The iCore® 2G GSN is a compact, carrier-grade GPRS support node facilitating GPRS and EDGE packet data access. The platform can be deployed as a Serving GPRS Support Node (SGSN), Gateway GPRS Support Node (GGSN) or both. Designed to cost-effectively introduce data services to a 2G network, this node fits into the iCore 2G-3G-4G product portfolio as shown below. This architecture enables operators to evolve to future generations through software plug-ins, increasing flexibility and reducing cost of upgrades.

As with all Tecore products, the GSN is fully compliant with the applicable 3GPP standards, is available on a standalone basis on a range of carrier-grade hardware platforms, and can also be integrated as a blade in a complete iCore network system. The iCore 2G GSN has been deployed in standalone and roaming networks connecting with infrastructure and devices from the industry’s leading vendors.

### Specifications

**SGSN Capabilities**
- Mobility Management
- HLR Addressing
- Session Management
- SMS
- Charging Functions
- Authentication and Identity Check
- Security – GEA1 and GEA2 ciphering
- Compression – using Van

**GGSN Capabilities**
- Subscriber Session/Data Management - dynamic IP addressing, static IP address allocation, five PDP contexts per MS, with different QoS classes
- Charging Function
- Routing
- RADIUS Accounting

**Operational Procedures Supported**
- Anonymous PDP context activation/deactivation procedures
- Network-Requested PDP Context activation procedure
- Combined GPRS/GSM procedures for circuit switched-services

**Operating System**
- Linux-based processing

**SGSN Interface**
- Base Station Subsystem (Gb)
- HLR (Gr), EIR (Gi), SMS-IWMSC (Gd), MSC/VLR (Gs)
- Charging Gateway (Ga) – supports GTP over UDP/IP to connect with an external
- Charging Gateway
- Other GSN (Gn)

### Features + Benefits

- Streamlined architecture that is scalable and combines features of both SGSN and GGSN in the same physical node
- Interoperable with leading vendors equipment and devices
- Built on Linux OS

### Target Markets

- Transportable networks including vehicle-mounted, airborne, and maritime systems
- Government and military data applications
- Enterprise and university campuses