**TECHNICAL DATA**

**OTS main unit**
- TMM interface: RS232/V24/10/100 BaseTX, Q2 (RS485), Q2E (10/100 BaseTX), 2 Mbit/s / G.703
- EOW telephone interface: Z (2-wire)
- DCC (F1 or E2) interface: 64 kbit/s, V.11
- Performance management: G.826, G.783
- 21 x 2 Mbit/s interface: G.703 (120/75Ω)
- 3 x 34 Mbit/s interface: G.703 (75Ω)
- Ethernet interface: 4 x 10/100 BaseT (IEEE 802.3)
- Mapping: GFP-F.G.7041 (n x VC12, n x VC3 or VC4)
- Capacity adjustment, LCAS: static, dynamic
- 2 x 155/622 Mbit/s interface: G.957, G.703
- Jitter and wander: G.825
- Power consumption: max 30 W

**OTS-G main unit**
- Same as OTS except:
- Ethernet interface: 1 x 1000 BaseT/1000 BaseX (IEEE 802.3)

**S4AD-2 unit**
- Cross-connect: non blocking matrix
- capacity 288x288 VC4 (up to VC12 level)
- Synchronization: according to G.813
- 2 x 155/622 Mbit/s interface: G.957, G.703
- Jitter and wander: G.825
- Ethernet interface: 5 x 10/100 BaseT (IEEE 802.3)
- 1 x 1000 BaseT/1000 BaseX (IEEE 802.3)
- Power consumption: max 30 W

**S4LI-4 unit**
- 4 x 155/622 Mbit/s interface: G.957, G.703
- Jitter and wander: G.825
- Ethernet interface: 2 x 10/100 BaseT (IEEE 802.3)
- 2 x 1000 BaseT/1000 BaseX (IEEE 802.3)
- Power consumption: max 27 W

**S16LE-2 unit**
- up to 2 x 2.5 Gbit/s interface: G.957, G.703
- up to 4 x 155/622 Mbit/s interface: G.957, G.703
- Jitter and wander: G.825
- Ethernet interface: 4 x 1000 BaseT/1000 BaseX (IEEE 802.3)
- Power consumption: max 30 W

**ST12-63 tributary unit**
- 63 x E1 interface: G.703 (120/75Ω)
- Jitter and wander: G.823
- Power consumption: max 25 W

**Plug-in SFP transceivers**
- STM-16: ITU-T G.957
- OLI.S1A: LC/FPLD 1310 nm/15 km
- OLI.L1A: LC/DFBLD 1310 nm/40 km
- OLI.S1B: LC/DFBLD 1550 nm/93 km
- STM-4: ITU-T G.957
- OLI.S4A: LC/FPLD 1310 nm/15 km
- OLI.L4A: LC/DFBLD 1310 nm/40 km
- OLI.L4B: LC/DFBLD 1550 nm/93 km
- STM-1: ITU-T G.957
- OLI.S1A1: LC/FPLD 1310 nm/15 km
- OLI.S1A: LC/FPLD 1310 nm/40 km
- OLI.S1B: LC/DFBLD 1550 nm/93 km
- OLI.S1 electrical: CMI/12.7 dB at 78 MHz
- FE: IEEE 802.3
- OLI.S1A1: LC/FPLD 1310 nm/15 km
- OLI.S1A: LC/FPLD 1310 nm/40 km
- OLI.S1B: LC/DFBLD 1550 nm/93 km
- OLI.S1 electrical: CMI/12.7 dB at 78 MHz
- GbE: IEEE 802.3
- OLI.GbE-AS: LC/MOW FPLD 1310 nm/10 km
- OLI.GbE-A: LC/DFBLD 1310 nm/40 km
- OLI.GbE-Z: LC/DFBLD 1550 nm/60 km
- EI.GbE-RJ45: RJ45/CAT5/CATe/CAT6/100 m

**Traffic protection**
- Line protection: 1+1 MSP
- Path protection: VC12, VC3, VC4
- Subnetwork protection: SNCP

---

**Next Generation SDH Systems**

- Next generation SDH Optical Digital Systems for STM-16/4/1, E1, E3, 10/100 BaseTx, 100 BaseFx, 1000 BaseX, 1000 BaseT services
- Add/drop, cross-connect and terminal multiplexer
- Ethernet over SDH, GFP/VCAT/LCAS technologies
- Compact and flexible SDH equipment, easily expandable from small to full capacity, for metro and access network applications
- Network management system SUNCE-M or SNMP based management

