

HFCL LIMITED

Annual Report 2022-23



EMBRACING TECHNOLOGY FOR **SUSTAINABLE GROWTH**



Contents

4-11

COMPANY OVERVIEW

- 4 HFCL at a Glance
- 6 Offerings
- 8 Core Strengths
- 10 Global Reach

12-17

PERFORMANCE OVERVIEW

- 12 Key Achievements
- 14 Managing Director's Message
- 16 Key Performance Indicators

18-25

VALUE CREATION APPROACH

- 18 Business Model
- 20 Operating Landscape
- 24 Strategic Priorities

26-32

ESG APPROACH

- 26 Environment
- 29 Social - People
- 30 Social - Community
- 31 Governance
- 32 Board of Directors

34-155

MANAGEMENT REPORTS

- 34 Management Discussion and Analysis (MDA)
- 58 Directors' Report
- 88 Corporate Governance Report
- 116 Business Responsibility and Sustainability Report

156-303

FINANCIAL STATEMENTS

- 156 Standalone Financial Statements
- 228 Consolidated Financial Statements
- 305 AGM Notice



FY23 Highlights

Revenue from Operations

₹4,743 crores

EBITDA

₹666 crores

Profit After Tax

₹318 crores

Earnings Per Share (EPS)

₹2.18

Return on Capital Employed (RoCE)

15.6%

Debt-Equity Ratio

0.24x

Order Book

₹7,000+ crores

Rating Upgrade

Long-term

CARE A; Stable

Short-term

CARE A1



EMBRACING TECHNOLOGY FOR SUSTAINABLE GROWTH

In a fast-changing world, technology has been a disruptive force reshaping business landscape. The surge in data-driven internet technologies, coupled with the transformative impact of 5G, not only fuels communication advancements but also spurs innovation across diverse industries. Amid this backdrop, India's strong economic fundamentals and technological progress have positioned it as an attractive investment destination globally.

The confluence of factors, including growing demand for high-speed connectivity, the 5G revolution and initiatives like BharatNet, implementation of FTTH, opens promising avenues for growth. Moreover, India's commitment to 5G adoption, network fiberisation and the PLI schemes fosters indigenous manufacturing and digital transformation.

As a prominent manufacturer of optical fiber (OF), optical fiber cables (OFC) and telecom products, HFCL embraces these technological trends to maintain a competitive edge while catalysing India's self-sufficiency mission. Over the years, technology has been instrumental in the Company's growth journey, augmented by strategic partnerships with global tech giants to enhance innovation and product development. Looking ahead, HFCL has charted a strategic roadmap for sustainable growth centred around integrating new technologies, developing new products, foraying into new geographies and increasing manufacturing capacities.



Capacity Expansion

Responding to rising demand, HFCL is expanding its existing manufacturing capacity for OF and OFC. It will also set up a new facility for manufacturing telecom and networking products.

Read more on Page [24](#) →



New Technologies

HFCL leads in adopting transformative technologies, evident through its launch of 5G Lab-as-a-Service and the world's first open-source Wi-Fi 7 Access Point, driving the digital revolution.

Read more on Page [25](#) →



New Products

The Company's future-ready offerings, Access Points 5G products, Wi-Fi Access Points, Unlicensed Band Radio (UBR), Switches and other advanced communication products will drive sustained and profitable growth.

Read more on Page [6](#) →



New Geographies

With an eye on global expansion, the Company has ventured into new geographies by establishing subsidiaries and deploying dedicated teams across key international markets.

Read more on Page [25](#) →

HFCL at a Glance

Enabling a Connected Future through Technology

HFCL is a dynamic and technology-driven enterprise, providing next-generation communication products and integrated network solutions to telecom, defence and railway sectors. With a focus on innovation, seamless execution and strong industry collaborations, the Company has established a distinguished position in its core domains.

Serving Key Industries with Expertise and Excellence



TELECOM

As a leading manufacturer of optical fiber (OF), optical fiber cables (OFC) and a range of telecom and networking products, the Company caters to evolving customer needs.

The Company also provides comprehensive solutions for building wireless and telecommunication networks, including optical transport and fiber-to-the-home (FTTH) networks, among others.

83%

Revenue Contribution in FY23



DEFENCE

As one of India's most prominent defence network implementers, the Company offers end-to-end solutions, including optical transmission backbone network, GIS-based optical fiber network, end-to-end solutions for multiple hybrid microwave broadband radio links in remote areas, MPLS based dedicated communication network for defence forces and more. The Company is designing customised defence communication and electronic products, catering to defence forces.

15%

Revenue Contribution in FY23



RAILWAYS

The Company designs modern communication systems for metros, main-line railways and freight corridors, leveraging its capabilities in cutting-edge telecom products and solutions.

It implements modern railway communication systems like video management systems for the Indian Railways.

2%

Revenue Contribution in FY23

Three Decades of Evolving Excellence

1987

Incorporated as a telecom equipment manufacturer.

1990s

Expanded business operations, reaping the benefits of liberalisation and the telecom revolution.

