



Company Overview

Data Patterns (India) Ltd, incorporated in 1998 and listed in December 2021, is a leading vertically integrated defence and aerospace electronics company based in India. With over 1,300 employees, including a robust engineering corps, the company designs and manufactures solutions spanning radar, electronic warfare (EW), avionics, satellite systems, test equipment (ATE), and naval and space systems—all developed and certified in-house.

Business Model & Strategy

Operating on a turnkey model, Data Patterns delivers end-to-end capability—from design and development to manufacturing and lifecycle support—across air, land, sea, space, and undersea domains. Its scalable approach leverages modular architectures and internal R&D, enabling competitive cost structures and shorter program cycles.

Recent Financial Performance

In the fiscal year 2023-24, the company announced operational revenue of ₹519.8 Cr, reflecting a 15% increase, along with an EBITDA of ₹222 Cr, which represents a 29% growth, and a PAT of ₹182 Cr, up by 47%. Notably, the PAT margin improved from 27% to 35%, according to Data Patterns India. In the fourth quarter of FY24, PAT experienced a remarkable 40% quarter-over-quarter increase, reaching ₹71 Cr, alongside a 31% rise in revenues.

Balance Sheet & Liquidity

Data Patterns is fundamentally robust, showcasing an exceptionally strong financial position. The company is nearly debt-free, maintaining a debt-to-equity ratio of approximately 0x, which significantly reduces financial risk and enhances long-term sustainability. Its solid liquidity profile is further reflected in a current ratio of 5.24x and a quick ratio of 4.09x, indicating ample short-term assets to comfortably cover its liabilities. This superior liquidity position not only reinforces its financial flexibility but also provides a strong buffer in times of economic uncertainty.



Metric	Value
Market Cap	₹15,438 Cr
CMP	₹2,757.50
P/E Ratio (TTM)	~69.6x
Book Value	₹269 per share
Dividend Yield	~0.29 %
52-Week Range	₹1,350 – ₹3,440
EV / Revenue	~21.2x
EV / EBITDA	~48x
ROE	14.70%
ROCE	~19.7 %



Atmanirbhar Bharat & the Rise of Defense Electronics

The Indian defense electronics sector is part of the broader defense industry, with an estimated value of around USD 17.3–17.4 billion anticipated by 2024. Projections indicate growth to USD 29.8 billion by 2033, reflecting a compound annual growth rate (CAGR) of approximately 5.6% to 5.8%. While specific figures for defense electronics are not separately listed, considering that electronics comprise up to 30% of the costs for modern systems, it is reasonable to expect this sub-sector to grow from nearly USD 3.5 billion today to over USD 7 billion within the next ten years.

Factors Driving Growth

This expansion is driven by:

- Heightened geopolitical tensions
- Rapid advancements in technologies such as AI, unmanned systems, and electronic warfare
- The Government's strong emphasis on indigenization through initiatives like Make in India and Atmanirbhar Bharat

India's total defense budget for FY 2025-26 is projected at ₹6.81 lakh crore (~USD 78.7 billion), marking a 9.5% year-on-year growth, with approximately ₹1.12 lakh crore (~USD 13 billion) earmarked specifically for domestic procurement. This includes platforms with significant electronic components such as radar, avionics, and communications.

Domestic Manufacturing and Exports

Domestic manufacturing is witnessing significant growth:

- India reported ₹1.06 lakh crore (~USD 12.8 billion) in defense production during FY 2023-24, representing a 21% increase from the prior year.
- Exports have surged to a record of over ₹21,000 crore (~USD 2.55 billion), increasing tenfold over the last decade, with the government targeting ₹35,000 crore (~USD 4.2 billion) by 2027.

The private sector's involvement is also expanding, with state and private companies such as BEL, Data Patterns, and Paras Defence, along with startups supported through iDEX and DRDO initiatives, advancing indigenous systems in radar, secure communications, avionics, and surveillance. This effort aims to lessen reliance on foreign Original Equipment Manufacturers (OEMs).

