

# **SHAPING THE FUTURE OF TRUSTED NETWORKS**

















# Tejas at a Glance

Tejas Networks is a global wireless, broadband, and optical networking company, with a focus on technology, innovation and R&D. Tejas' carrier-class products are used by telecom service providers, utilities, government, and defense networks in 75+ countries. Tejas has an extensive portfolio of leading-edge telecom products for building end-to-end telecom networks based on the latest technologies and global standards with IPR ownership. Tejas Networks is a part of the Tata Group, with Panatone Finvest Ltd. (a subsidiary of Tata Sons Pvt. Ltd.) being the majority shareholder. With a strong focus on deep technology and R&D, Tejas Networks has built a rich portfolio of patents and has shipped over 1,000,000 systems worldwide. As a leading innovator in wireless and wireline communication equipment, Tejas designs and manufactures cutting-edge solutions that are deployed in more than 500 carrier networks across 75 countries.

# 25 Years of being a Trusted End-to-End Technology Provider for Mission-Critical Networks







500+



525+
Patents



350+
Silicon IPs



**25**+
Tier 1 Customers

## Wireline Solutions

# **Adaptable for Multiple Applications**

At Tejas Networks, we design, develop, and manufacture a comprehensive range of wireline products, including optical transport, FTTx access, and advanced switching and routing. Our optical systems support high-capacity backbone networks, while our FTTx solutions enable ultrafast broadband for homes, enterprises and government segments.

Complemented by our switching and routing offerings, our products form an integrated wireline ecosystem for service providers, ISPs, and enterprises. Built on industry standards with significant IPR, our solutions ensure high performance, cost efficiency, and scalability. Our network management platforms help operators deploy, manage, and troubleshoot networks efficiently, supporting digital growth.

#### **Enterprise FTTx**









- Support for GPON/XGS-PON with combo-PON modular and pizza-box OLTs; working on HS-PON
- · Cost-effective 4-port GPON OLTs for residential use
- A wide range of ONTs with advanced features like Wi-Fi 6,
   LTE Back-up, supporting diverse applications such as residential, enterprise and industrial deployments.

#### **Optical Transport**



- WDM capacity to 76.8 Tbps using 1.2 Tbps Muxponders and extended C+L band technology
- Sub-lambda grooming and switching of OTN, PTN, SDH, SONET and Ethernet Traffic
- Enhanced troubleshooting, improved operational ease, and provided robust planning tools for scalable, intelligent optical networks

### **Switching & Routing**





- Complete Range of Ethernet Switches and Routers for Service Provider, Enterprise, Campus and Industrial Networks
- Introduced multi-terabit routers supporting growing traffic and expansion
- Supports segment routing and SDN for flexible, programmable networks

## **Intelligent Universal Domain Controller**



- Enhanced with Al/ML, optical visualization, and real-time analytics
- Simple Point and Click Provisioning with Full FCAPS Function
- Enables proactive troubleshooting, performance optimization, and operational excellence

Scan to explore more
Wireline Product Features



# Wireless Solutions Proven 4G/5G Mobility Stack

# Leading the way as one of the largest global single-vendor 4G/5G RAN suppliers

Our wireless product suite spans across radio access network (RAN), from 4G offerings to high-capacity 5G Massive MIMO radios with beamforming capability, complemented by converged core network solutions.

Our radio units are designed with flexibility and scalability in mind, supporting multi-band, multi-mode operations such as FDD and TDD, enabling deployment in urban, suburban, and rural environments. The TJ1400 UltraFlex Baseband product is one of the industry's most feature-rich wireless and wireline platforms. It provides integration of wireless, broadband, transport, and IP network technologies in one integrated box, thus significantly reducing the cost of network build-outs for operators.

- Unified approach to Scalability
- Architecture Flexible
- **Solution** Backhaul Optimization
- Compact & Rugged
  Outdoor Design

Shipped 100,000+ Cell Sites MIMO Support 2T2R to 64T64R Multi-Technology Support Same Platform for 2G/4G/5G

#### O-RAN enabled 5G RU



Single Band 4T4R RU



**Dual Band 4T4R RRH** 



**Dual Band 8T8R RU** 



n78 32T32R / 64T64R

# TJ1400 Ultraflex Baseband : Transforming Networks with Ultra-Convergence

# Integrating 4G/5G RAN baseband functions with Carrier Ethernet backhaul

TJ1400-7 Ultraflex BBU is a versatile, converged platform that integrates 4G/5G RAN baseband functions with Carrier Ethernet backhaul, eliminating the need for a separate Cell Site Router. This simplifies site architecture, reduces costs, and accelerates deployment timelines. Supporting multiple technologies, the TJ1400 leverages software-defined hardware™ architecture for flexible, future-proof network operations across wireless, broadband, and critical infrastructure services.

- Supports 2G, 4G and 5G
- Multi-Band Support
- 3GPP Compliant Platform with Integrated Transport
- Massive MIMO Support up to 64T64R



TJ1400 Ultraflex BBU

### Cloud-Native 4G/5G Converged Core

- Tejas 5G Converged Core is a Cloud-Native Based 3GPP Release 16 compliant 5GC for Public Land Mobile, Fixed Wireless Access deployments & Captive Non-Public Networks.
- It supports 5G SA, Converged 4G/5G and 4G EPC with its cloud native architecture thereby having capability of integrating 4G as well as 5G technologies to deliver seamless user experience & service continuity.