---

**IRITEL AD BEOGRAD**

Batajnjićki put 23, 11080 Beograd, Serbia
General Manager: (+381 11) 3073 515, Sales: (+381 11) 3073 555
Marketing: (+381 11) 3073 544, Exchange: (+381 11) 3073 400, Fax: (+381 11) 3073 434
http://www.iritel.com, e-mail: info@iritel.com
**Basic configuration**

- **ODS2GSC3** configuration for 3 units:
  - up to: 4 x STM-16, 18 x STM-4/1, 21 x 2 Mbit/s, 3 x 34 Mbit/s and 4 x 10/100 BaseT, 1 x 100 BaseT, 9 x 1000 BaseT/1000 BaseX

- **ODS2GSC8** configuration for 8 units:
  - up to: 4 x STM-16, 20 x STM-4/1, 273 x 2 Mbit/s, 3 x 34 Mbit/s and 13 x 10/100 BaseT, 2 x 100 BaseT, 10 x 1000 BaseT/1000 BaseX

- **ODS2GSC12** configuration for 12 units:
  - up to: 6 x STM-16, 30 x STM-4/1, 273 x 2 Mbit/s, 3 x 34 Mbit/s and 20 x 10/100 BaseT, 3 x 100 BaseT, 15 x 1000 BaseT/1000 BaseX (cross connect card protection, E1 line protection)

**Applications**

- Point-to-point fibre optic links
- Linear fibre optic networks, providing add-and-drop capability
- All types of fibre rings and complex network structure at STM-16, STM-4 and STM-1 level
- Local cross-connect at VC12 (2 Mbit/s), VC3 (34 Mbit/s) and VC4 levels

**Main features**

- Multiservice SDH optical digital system for voice and data transmission of up to STM-16 (2.3 Gbit/s) rates
- Optical line interface 2.5 Gbit/s, 622 Mbit/s and 155 Mbit/s provides transmission over single-mode fibre at 1310 nm for section length of up to 50 km, or at 1550 nm for section length of up to 120 km
- Plug-in SFP optical or electrical transceivers, provide STM-16, STM-4 or STM-1 interface configurations on the same unit
- WDM option - two way single fibre transmission (1310 and 1550 nm), passive optical filter
- CWD option - wavelength division multiplexing (1471, 1491, 1511, 1531, 1551, 1571, 1591, 1611 nm >1310 nm), passive optical filters
- PDH tributary interfaces for 2 Mbit/s and 34 Mbit/s
- Full non blocking cross-connect matrix, capacity 44.78 Gbit/s (288 x 288 VC4) up to VC12 level
- Ethernet over SDH via GFP/VCAT/LCAS technologies
- Static and dynamic Ethernet traffic capacity adjustment, LCAS procedure
- Line protection at multiplex section, 1+1 MSP; higher order path or lower order path protection (VC12, VC3, VC4), sub-network protection SNCP

**Control and monitoring**

- Integrated network management system SUNCE-M provides continuous management of ODS2G5 and all other IRITEL’s SDH and PDH equipment (OTS622, ODS155, FM-MSAN, ...)
- The computer (PC) in management operations centre is connected to one network element (ODS2G5) using Ethernet 10/100BaseT or RS232 interface (F interface)
- NMS interconnections of collocated IRITEL devices using G2 (RS485) or Q2E (10/100BaseT) interfaces
- NMS interconnection of remote IRITEL’s SDH equipment using DCC channels (192 kbit/s, 576 kbit/s)
- Additional G.703 2 Mbit/s interfaces used for connections of independent subnetworks to one centralized management system SUNCE-M
- SNMP northbound and southbound interfaces
- SNMP MIB
- Control and monitoring using standard SNMP viewer

**Power supply**

- DC power supply –48 V DC or –60 V DC

**Mechanical design**

- Unit's dimension: 277 x 175 mm
- Module's dimension:
  - ODS2GSC3 (3 units): 150 x 436.6 x 238 mm
  - ODS2GSC8 (8 units): 400 x 436.6 x 238 mm
  - ODS2GSC12 (12 units): 482 x 436.6 x 238 mm
- ETSI or 19” cabinet’s dimension: 2200 x 600 x 300 mm