Innovations and Collaborations

Innovations for Defence Excellence (iDEX) has introduced over 549 problem statements, engaged 619 startups and MSMEs, and signed 430 contracts to date. With a budget of ₹449.6 crore for FY 2025-26, iDEX grants foster development in areas such as AI, onboard sensors, satellite miniaturization, drone technologies, and secure communications.

A ₹25,000 crore (USD 3 billion) government initiative has been launched to boost local component production over the next five years.



Data Patterns: A Leading Defence & Aerospace Electronics Company

Platform Coverage

Data Patterns delivers extensive electronics solutions within the defence and aerospace sectors, covering all domains—space, air, land, sea, and undersea. Their approach encompasses multi-domain design and engineering.

Core Design & Manufacturing Capabilities

They provide in-house engineering across various areas, including:

- Processors
- Power systems
- RF and microwave equipment
- Embedded software/firmware
- Mechanical engineering

Product Portfolio

Data Patterns boasts a diverse product lineup:

- Radars (including precision approach radars and MPAR)
- Underwater electronics and communications
- Electronic Warfare (EW) systems
- BrahMos missile systems integration
- Avionics and cockpit systems
- Automated Test Equipment (ATE)
- Over 1,000 reusable building blocks deployable across different platforms



FY24-25 Financial Snapshot

- Revenue (FY24): ₹520 Cr
- Revenue Growth: 22% YoY to ₹566 Cr; EBITDA: ₹222 Cr (+29% YoY)
- Revenue (FY25): ₹755 Cr (+33%); EBITDA: ₹275 Cr (+24%)
- PAT FY24: ₹182 Cr (+47%); PAT FY25: ₹222 Cr

Order Book & Inflow

- FY24 Orders: ₹670 Cr; As of Mar-24: ₹1,083 Cr
- FY25 Orders: ₹355 Cr; As of Mar-25: ₹730 Cr

Manufacturing & Workforce

Chennai Facility: Spanning 200,000 square feet on 8.56 acres, this facility is equipped for design, comprehensive manufacturing, qualification, and lifecycle support. It features EMS assembly with the capability to produce around 600 boards daily.

Employees: A total of 1,130, including over 700 engineers.

New Facility Commissioned: In Q4 of FY23.

Recent Projects & Deliveries

1. Supplied nine Precision Approach Radars to the Indian Army and Navy.
2. Delivered COMINT/ELINT suites and self-protection systems for various platforms including land, fighters, and aerostats.
3. Developed electronic systems for land, air, and satellite platforms, including small satellites.
4. Supported BrahMos, LCA-Tejas, HAL Dhruv, and LUH platforms through avionics, EW, and communications.





Strengths

1. Proven Track Record:
2. Data Patterns has established a solid reputation for delivering high-quality products and services across the defense and aerospace sectors.
3. Robust Domain Capabilities:
4. The company operates with deep expertise in key verticals such as:
 - Radar systems
 - Electronic warfare
 - Avionics
 - Satellite and space-based systems
5. Strong R&D Focus:
6. Significant and consistent investments in R&D drive innovation and enable the company to stay aligned with evolving defense requirements and technological trends.
7. Rigorous Quality Standards:
8. Equipped with a strong internal quality team and stringent control processes, ensuring consistent product excellence and customer satisfaction.
9. Scalable Business Model:
10. The company has the ability to scale operations and build fully integrated and customized systems for complex defense applications.
11. Deep Technical Expertise:
12. Data Patterns brings a high level of technical sophistication in areas such as:
 - Electronic system design
 - Embedded software and firmware development
 - Advanced manufacturing and prototyping

Weaknesses

1. Government Dependency:
2. The business is heavily reliant on government contracts, which makes it sensitive to changes in defense policies, procurement priorities, or budget allocations.
3. Long Gestation Periods:
4. Extended development and approval timelines for defense programs can lead to delays in revenue realization and monetization.
5. High R&D and Production Costs:
6. Defense programs typically involve significant upfront costs and long development cycles, which can exert pressure on short-term cash flows and margins.
7. Technological Obsolescence Risk:
8. Rapid advancements in defense technology necessitate continuous innovation; failure to adapt may render existing products outdated.
9. Working Capital Challenges:
10. Long payment cycles and inventory build-up create pressure on working capital, adding to financial complexity and operational risk.