2010s

- Consolidated the business following the global recession through debt, equity and business restructuring.
- Ushered in revival and growth via expansion of manufacturing capacities and strengthening of network solutions capabilities.
- Expanded portfolio of products and solutions and entered new geographies to tap new customers.

2000s

Achieved organic and inorganic growth along with portfolio expansion.

2020-2023

- Completed broadband connectivity in all gram panchayats of Jharkhand and Punjab under the BharatNet Project.
- Received approval as a 'Trusted Source' from the National Security Council Secretariat (NSCS) for supplying telecom equipment in India.
- Set up a greenfield capacity for the manufacture of optic fiber with an annual capacity of 10 million fiber kilometre (fkm) as a backward integration measure.
- Expanded the optical fiber cable capacities from 18.5 million fkm to 25.08 million fkm.
- Commissioned a facility for the manufacture of wire harnesses (automotive and aerospace) and polymer compounds at HTL Limited, a subsidiary.
- Established three R&D centres in Bengaluru, Gurugram and Hyderabad.
- Entered technology collaborations with leading global players including Wipro, Qualcomm, CommAgility, VVDN Technologies, IP Infusion, NXP Semiconductors, Aprecomm, Metanoia, Capgemini Engineering, Olotech, AnexGATE and Xilinx among others.
- Launched 5G Lab-as-a-service, unlicensed band radios, switches and the world's first open-source Wi-Fi 7 access point.

Offerings

Future-Ready Products and Solutions

HFCL is critical for ensuring secure connectivity in an era driven by digital transformation. The Company empowers the global telcos, defence and railways sectors with a wide range of innovative telecom products and comprehensive network solutions.

PRODUCTS



Optical Fibers and Cables

- Optical fibers
- Armoured cables
- Unarmoured cables
- Micro cables
- Micro module cables
- FTTH cables
- High Fiber Count IBR Cable
- High density Unitube and Multitube Ribbon cables
- Passive connectivity solutions



Telecommunication Products

- Point-to-point and point-to-multi-point backhaul radios
- Indoor and outdoor Wi-Fi 5 and 6 access points
- Cloud-based network management system
- Ethernet L2/L3 switches
- Home mesh routers



Passive Connectivity Products

- Cable assemblies
- High density cabinets
- Fiber termination boxes
- PLC splitters
- Joint closures
- Aerial/FTTH accessories

SOLUTIONS



Public Telecommunication Solutions

Deployment of comprehensive solutions for building of wireless and optical telecommunication networks such as

- Optical transport networks
- Rural GSM Networks
- Fiber-to-the-Home network and in-building solutions
- Mobile Backhaul Networks



Defence Communication Solutions

- Optical fiber cable and optical transport network
- Fiber monitorings and management system
- Internet protocol Multi-protocol label switching networks
- Microwave broadband radio



Railway Communication Solutions

Implementing communication network including IP-based video surveillance system (VSS) for railways

Products in Pipeline



Defence Electronics Products

- Thermal weapon sights (TWS)
- Electronic fuses
- High-capacity radio relays
- VMS and video analytics



Telecommunication

- 5G indoor and outdoor fixed wireless access (FWA) customer-premises equipment (CPE)
- 5G Macro Radio Unit products (8T8R)
- 5G Indoor and Outdoor Small Cells (2T2R and 4T4R)
- Cell Site Routers and Centralised Unit Aggregation Routers
- Ultra-high-capacity Point-to-Point and Point-to-Multipoint UBRs



Defence Communications and Electronics

- Software-defined radio
- Ground surveillance radar

Core Strengths

HFCL's Competitive Edge

HFCL has carved out a distinct space in the industry by constantly setting challenging goals. The Company aspires to create sustained value for its stakeholders by leveraging its strengths in manufacturing, R&D, project execution, talent management and customer relationships.



Market Leader



Integrated Manufacturing



Dedicated R&D Capabilities



End-to-end Network Provider



Long-term Customer Relationships



MARKET LEADER

HFCL ranks among India's top optical fiber cable manufacturers, signifying its substantial industry position. Moreover, the Company holds a significant market share in producing Wi-Fi access points, UBR, and diverse telecom products. This expertise underscores HFCL's pivotal role in shaping India's telecommunication sector and highlights its strong market presence.

#1

in Optical Fiber Cable (OFC) supplies in India



INTEGRATED MANUFACTURING

HFCL's integrated facilities provide enhanced control and cost competitiveness. With five state-of-the-art manufacturing facilities in India, the Company has established a strong foothold in the OF and OFC industry.

Present Capacities

10 mn fkm

Annual Capacity for Optical Fibers (OF)

25.08 mn fkm

Annual Capacity for Optical Fiber Cables (OFC)

702k ckm

Annual Capacity for FTTH Cables

18 Lakh

Passive Interconnect Cable Assemblies

24 Lakh

Automotive and Industry Parts

2,700 MT

Annual Capacity for Impregnated Glass Fiber Reinforcement (IGFR)

660k km

Annual Capacity for Aramid Reinforced Plastic (ARP) rods

504k km

Annual capacity for Fiber Reinforced Plastic (FRP) Rods

24k MT

Annual capacity for Polymer Compounds

1 Lakh

Aerospace and Defence Cable Assemblies