4G/5G Converged Core

Scan to explore more Wireless Product Features



#### **Direct To Mobile (D2M) Broadcast Ecosystem**

Direct-to-Mobile (D2M) Broadcast is redefining content delivery by integrating broadcast networks with mobility services, enabling efficient, real-time transmission without relying on mobile data. Using advanced standards like ATSC 3.0, D2M supports applications such as live TV, emergency alerts & notifications, educational content and targeted advertising.

Solutions built to serve both urban and rural users reinforcing Tejas's commitment to inclusive digital access and bridging the digital divide.



**Enabling Broadcast-as-a-service with** complete D2M device ecosystem

Powered by Tejas indigenous chipsets







USB Dongles



Smartphones



Feature Phones

### Software Defined Radio (SDR) Chipsets

Tejas has deployed its third-generation Software Defined Radio (SDR) chipsets in a diverse range of applications such as set-top boxes, dongles, and smartphones to mission critical systems, including broadcast transmitters, satellite modems, and emergency response communications equipment.

- **Mard-winning Architecture**
- ✓ Low- Power, Cost-Efficient

- **Advanced Software Programmability**

#### P1 Generation









P3 Generation



#### Satellite IoT Solutions

#### **Built on Tejas Designed SDR Chipsets**

Tejas is actively expanding its Satellite Communication (Satcom) product portfolio to address the emerging market requirements across LEO, MEO, and GEO constellations.







**Expertise** to modify, develop and adapt to any of the Satellites and develop new solutions

**Expertise** on design, development & deployment of Asset Tracking Sat-IoT networks

Vessel Tracking System is deployed on over 1,00,000 Boats

**Asset Tracking:** Marine vessels, Railways, Cargo, High value assets, Live stock monitoring **Automotive Application:** Connected cars, emergency communication, fleet

management, etc

**Connecting the unconnected**: Remote Connectivity, Mining, Oil & Gas, Construction, etc **Remote Monitoring:** Dams, Rivers, Nuclear/Thermal, installations, Agriculture, Utilities etc **Education:** Delivery of Edutainment to remote schools, skill development, exam paper etc

Scan to explore more D2M & Satcom Features



# Delivering value to our Customers across the Globe

#### Wireless Mobile RAN

#### Pioneering India's Self Reliance with BSNL

Tejas Networks has played a pivotal role in transforming India's telecommunications landscape by deploying a fully indigenous 4G/5G RAN for BSNL's expansive nationwide network. After rigorous real-world proof of concepts and field trials, Tejas was selected as the sole RAN equipment supplier for over 100,000 cell sites, making it one of the largest single-vendor 4G/5G network deployments globally. This project highlights a strong collaboration between Tejas Networks, TCS and C-DoT. This solution encompasses advanced baseband and radio equipment supporting multiple TDD and FDD bands, fully compliant with 3GPP and O-RAN standards.



5G NSA upgraded

100000+ Sites Delivered

**18 Months** of Implementation Time

\$ 900 M Worth of Contract Executed

#### **Mobile Backhaul**



Airtel and Vodafone Idea Limited (VIL), two of leading mobile operators, leveraged Tejas TJ1600 DWDM/OTN and packet-optical transmission products to strengthen their 4G/5G backhaul infrastructure. These deployments significantly augmented backhaul capacity and enhanced overall network performance.

#### Fixed Broadband Access and Network Modernization

## Seamless Network Modernization for a Leading ISP in USA

A U.S.-based ISP has selected the Tejas TJ1400-7 UCB platform to modernize its TDM network, leveraging advanced Circuit Emulation and Software-defined Hardware $^{\text{TM}}$  for scalable, future-ready connectivity.

#### Bharatnet Innovation: Bridging the digital divide

- GPON-based fiber broadband connectivity to every Gram Panchayat (GP). Scalable to multi-gigabits speeds
- Tejas GPON equipment deployed in 75,000+ villages across India. Solar Power CPES, ruggedized enclosures, featuring solar-powered CPEs and ruggedized enclosures

## Interoperable Tejas Alien-wave Solution Tried & Tested Worldwide

A leading service provider in India, aiming to optimize unused bandwidth on its third-party DWDM network, selected the Tejas TJ1600 compact platform to enhance capacity while ensuring cost-efficiency and future scalability. The solution was successfully deployed across 300 sites nationwide.

#### Building Resilient DWDM Networks for a Major Power Utility

One of India's largest power distribution companies, operating a nationwide optical network, provides connectivity services to ISPs, government, defense, and enterprises, supporting critical national projects. For its latest network upgrade, it deployed the Tejas TJ1600 DWDM/OTN platform with 400G capability and GMPLS WSON technology, ensuring high scalability and advanced reliability.

#### Harvesting the Power of Sat-IoT Communication

# Revolutionizing Fishermen's Safety with Sat-IoT based Vessel Tracking Solution

The Department of Space, Government of India, through NSIL, has selected the Tejas Satellite-based Vessel Tracking System to enhance the safety of fishermen venturing into deep-sea waters.



Harvesting the Power of Sat-IoT Communication





Scan to know more **About Us** 



Discover how we can revolutionize your network

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