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GERMAN SECURITY SOLUTIONS

**Telephone Line Monitoring**

Zebra E1/T1 Gateway

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# Telephone line Monitoring Zebra E1-T1 Gateway

The Zebra E1/T1 gateway is designed to connect the Zebra monitoring centre system to E1/T1 telephony networks. It provides a highly dense connectivity solution: 64 E1/T1 carriers can be intercepted in a single 1U 19" rack module. Used in conjunction with the Zebra monitoring centre system, the Zebra gateway provides a very powerful telecommunications monitoring solution.

Unlike general purpose media gateways and protocol converters, the Zebra gateway is designed to support the requirements of communication monitoring. This allows the Zebra monitoring centre system to support features that were not possible with the previous generation of monitoring equipment, for example:

- The Zebra gateway and Zebra monitoring centre system can intercept 31 SS7 signaling timeslots on every one of 64 E1 streams connected to the gateway. This is a total of 3 968 input signaling timeslots connected in a single 1U 19" rack module
- The Zebra gateway supports any combination of hyper channels (consecutive timeslots used together to provide one bigger n x 64 kbps channel) together with E0/D0 (64 kbps) channels on the same carrier
- The Zebra gateway supports channelized E1/T1 streams (unframed streams used as primary rate bit streams)
- E1/T1, E0/DS0 channels, hyper channels and channelized primary rate carriers can be mixed on the same gateway
- The Zebra E1/T1 gateway can be used in conjunction with other Zebra gateways (for example: the Zebra STM1/OC3 gateway) in the same Zebra monitoring centre system
- The Zebra monitoring centre system reads data from the Zebra gateway over Ethernet, allowing the processing of monitored streams to be farmed out to as many servers on the network as required for the connected capacity. This allows a Zebra system to be scaled up to an unprecedented capacity of thousands of E1/T1 carriers in a single system

## Specifications

| | |
|---|---|
| Dimensions | The Zebra E1/T1 gateway is a 1U 19" rack module. |
| weight | 8kg |
| Capacity | 128 inputs providing for the monitoring of 64 E1/T1 carriers per gateway.<br>All the traffic offered on every connected E1/T1 carrier can be processed. |
| Carrier type configuration | Each input can be individually configured as E1 or T1. |
| Channel configuration | Any combination of signaling channels, bearer channels, hyper channels and channelized primary rate may be configured. |
| Input signal strength | 0 to – 40dB |
| Termination and connectivity | Input: 75 Ω, 100 Ωand 120Ω.<br>The Zebra E1/T1 gateway takes 16 input pairs on each of 8 DB44 connectors on the gateway's backplane, for a total of 128 input pairs.<br>We offer rack-mountable high-Z buffers with 8-pair Crone connection blocks for termination of passively monitored live carriers.<br>Satellite and active inputs can be terminated directly in the Zebra gateway. |
| LAN | 1 Gbps Ethernet<br>Copper or fiber |
| AC power input | 110V to 240V AC<br>Automatic switching |
| Redundant power input | 48V DC |
| Power consumption | 100W |
| VoIP | The Zebra gateway supports the interception of VoIP streams in hyper channels or channelized primary rate.<br>Protocol processing is on open platforms. |
| ATM | Interception of ATM carried over E1/T1 is supported.<br>Protocol processing happens on open platforms. |

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