) across UK, Europe and the US expected by 2025.
- The shares have been adversely impacted by Covid-related issues, with a near shutdown in air travel leading to a pause in Customs spend, which has now ramped up again. This dynamic, coupled with strong growth in its Retail Distribution market, fuels our confidence that the group on track to achieve profitability in FY24. We strongly suggest that investors meet management to learn more.

## Executive Management Team and Chair

**Tom Black**  
Chairman



Tom spent over 20 years with Detica Group plc, where he led the management buyout in 1997 and the group's flotation on the London Stock Exchange in April 2002. Tom then oversaw the acquisition of Detica by BAE Systems in 2008. He is also currently the Non-Executive Chairman of Herald Investment Trust plc and a Trustee of the Black Family Charitable Trust and the Edward Barnsley Educational Trust.

**Colin Evans**  
Chief Executive



Colin was appointed Chief Executive of Thruvision in November 2017, having previously served in a number of senior management positions within the group. Colin has over 25 years' experience delivering innovative new technology to the international security industry and, in particular, to the US Federal Government. Prior to joining Thruvision, Colin spent 15 years with Detica Group plc, where he was Group Chief Operating Officer.

**Victoria Balchin**  
CFO



Victoria was appointed Chief Financial Officer on 1 October 2022. Victoria held a number of finance roles with British Sky Broadcasting Group plc (2000 to 2005) and SABMiller plc (2005 to 2017) before joining Spectris plc in 2017 as Group Financial Controller. In 2019, she was appointed CFO of Brüel & Kjær Vibro, a Spectris business headquartered in Germany, which was sold in March 2021 to a large Japanese listed group.

## Key risks and challenges

### Areas of concern

### Management mitigation

Competitors could emerge with innovative offerings in any of the group's target markets, attracted by their growth characteristics

The technology is very specialist, competing with metal detectors but with currently no direct competitors. It has a significant first-mover advantage in the Customs and Retail Distribution markets, while in Aviation it is still a challenger brand.

Global supply chain issues could impact manufacturing capability

Patented technology is manufactured in the UK and subsystems are outsourced to manufacturing partners. Cash resources could be used to purchase specific components if needed.

A significant single revenue generator

US CBP is the largest revenue generator and is expected to remain so for the next couple of years. The CBP relationship is underpinned by a framework agreement, but management has mitigated risk through investment and rapid traction in Retail Distribution.

Economic slowdown

The group has added sales capacity in the US and EU and strengthened its US Retail Distribution sales leadership. Investment has increased in the US market vs mainland Europe given the current macro environment.

Financial risk

The US CBP framework underpins revenue performance. Cash burn is reduced and there is no further requirement to significantly scale overheads, leading to good operational efficiency.

**Financial Summary: Thruvision**

Year end: March (£m unless shown)

