

## Die folgenden Schnittstellenspezifikationen gelten für die Produkte der

- Deutsche Glasfaser Business GmbH
- Deutsche Glasfaser Wholesale GmbH

**Ansprechpartner:** Schnittstellenspezifikation@deutsche-glasfaser.de

## 1. Passive optische Schnittstelle am Hausübergabepunkt (HÜP) - Optisches Interface:

- Connector: LC/APC
- Patchkabel: ITU-T G.657
- Interface: 1000BASEBX10-U
  - TX Wellenlänge: 1310 nm
  - TX Wellenlänge range: 1260 - 1360 nm
  - TX Pegel: -3 - -9 dBm
  - RX Wellenlänge: 1490 nm
  - RX Wellenlänge range: 1480 - 1500 nm
  - RX Pegel: -3 - -19,5 dBm
  - Laser Class: 1 (IEC 60825-1)

## 2. Optical/Electrical converter:

- Compliant with 1000BASE-BX10-U, 10 km range
- Single mode fiber (ITU-T G.657),
- SC/APC connector,
- Managed Quality of Service,
- Remote port enabling/disabling, Remote per-port rate shaping and limiting,
- min 64 VLANs,
- Flow control setting
- min 4 1000/100/10Base-T RJ45 Interfaces
- CE approved, Safety: – IEC EN 60950 – IEC EN 60825-1:2001-08,
- Laser safety – IEC EN 60825-1: Class 1 laser product,
- Emission: EN 55022, Class B, EN 55024,
- RoHS/WEEE marking: Compliant with 2002/95/EC
  
- Full TR-069 Management enabled and support,
- Genexis GAPS (7.0 and higher) compatible,
- CLI DHCP/TFTP,
- IEEE 802.3ah OAM in passive mode: – Discovery – Loopback – Fault notification (dying gasp)

## 3. Router:

### WAN interface

- Option for:
  - 1000/100/10Base-T RJ-45 port
  - SFF (fixed fiber) interface (Compliant with 1000BASE-BX10-U)
  - Combo port (RJ-45 + SFP interface)
- VLAN per service triple play
- DHCP client
- PPPoE client
- IPv4/IPv6 dual stack
- IPv6 6rd
- MAP E/T

### LAN interface

- 4 1000/100/10Base-T LAN ports (RJ-45)

### Routing

- Line-speed (1000 Mbps) routing
- performance for packets > 256 byte.
- DHCP server
- NAT / PAT
- UPnP
- VPN pass-through
- SPI Firewall
- DMZ
- Mixed bridged/routed port(s) for IPTV
- IGMPv2, IGMPv3 snooping and proxy

### Voice

- SIP based Voice-over-IP
- G.711 A-law /  $\mu$ -law codec
- 5 REN support
- Line Echo Cancellation
- DTMF transmission: In-band, RFC2833,
- SIP-Info
- Class 5 features

### IEEE 802.11n / ac wireless interface

- IEEE 802.11b/g/n (2.4 and 5.0 GHz) 2T2R
- IEEE 802.11ac (5.0 GHz)
- Automatic channel selection
- Internal antennae
- WEP, WPA, WPA2
- WPS button for simple WLAN network setup
- Multiple SSIDs supported

**Management and control**

- TR-069, TR-098, TR-104
- Genexis Automatic Provisioning System (GAPS) compatible
- SNMP
- DHCP / TFTP
- CLI
- Fail-safe firmware upgrade
- Factory default reset button