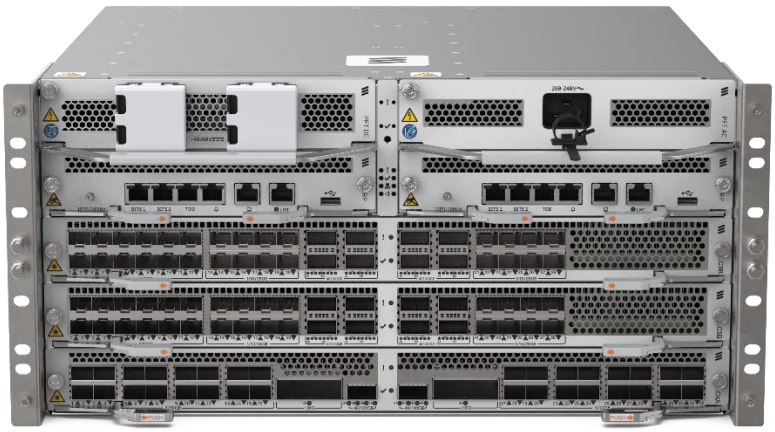

Router 6274

The Router 6274 is a high performance modular and fully redundant aggregation router, designed to enable high quality network service delivery for RAN and fixed/mobile converged metro aggregation networks. In its category, it sets a new benchmark for port density by scaling up to 144x10G and 24x100G interfaces and offering up to 2.7Tbps switching capacity in a space efficient 5RU chassis with front access for all field replaceable units allowing an overall lower OPEX. It supports VPN services over IP/MPLS networks, service provider SDN, service exposure using NETCONF/YANG, extensive quality of service and precise synchronization features.

The Router 6274 has strong security features such as vendor credential and secure boot for ubiquitous deployment.

With 2.7Tbps of switching capacity, the Router 6274 delivers performance needed to fully support LTE, LTE Advanced, 5G, Fixed Mobile Convergence and Enterprise applications.

The Router 6274 is part of the Ericsson Router 6000 Series, a radio integrated and subscriber aware IP transport family of products. The Router 6000 offers a range of high-performance routers with resiliency features and form factors optimized for the various needs of metro and backhaul networks.

The Ericsson Router 6000 Series is an essential component of the Ericsson Radio System and is tightly integrated with Ericsson Radio and Microwave to provide high capacity mobile backhaul with unprecedented quality of experience.

All routers in the Ericsson Router 6000 Series run the IP Operating System (IPOS), enabling accelerated feature delivery and operational efficiencies.

Ericsson Network Manager (ENM) manages the complete end-to-end network for both Mobile and Fixed deployments: Radio, Metro and Backhaul, Mobile Core, and Data Center. This enables seamless plug and play capabilities for radio and router installation and network operation.

Meeting the strictest radio requirements

With its best-in-class 10/100G port density, 2.7Tbps switching capacity and high-scale queues with deep buffers, the Router 6274 enables high quality network service delivery at low rental costs.

Precise and proven synchronization

LTE-A enhancements such as COMP and e-ICIC that enable efficient use of spectrum have strict synchronization requirements. The Ericsson synchronization solution comes pre-verified to work with Radio.

SDN capabilities and programmability

Provides application aware traffic engineering with open and standardized interfaces, enabling network slicing and ability to tailor services for utmost agility.

Designed for low CAPEX and OPEX

The Router 6274 uses merchant silicon and designed to have cost optimized form factor to lower CAPEX. In-service upgrade of new software versions and patches with zero downtime and for all Ericsson Radio System products the simplified end-to-end management offered by Ericsson Network Manager (ENM) contributes to reduced OPEX.

Strong Security

Strong and complete security solution for Macro cell, Small Cell and Aggregation in trusted and untrusted environments enables ubiquitous deployments.

Radio integrated Transport

Provides Radio aware transport for mobile backhaul enabling improved Quality of Experience for end users. Tight hardware and mechanical integration as part of Ericsson Radio System allows significantly easier deployment and lower overall TCO.

Technical specification for Router 6274

Connectivity

Interfaces:	Line cards: 3 Line card slots that can take the following line card types -LC 8x100G+16x25G+12x10G -LC 48x GE / 10GE SFP+ -LC 4x 100G QSFP28 + 32x GE / 10GE SFP+ -LC 2x 100G CFP2 + 2x 100G QSFP28 + 32x GE/10GE SFP+ QSFP28 ports each can be configured as 4x10GE, 4x25GE, 1x40GE or 1x100GE RP Card: 1x 100 / 1000 Base-T Ethernet for Out-of-Band Management 1x RJ-45 console port 1x RJ45 Alarm ports for 3 input and 1 output alarms contacts 1x USB port for file uploads and downloads
Synchronization interfaces:	1x RJ45 ports 1PPS+TOD input/output 2x RJ-48 ports for 2.048 MHz, E1/T1 (BITS) input/output 1x Coaxial (SMB) Interface for 10Mhz or 1PPS input or output

