The network termination for the ISDN basic access is used to enable subscribers who are served via a two-wire local exchange line to be connected to an integrated services digital network.

The main advantage is that the existing two-wire line can then be retained to transmit standardized data rates of 64 kbit/s, thus providing the subscriber with access to several digital services.

The product range comprises different NTBAs according to the line codes transmitted:

- Standard-NTBA for line code 4B3T
- Euro-NTBA for line code 2B1Q

Bit-transparent duplex-transmission between exchange and NTBA provides high performance over several kilometers without regenerative repeaters.

Standardized interfaces on the subscriber side S/T and exchange side U conform to the relevant guidelines and recommendations from ITU-T, ETSI and FTZ.

Conformance to the recommendations and standards means that any device likewise meeting these recommendations will connect to an NTBA without problem.

Automatic power-down and power-up mode control minimizes power consumption.

An NTBA can be used to connect user terminals in three possible wiring configurations:

- Point-to-point
- Short passive bus
- Extended passive bus.

For each configuration there are specific electric values as set out in recommendation ITU-T I.430.

The NTBAs are housed in plastic cases measuring 110 mm x 150 mm x 45 mm (W x H x D) suitable for wall mounting or desktop use.

They can also be installed in subracks if the appropriate mounting kit is used.
The main purpose of an NTBA is to provide the NT1 function as per ITU-T I.411/I.412, i.e., detect the signals arriving on a two-wire line from an exchange, evaluate and convert them to the subscriber’s four-wire connection and vice versa.

This involves:

- Processing the line code 2B1Q or 4B3T
- Access control via signaling channel D
- Rapid fault detection through switching transparent loops
- Flexible powering arrangements:
  - integ. power supply for 230 V
  - integ. power supply for 115 V
  - emergency operation via the remote power fed from an exchange
- The NTBA supplies connected terminal equipment either directly from the integrated power supply (normal mode) or via the remote feed from the exchange in order to ensure that one terminal equipment maintains the basic telephony functions (emergency operation mode).

Device Versions

- For line code 4B3T:
  - NTBA for 230 V with integral power supply
- For line code 2B1Q:
  - Euro-NTBA for 230 V with integral power supply
  - Euro-NTBA for 115 V with integral power supply

Special device variants allow explicit use in different customer networks.

Product Overview

**Line Code 4B3T**
- Standard-NTBA (Deutsche Telekom) ................. S42024-A292-B1
- Standard-NTBA ........................................ S42024-A292-B27

**Line Code 2B1Q**
- Euro-NTBA 230 VAC: ................................. S42024-A260-C300
- Euro-NTBA 115 VAC ................................. S42024-A260-C310

1) Further costumer-specific adaptations are available.