

Fiber optic modem/multiplexer (FOM)



Bitel's BT-FOM increases the flexibility of your transport and access networks.

Compactness, cost-efficiency and versatility highlight the BT-FOM product family. BT-FOM is best suited for transportation of $n \times 2$ Mbit/s signals (where n means 4, 8, 16, 64) via optical fibers. It is suitable for connection of remote units and PBX's. Furthermore it is also best suited for transportation applications in GSM, 2.5 and 3 G mobile networks.

BT-FOM family

- 4 x E1 19" minirack fiber optic multiplexer
- 8 x E1 19" minirack fiber optic multiplexer
- 16 x E1 19" minirack fiber optic multiplexer
- SPDH 155 19" minirack
- SPDH 155 19" Rack System

Fits to Every Network

The 4 x E1 and 8 x E1 are PDH systems with optional 2 x V.35 interfaces in addition. Standard systems are provided with hotline telephone which simplifies the installation works. Furthermore

it transports 2 x RS 232 transparent channels for control and monitoring applications of other equipments.

The SPDH 155 system has both TM and ADM functionality and can be connected in chain and ring configurations. The SPDH 155 system transports up to 64 x E1 and it supports 8 Mbit/s and 34 Mbit/s interfaces as well as 8 Mbit/s optical interface.

Contact us or our distributors to find out more about BT-FOM system.

Technical Data

-E1 Interface

The E1 interface provided by the terminal is in accordance with ITU-T G.703

- Bit Rate: 2048 kbit/s
- Code: HDB3
- Impedance: 120 balanced
- Jitter: In accordance with ITU-T G.823
- Pulse waveform: ITU-T Table 6/G.703, Fig.15/G.703

- Optical Interface

4 x E,8 x E1

SPDH 155M

- | | | |
|--------------------------|---|-----------------------|
| • Wavelength: | 1310 nm or 1550 nm | 1310 nm or 1550 nm |
| • Light source | LED (1310 nm) or | Laser (1550 nm) Laser |
| • Transmission Power: | - 14 dBm - 15 dBm | |
| • Receiving Sensitivity: | better than - 35dBm (bit error rate $\leq 10^{-10}$) | |
| • System gain: | > 30 dB | > 20 dB |
| • Connector: | FC-PC or SC-PC | FC-PC or SC-PC |
| • Line Coding: | 8B1D1H | NRZ |
| • Line Rate: | 21.12Mb/s 155.520 | Mbit/s ± 20 ppm |

- Supervisory and Monitoring Terminal Interface

- Signal level: RS-232
- Data rate: 9600 Baud, Asynchronous
- Protocol: Proprietary
- Connector type: SubD9 Male

- Hotline Telephone

The telephone set for the terminal is a ordinary telephone (2-line telephone), and the 2M transmission channel is not occupied when telephone is in use.

SPDH system equips with dial telephone.

- Data Channel 2 x RS 232

Two interfaces can directly connected with PC serial ports, allowing serial communications with remote devices. The maximum rate for serial port devices is 9600 baud.

- Signal level: RS-232
- Data rate: 9600 Baud, Asynchronous
- Protocol: Transparent
- Connector type: SubD25 Female

- Expanding Interfaces (Optional)

The equipment is provided with the following optional interfaces for specific requirements.

2 x V.35 Data Channels (optional)

2 x 64K G.703 co-directional interface (optional)

8 x Audio Interface (optional)

- Environment Requirements

Climatic Conditions:

The equipment is designed and test in accordance with industry standard ETS 300 019.

Operating temperature: -5°C ~ 50°C

Operating relative humidity: 5% - 95%

Storage temperature: -25°C ~ 55°C

Transportation temperature: -40°C ~ 70°C

Safety: According to EN 60950

EMC: According to EN 300 386-2

- Power Supply

Power Supply -48VDC: Input voltage range - 36V ~ -72V

Power Supply 220VAC: Input voltage range 175V ~ 250V (city utility voltage)

- Power Consumption

Stand alone Equipment Power Consumption < 10W

19" rack < 50W

- Dimension

19" Subrack (table top) 480 ´ 45 ´ 230mm