Mechanical

System weight:	Fully configured chassis: 36kg / 79lbs
Dimension (H x W x D):	5RU 221.3mm x 445mm x 438.5mm (without optional air filter)
Air flow:	Front to Back

Electrical

Power supply DC:	-48V / -60V, Dual feed redundant power supply units
Power supply AC:	200V / 240V, 50-60Hz
Power consumption:	Typical 760 Watts, Max 1500 Watts (Max 2600 Watts supported by power and fan)

Environmental

Operating Temperature:	-5°C to +55°C
Relative Humidity:	5 - 95% Non-condensing
GR-63-CORE:	Central Offices (COs) and other environmentally controlled telecommunications equipment spaces
EN 300 019-1-3 Class 3.2:	Partly temperature-controlled locations

Key features

IP Routing MPLS:	IPv4, IPv6, BGP-4, MP-BGP, BGP FRR, BGP-LS, IS-IS, OSPFv2/v3, VRRPv2/v3, LFA/RLFA/TI-LFA, RSVP-TE including FRR, LDP, T-LDP, mLDP, Segment Routing, PCEP, Seamless MPLS, CSPF, Routing policy, Policy based routing , DHCP client/relay/Server
Ethernet:	802.1Q virtual LAN (VLAN), 802.1ad Provider Bridge, IEEE 802.3ad Link Aggregation Control Protocol, BVI – Bridged Virtual Interface, QinQ, G.8032 Ethernet Ring Protection Switching, BUM storm protection, Jumbo Frame up to 9600 bytes
Layer-2/Layer-3 Virtual Private Networking:	L3 MPLS VPNs, 6VPE/6PE, Inter-autonomous-system MPLS VPN (options A, B, C), VPWS for E-Line Services, VPLS/H-VPLS for E-LAN Services, Pseudowire redundancy, MEF CE1.0/2.0 Compliant, Ethernet VPN for E-Line & E-LAN Services
Multicast Protocols:	IPv4/IPv6 multicast, PIM-SM/SSM, IGMP v1/v2/v3, MLDv2, MVPN, IGMP snooping*
Timing and Synchronization:	IEEE 1588-2008 Precision Time Protocol, ITU-T Profiles for Frequency (G.8265.1 SOOC) and Time/Phase (G.8275.1 T-BC/GM & G.8275.2 T-BC/GM), NTP, SyncE with ESMC, Enhanced SyncE, Stratum 3E clock, L1 Assist holdover, PTP quality measurement and monitoring
Operation and Maintenance:	IEEE 802.1ag Connectivity Fault Management, ITU-T Y.1731 (DM, SLM and Throughput), 802.3ah Ethernet OAM, Microwave Bandwidth Notification, MACSWAP, MPLS Ping /Traceroute, BFD IPv4 & IPv6 Single Hop, BFD IPv4 & IPv6 Multi Hop, Micro-BFD, Seamless BFD, TWAMP Reflector, TWAMP Initiator, Port Mirroring, LLDP, IPFIX (IP Flow Information Export)*
Security:	Secure boot, Vendor credential, secured storage, Access Control Lists, RADIUS, TACACS+, LDAP, SSH v1/v2, Reverse-path forwarding, IPSec*, IKEv2*, CMPv2, CRL, TLS, 802.1x port-based network access control
Quality of Service:	Strict-queuing, WFQ, priority-WFQ, Multi-tier H-QoS, Deep packet buffers, RED/Weighted RED, Ingress policing, Egress shaping, 802.1p, MPLS EXP bits, DiffServ
Network Management:	Ericsson Network Manager (ENM), Ericsson OSS-RC, Ericsson ServiceOn Element Manager (SoEM), CLI, SNMP v2c/v3, NETCONF, YANG models, Syslog, RMON, PM Job, Telemetry Streaming

Standards and specifications

Safety:	LVD Directive 2014/35/EU, IEC/EN 60950-1, IEC/EN 62368-1, CFR 29 Part 1910, UL/CSA 62368-1
EMC:	EMC Directive 2014/30/EU, EN 300386, CISPR 32, EN 55032, CISPR 24, EN 55024, EN 50121-1, EN 50121-4, EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 300132-2, EN 300132-1, ES 201468, DTAG 1 TR 9; CFR 47 Part 15, ICES-003; VCCI V-3
ENV:	RoHS Directive 2011/65/EU, WEEE Directive 2012/19/EU, EN 300 019-2-1, EN 300 019-2-2, EN 300 019-2-3, EN 300 753, ECE-C1.1
NEBS:	GR-1089-CORE, GR-63-CORE, SR-3580 (NEBS Level 3), ATT-TP-76200, VZ.TPR.9203, VZ.TPR.9305

*Future release

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