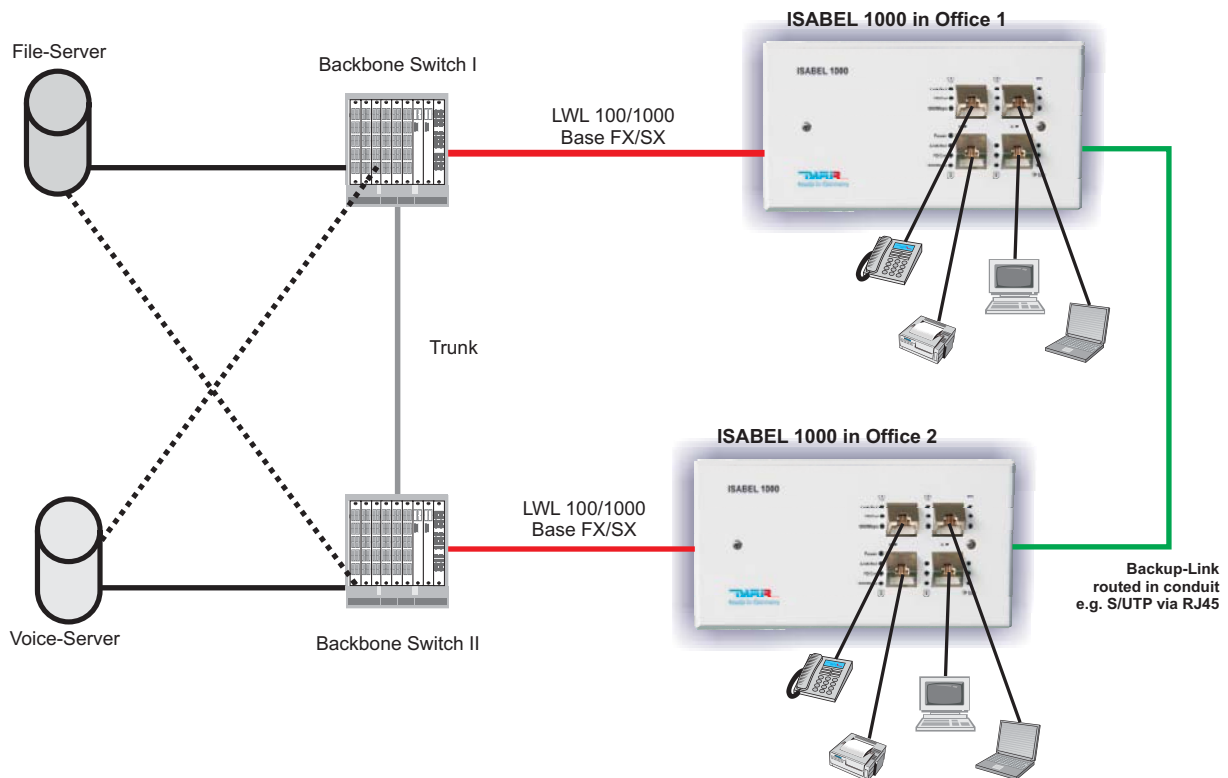


ISABEL* 1000

provides **100%** availability
for IP telephony and
Power-over-LAN in fibre optic networks