Opportunities

- Defense Modernization Push:
- Continued government focus on upgrading defense infrastructure presents a strong pipeline of high-value contracts, especially under the Make in India initiative.
- Global Expansion Potential:
- The company can scale its international presence through:
 - Strategic alliances
 - Joint ventures with global defense players
 - Establishing subsidiaries in key geographies
- Rising Export Demand:
- As global defense customers seek cost-effective and indigenous solutions, Data Patterns is well-positioned to serve friendly nations with its portfolio.
- Policy Tailwinds for Indigenization:
- India's thrust on self-reliance and reduced import dependence boosts Data Patterns' visibility and competitiveness as a preferred indigenous vendor.
- Private Sector Participation:
- Increased privatization and corporatization in defense production open doors for collaborations with both Indian and global OEMs.

Threats

- Regulatory Uncertainties:
- Any changes in export policies, licensing frameworks, or compliance mandates could impact international opportunities and operational agility.
- Supply Chain Vulnerabilities:
- Dependence on third-party suppliers for critical components increases exposure to global supply chain disruptions, raw material shortages, or geopolitical tensions.

Company Leadership



**Mr. Srinivasagopalan
Rangarajan**
Chairman



**Ms. Rekha Murthy
Rangarajan**
Director



Mathew Cyriac
Non-Executive Director



Peer Comparison: Key Valuation & Efficiency Metrics

Metric	Data Patterns	HAL	BEL	Mazagon Dock	BDL	GRSE	Zen Tech
Valuation Score	23.7	34.8	27.5	30.7	21	30.2	30
P/E Ratio (TTM)	69.6	37.2	54.2	49.8	111.5	56.9	60.6
Forward P/E Ratio	56.1	34.4	48.4	40.3	62.7	36.4	52.4
PEG Ratio (TTM)	3.2	3.8	1.6	2	-10.8	1.2	0.5
Forward PEG Ratio	2.3	3.9	3.8	1.7	0.8	0.6	2.7
Price to Book Value	11.4	10	16.3	16.5	14.6	16.3	10.9
Price to Sales (TTM)	21.8	10	12.1	10.5	18.3	5.9	17.4
Price to Sales (Annual)	13.4	9	9.3	9.3	14	3.8	13.7
EV to EBITDA	29.1	19.8	27.8	28.4	52	20.6	28.9
Market Cap to Sales	13.4	9	9.3	9.3	14	3.8	13.7
Price to Free Cash Flow	-50.5	293.9	-492.9	66.9	-460	-1.4	37.4
Graham Number	463.5	1145.8	62.9	493.2	185.3	408.2	347.5

Source: trendlyne.com

Key Insights:

- Data Patterns commands the highest P/E and PEG ratios, indicating a rich valuation tied to expected high growth.
- HAL and Mazagon Dock offer more balanced valuations.
- BEL and BDL have lower Graham Numbers, reflecting asset-light or higher risk profiles.
- Free Cash Flow valuations vary widely—Data Patterns, BEL, and BDL report negative P/FCF, potentially due to reinvestments.



