The Router 6675 is a high capacity pre-aggregation and aggregation router, designed to enable high quality network service delivery while at the same time lowering operating costs through features such as a completely filter-less mechanical design. It provides high 10GE and 100GE port densities in a compact and hardened 1RU form factor enabling lower rental costs and 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 6675 has strong security features such as IPSec, vendor credential and vendor software authentication ensuring data security even in insecure environments. With 320Gbps of switching capacity, the Router 6675 delivers performance needed to fully support LTE, LTE Advanced, 5G, access sites for years to come.

Meeting the strictest radio requirements
Provides high 10GE density with 100GE support and 320Gbps switching capacity in a 1RU compact and hardened form factor enabling lower rental costs and lower OPEX.

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
Router 6000 series uses merchant silicon and a cost optimized design to lower CAPEX. Filter less design removes costly truck rolls every 3 months to inspect the filters, resulting in $1000 yearly OPEX savings/site.

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 cell site deployment and lower overall TCO.
Technical specification for Router 6675

Connectivity

**Interfaces:**
- 24x GE / 10GE SFP+ ports
- 4x QSFP28 ports each can be configured as 4x 10GE, 4x 25GE, 1x 40GE or 1x 100GE
- 1x 100 / 1000 Base-T Ethernet for Out-of-Band Management
- 1x RJ45 console port
- 1x RJ45 Alarm port for 3 input and 1 output alarm contacts
- 1x USB 2.0 port

**Synchronization interfaces:**
- 1x RJ45 port IPPS+TOD (ITU-T G.703 Amd1)
- 1x RJ48C port for 2.048 MHz, E1/T1 (BITS) input/output

**Mechanical**

**System weight:**
- 8kg / 17.6lbs

**Dimension (H x W x D):**
- 1RU 43.6mm x 442.8mm x 315mm

**Air flow:**
- Filter-less design, Front to Back with field swappable fan tray

**Environmental**

**Operating Temperature:**
- -40°C to 65°C

**Relative Humidity:**
- 5 - 95% Non-condensing

**GR-5188-CORE Class 1:**
- Protected Equipment in Outside Environments

**GR-5188-CORE Class 2:**
- Protected Equipment in Controlled Environments

**EN 300 019-1-3 Class 3.3:**
- Not temperature-controlled locations

**Key features**

**IP Routing MPLS:**

**Ethernet:**
- 882.1Q virtual LAN (VLAN), 882.1ad Provider Bridge, IEEE 882.3ad Link Aggregation Control Protocol, BVI – Bridged Virtual Interface, QinQ, G.8832 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 CE1.1/2/3 Compliant, Ethernet VPN for E-Line & E-LAN Services

**Multicast Protocols:**
- IPv4/IPv6 multicast, PIM-SM/SSM, IGMP v1/v2/v3, MLDV, MVPN, IGMP snooping*

**Timing and Synchronization:**
- IEEE 1588-2008 Precision Time Protocol, ITU-T Profiles for Frequency (G.8265.1 DOOC) and Time/Phase (G.8275.1 T-BC/GM & G.8275.2 T-BC/GM), NTP, SyncE with ESME, Enhanced SyncE, Stratum 3E clock, L1 Assist holder, PTP quality measurement and monitoring

**Operation and Maintenance:**

**Security:**
- Secure boot, Vendor credential, Secure storage, Access control lists, RADIUS, TACACS+, LDAP, SSM v1/v2, Reverse-path forwarding, IPSec, IKEv2, CMPv2, CRL, TLS, 802.1x port-based network access control

**Quality of Service:**
- Strict-queuing, weighted fair queuing, priority-weighted fair queuing, Multi-tier Hierarchical QoS, Deep packet buffers, RED/Weighted RED, Ingress policing, Egress shaping, 802.1p, MPLS EXP bits, Differentiated Services

**Network Management:**
- Management by Ericsson Network Manager (ENM), Management by Ericsson OSS-RC, Management by Ericsson ServiceOn Element Manager (SoEM), CLI, SNMP v2c/v3, NETCONF, YANG models, Syslog, RMON, PM Job, Zero Touch Provisioning, Telemetry Streaming

**Standards and specifications**

**Safety:**

**EMC:**
- EMC Directive 2014/35/EU, EN 300386, CISPR 32, EN 55032, CISPR 24, EN 55024, EN 55012-1, EN 55012-3, EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 30032-2, EN 30132-1, ES 201468, DTAG 1/287 01
- CFR 47 Part 15, ICES-003, VCCI V-3

**ENV:**

**NEBS:**
- GR-1089-CORE, GR-65-CORE, SR-3580 (NEBS Level 3), ATT-TP-76260, VZ.TPR.9203, VZ.TPR.9305

*Future release

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