	2020	2021	2022	2023E
<b>PROFIT &amp; LOSS</b>				
Revenue	8.0	6.7	8.4	12.4
Adj EBITDA	(1.1)	(1.5)	(1.7)	(0.2)
Adj EBIT	(1.5)	(2.0)	(2.3)	(0.7)
Reported PBT	(1.1)	(2.5)	(1.7)	(0.6)
Fully Adj PBT	(1.2)	(2.3)	(2.3)	(0.8)
NOPAT	(1.3)	(1.8)	(2.0)	(0.5)
Reported EPS (p)	(0.8)	(1.7)	(1.1)	(0.4)
Fully Adj EPS (p)	(0.8)	(1.7)	(1.1)	(0.4)
Dividend per share (p)	0.0	0.0	0.0	0.0
<b>CASH FLOW &amp; BALANCE SHEET</b>				
Operating cash flow	(0.8)	(0.6)	(1.6)	(2.1)
Free Cash flow	(0.9)	(1.0)	(2.3)	(2.6)
FCF per share (p)	(0.6)	(0.7)	(1.6)	(1.8)
Acquisitions	0.0	0.0	0.0	0.0
Disposals	0.3	0.0	0.0	0.0
Shares issued	0.0	0.1	0.2	0.0
Net cash flow	(1.0)	(1.1)	(1.8)	(2.6)
Overdrafts / borrowings	0.0	0.0	0.0	0.0
Cash & equivalents	8.4	7.3	5.4	2.8
Net (Debt)/Cash	8.4	7.3	5.4	2.8
<b>NAV AND RETURNS</b>				
Net asset value	13.4	11.3	9.4	8.8
NAV/share (p)	9.2	7.8	6.5	6.1
Net Tangible Asset Value	1.2	1.1	1.2	1.1
NTAV/share (p)	0.9	0.8	0.8	0.8
Average equity	13.7	12.3	10.4	9.1
Post-tax ROE (%)	(8.8%)	(18.9%)	(16.8%)	(5.3%)
<b>METRICS</b>				
Revenue growth	34%	(16.3%)	24.8%	48.9%
Adj EBITDA growth	(19.8%)	40.4%	13.1%	(90.3%)
Adj EBIT growth	(14.7%)	32.8%	11.8%	(68.1%)
Adj PBT growth	(30.5%)	94.8%	(3.9%)	(62.8%)
Adj EPS growth	(33.8%)	128.0%	(33.3%)	(63.7%)
Dividend growth		N/A	N/A	N/A
Adj EBIT margins	(19.0%)	(30.1%)	(27.0%)	(5.8%)
<b>VALUATION</b>				
EV/Sales (x)	4.3	5.1	4.1	2.8
EV/EBITDA (x)	-32.2	-22.9	-20.3	-207.8
EV/NOPAT (x)	-26.5	-19.6	-17.0	-70.2
PER (x)	N/A	N/A	N/A	N/A
Dividend yield	N/A	N/A	N/A	N/A
FCF yield	(2.3%)	(2.7%)	(6.2%)	(7.1%)

Source: Company information and Progressive Equity Research estimates

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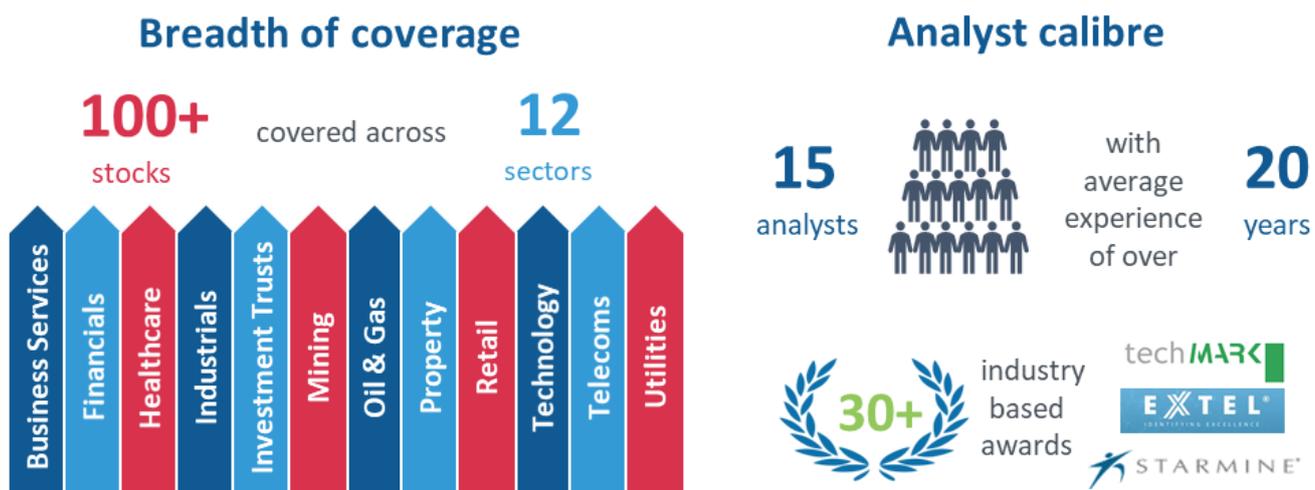
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