10-Year Financial Position – Data Patterns (₹ in Crores)

Financial Year Ending March	Shareholders' Funds	Total Liabilities	Total Assets	Reserves & Surplus	Fixed Assets	Current Assets
Mar 1, 2025	1,508.20	330.9	1,839.10	1,497	296.3	1,451.40
Mar 1, 2024	1,324.20	366.9	1,691.80	1,313	198.3	1,400.90
Mar 1, 2023	1,167.10	267.8	1,434.90	1,155.90	113.4	1,235.20
Mar 1, 2022	574.5	132.2	706.7	564.1	64.8	519.9
Mar 1, 2021	207.9	120.7	328.6	206.2	33.2	261.3
Mar 1, 2020	153.7	141.9	295.6	152	33.6	215.5
Mar 1, 2019	34.4	141.5	175.9	27.1	8.3	165.8
Mar 1, 2018	28.5	108.1	136.6	21.2	9.3	125.4
Mar 1, 2017	24.8	78.4	103.2	17.5	10.3	91
Mar 1, 2016	23.5	78.8	102.3	16.2	11.3	89.1
Mar 1, 2015	22.7	76	98.7	15.4	12.1	84.8

Source: trendlyne.com

Key Insights:

- Shareholders’ funds grew at a CAGR of 57.9% over 5 years.
- Assets have more than 6X increased from FY20 to FY25, showing aggressive expansion.
- Fixed assets grew 66% CAGR over 3 years, suggesting increased capex.
- The company maintains a strong balance sheet with minimal external debt and rapid growth in reserves.



Cash Flow Statement (₹ Crores)

Financial Year	CFO (Op. Cash Flow)	PBT	Interest	Tax Paid	CFI (Investing)	CFF (Financing)	Net Cash Flow	Cash Start	Cash End
Mar 1, 2025	-89.9	295.3	12.1	73.5	89	-49.6	-50.5	88.1	37.7
Mar 1, 2024	139.4	242.2	9.3	60.5	-223.9	-42.5	-127	215.2	88.1
Mar 1, 2023	-17.2	164.8	7.7	40.8	-383.2	438.1	37.7	177.1	214.8
Mar 1, 2022	50.3	127.4	11	33.4	-382.2	235.9	168.3	8.8	177.1
Mar 1, 2021	54.9	74.5	14.5	19	-48.2	-8.2	7.3	1.5	8.8
Mar 1, 2020	13.5	28.5	13.3	7.4	-18.2	-13.7	1.2	0.3	1.5
Mar 1, 2019	7.3	7.8	5.6	1.9	1.4	11.8	20.3	15.8	36.1
Mar 1, 2018	21.2	4.9	4.3	1.1	0.5	-12.3	9.3	6.5	15.8
Mar 1, 2017	5.2	1.9	3.7	0.5	0.5	-4.4	1.2	5.3	6.5
Mar 1, 2016	0.6	0.6	3.2	0.3	-0.5	-0.6	0.6	4.7	5.3
Mar 1, 2015	-5	2.8	3.6	0.8	-1.4	3.3	0.6	7.8	4.7

Source: trendlyne.com

Key Insights:

- FY25 CFO turned negative (-₹90 Cr) from ₹139 Cr YoY, mainly due to sharp increase in tax outgo and working capital changes.
- Net Cash Flow in FY25: -₹50.5 Cr, despite ₹295 Cr in PBT, suggests aggressive reinvestment or WC build-up.
- Cash reserves declined from ₹88.1 Cr to ₹37.7 Cr.
- Historically, FY22 and FY23 had strong inflows via financing (₹235 Cr and ₹438 Cr respectively).
- Investing cash flow was negative in most years due to consistent capital investments.



Why Data Patterns is a Strong Long-Term Pick

1. Trusted Defence Partner
2. A key supplier to ISRO, DRDO, and the Armed Forces, offering complete electronics solutions across land, air, sea, and space.
3. High Profit, Low Risk
4. Strong gross (~80%) and EBITDA (~40%) margins with negligible debt, ensuring financial stability.
5. Robust Order Pipeline
6. Order book over ₹1,180 Cr, with new contracts worth ₹2,000–3,000 Cr expected—boosting visibility.
7. Focused on Innovation
8. Strong R&D in radar, avionics, and satellites enables next-gen, reusable system designs.
9. Aligned with India's Defence Vision
10. Positioned to benefit from ₹6.8 lakh Cr defence budget and Make in India policy tailwinds.

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