SDH Monitor 3.0 Datasheet

E1/T1-on-SDH/SONET monitoring

SDH Monitor 3.0 extracts signalling and voice from E1/T1 links carried on SDH/SONET links in fixed and mobile telephone networks. It connects to 155Mbit/s STM-1/OC-3 links, extracts a subset of the the E1/T1 links inside them, decodes layer 1 and layer 2 of the protocol stack and then forwards the monitored data to an external server over TCP/IP.

SDH Monitor 3.0 is permanently installed in the PSTN SS7 network, on GSM Gb, Abis, A, C, D, E and F links and on 3G lub, lucs and lups links. The monitored data can be used for real-time billing, fraud detection and network supervision. It can also be used to create new services, for instance SMS welcome.

Corelatus hardware is in its fifth design generation and has shipped in volume since 2001.

Monitored protocols

SS7 MTP-2 in narrow-band 56/64 kbit/s and wide-band Nx64 kbit/s variants. Support for ITU-T Q.703, including Annex A, as well as ANSI T1.111.2.

Frame Relay in arbitrary channel widths from 64 kbit/s to 1984 kbit/s. Support for ITU-T Q.922.

ATM-based HSSL Support for ITU-T I.361, ITU-T I.363.5 and ANSI T1.111.2A with interfaces at the CPCS (AAL5) and AAL0 sublayers.

ISDN LAPD, as per ITU-T Q.921.

Easy to interface

The GTH probe is controlled by an external application through an OS- and language-neutral text-over-TCP/IP/ethernet API. Sample code in popular languages and an API guide are online at: https://www.corelatus.com/gth/api/



Hardware features

19" x 1U chassis, WxDxH: 482 x 144 x 42 mm. 3 kg.

One chassis holds one or three sub-modules, providing 2 or 6 SFP sockets in a 1U rack space. One chassis can thus monitor *both* directions of 1 or 3 SDH/SONET links.

Dual 10/100 Mbit/s ethernet, both support Power over Ethernet (PoE).

Power consumption typically 6 W per sub-module (up to 18 W per chassis).

Dual, independent 48VDC power inputs.

No moving parts, passively cooled.

Measured MTBF: more than 130 module-years between failures, measured over all modules shipped since 2001.

