NTBA

ISDN Systems

Network Terminator for ISDN Basic Connections
As a network terminator for ISDN basic connections, the NTBA enables the transition from the public ISDN network subscriber line to the private S-bus. The interface allows the connection of ISDN communications systems, ISDN terminals and ISDN PC cards, enabling subscribers to access all the services provided by their network operator.

For ISDN signalling, the system provides two 64-kbit/s bearer channels and a 16-kbit/s data channel (a signalling channel, which can also be used for data transmission). Two simultaneous external calls are possible, as is channel bundling, the use of both bearer channels for the transfer of large amounts of data.

The NTBA is available in two variants: the NTBA Standard variant (separate wall-mounted housing) and the NTBA Module variant (for plugging into a mounting rack). Power for all internal functions is supplied either by the exchange via the U-interface or locally. In addition, the NTBA Standard can be connected to an AC adapter or transformer and used as a local power supply for the ISDN terminals.
The Advantages of the ELCON System

- Simple conversion to an ISDN connection by use of existing subscriber lines
- Quick configuration using easy-to-reach DIP switches
- Low susceptibility to interference
- Small, compact housing
- Easy installation
- Highly economical, low power consumption
- Can be used for non-switched connections
- Doubling of system range with the ELCON ISDN Regenerator

Variants of the S-bus

The NTBA can be configured by means of DIP switches to meet subscribers’ personal requirements. Depending on the settings, up to eight terminals can be connected, resulting in varying ranges. The NTBA can be configured as follows:

1. Short passive bus
   In this case, a maximum of eight terminals can be connected to the NTBA (TE = Terminal Equipment).

2. Point-to-point connection
   This enables the connection of an ISDN communications system to the NTBA. Direct-dialling into the connected ISDN communications system is then possible.

3. Extended passive bus
   Up to four terminals can be operated on this type of bus.
### Technical Data

<table>
<thead>
<tr>
<th>U-interface</th>
<th>The U-interface at the exchange operates in accordance with the ETSI TS 102 080 guideline, using the echo compensation procedure for directional separation on a twin-wire subscriber line with a 4B3T or 2B1Q line code.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range: (if no noise signals occur)</td>
<td>4.8 km (2B1Q) or 4.2 km (4B3T) using Ø 0.4 mm cable 9.0 km (2B1Q) or 8.0 km (4B3T) using Ø 0.6 mm cable</td>
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<tr>
<td>S/T interface</td>
<td>In accordance with the ETS 300012 guideline</td>
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<tr>
<td>Range:</td>
<td>max. 220 m (short passive bus) max. 1,100 m (point-to-point connection)</td>
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<tr>
<td>Power supply</td>
<td>Rated voltage: 230 V AC, 50 Hz (optionally 110 V AC, 60 Hz)</td>
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<td>Power consumption:</td>
<td>14 VA (NTBA Standard)</td>
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<tr>
<td>Housing dimensions</td>
<td>NTBA Standard: 116 x 105 x 38 mm (W x H x D) NTBA Module: 28.5 x 95 x 85 mm (W x H x D)</td>
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<tr>
<td>Ambient temperatures</td>
<td>Transport/storage: -25°C to +55°C Operation: 0°C to +55°C</td>
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</tbody>
</table>

### Example of Application

![Diagram of ISDN exchange and NTBA connection](image-url)

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