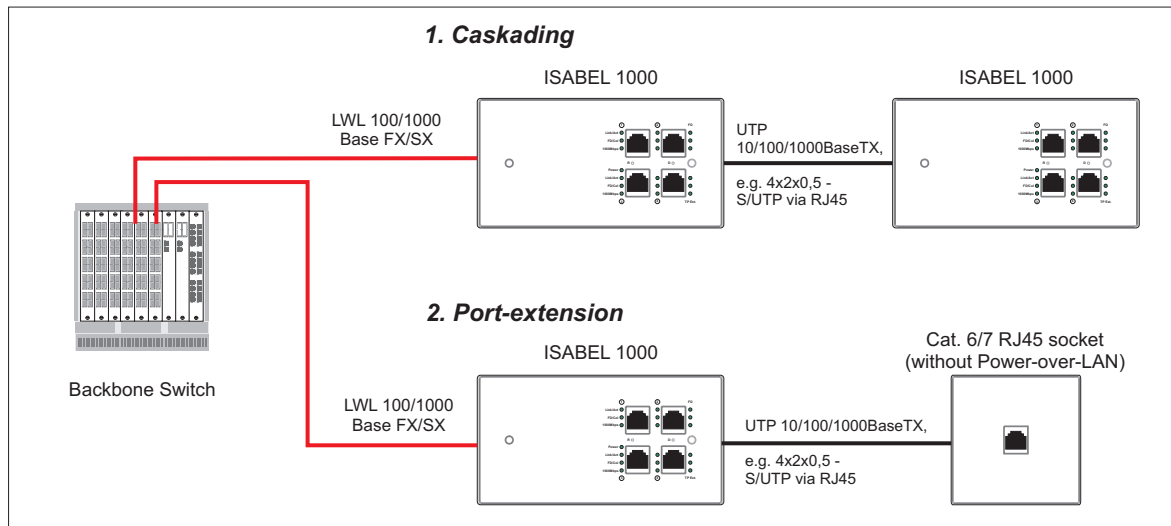


Your advantage

- **ISABEL's high-availability backup function.** In the event of an outage of fibre optic (FO) components due to a fault or maintenance in the central exchange or passive network, the affected ISABEL 1000 remains connected to the LAN via its partner ISABEL 1000 and no user even notices the outage.
- **PoL/PoE function simultaneously on all 4 ports.** Free selection of front-side UTP ports with respect to where you wish to connect your PoL/PoE terminal device to the ISABEL 1000. This reduces management overhead for the administrator.
- **Above-average service life** due to elaborate metal design of the enclosure out of solid aluminium to provide maximum cooling and dissipation of residual heat.
- **Over 90% cost savings and investment protection** when migrating from 100 to 1000 Mbit/s. The use of modern SFP technology permits the migration from 100 to 1000 Mbit/s to be accomplished by replacing only the optical transceiver. All other hardware remains in place.

*Investment saving architecture bonding electric and light

ISABEL 1000 cascading and port-extension functions



Technical data

| Switch | |
|----------------------------|---|
| Features | S&F (store and forward), full-wire speed, prioritising, software configurable, 4 priority queues per port, non-blocking, full-duplex (802.3x) with flow control, half-duplex with backpressure, port mirroring, VLAN, DiffServ, TFTP. Embedded broadcast and multi-cast storm protection. |
| Memory | 1 M byte memory, 112 k byte internal frame buffer/8192 MAC addresses |
| Ports | 4 x UTP/STP with auto MDI/MDIX, 1 x FO SFP transceiver |
| Extensionport | 1 x UTP/STP, fast backup with 802.1w(RSTP) |
| Power supply | External power supply for rapid installation/removal |
| Input voltage | 100-240V AC/47-63Hz |
| Output voltage | 3,3V DC or 3,3+48V DC for PoL |
| Power consumption, overall | max. 10 Watt for 7 active ports, max. 30.8 Watt for PoL |
| Power connection | 230 V: IEC mains chassis socket; 3.3V or 3.3+48V: 4pole Phoenix 3.81 mm |
| Installed depth | 39 mm |
| Ambient conditions | Operating: 0° ... 40°C, 20 ... 90% relative humidity, non-condensing |

| Optical interface | | | | |
|-------------------|---|--|----------------------|---------------|
| Standards | compliant with IEEE 802.3u (100 Mbit/s) and IEEE 802.3z (1000 Mbit/s) | | | |
| Fibres | Graded index fibre (50/125 bzw. 62,5/125µm) | | Singlemode (9/125µm) | |
| Connection | 100 Base FX | 1000 Base SX | 100 Base FX | 1000 Base LX |
| Wave length | 1270...1380nm | 770...860nm | 1260...1360nm | 1270...1355nm |
| Transmitter | LED | Laser | Laser | Laser |
| TX power | -14...-20 dBm | 3...-9,5 dBm | -8...-15 dBm | -3...-9,5 dBm |
| RX power | -12...-32 dBm | 0...-17 dBm | -5...-34 dBm | -3...-20 dBm |
| Distance, max. | 2 km | 550 m (50/125µm) 275 m (62,5/125µm) | 10 km | 10 km |

| Electrical interface | |
|----------------------|--|
| Connection | RJ 45 socket |
| Standards | Ethernet/Fast Ethernet/Gigabit Ethernet 10/100/1000 Base TX, per IEEE 802.3ab, 802.3af, 802.3u/z, 802.3x, 802.1x, 802.1q, 802.1p, 802.1w(RSTP) |

ISABEL 1000 has been tested according to DIN VDE 0710 guidelines. Compliance with these guidelines has been accomplished with strict application of DIN VDE 0710 for certification and accreditation per \equiv (double M) testing which is more stringent and extensive than certification pursuant to \equiv and \equiv . ISABEL 1000 is suitable for the installation in such surroundings.

*) The ISABEL module is completely fabricated (100%) from lead-free materials according to legal stipulations and the ROHS EU guidelines that become binding Europe-wide effective 01/06/2006 for all electronic components.

Subject to technical changes
ISABEL 1000 Prospekt_english.cdr
Stand 31. August 2006