

SCHNITTSTELLENSPEZIFIKATION

Die folgenden Schnittstellenspezifikationen gelten für die Produkte der:

- NEW Niederrhein Energie und Wasser GmbH

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

- Connector: LC/APC
- Patchkabel: ITU-T G.657
- Interface: 1000BASEX10-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:

- 1490nm wavelength downstream, 1310nm wavelength upstream
- 2.488Gb/s line rate downstream, 1.244Gb/s line rate upstream
- SC/APC optical connector
- Single mode fiber (ITU-T G.657)
- G.984.3-compliant Advanced Encryption Standard (AES) in downstream
- Compliant with ITU-T G.988, OMCI
- Compliant with ITU-T G.984.2 Amd1, Class B+
- G.984.3-compliant forward error correction (FEC) in both directions
- 802.1p fixed mapping to queues
- IEEE 802.3-compliant 10/100/1000Base-T ports
- Medium dependent interface/medium dependent interface crossover (MDI/MDIX) automatic sense

3. Router:

WAN interface

- Option for:
 - 1000/100/10Base-T RJ-45 port
 - SFP (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

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 / μ -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
- Genesis Automatic Provisioning System (GAPS) compatible
- SNMP
- DHCP / TFTP
- CLI
- Fail-safe firmware upgrade
- Factory default reset button