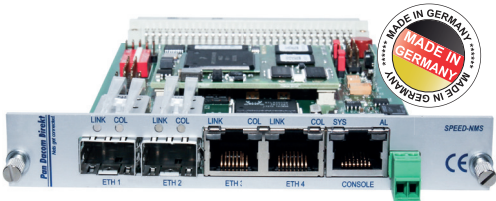


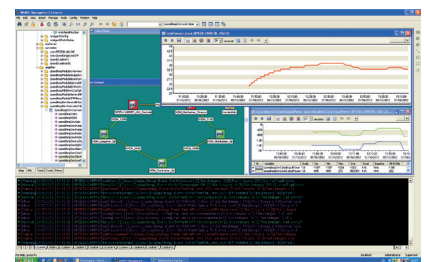
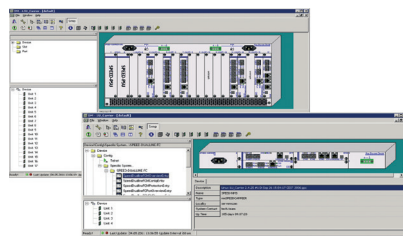
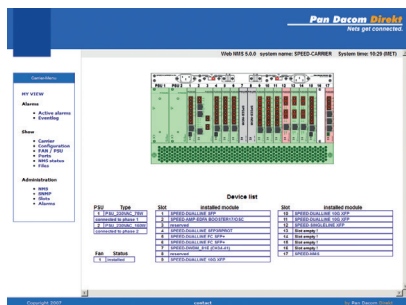
Management Module for central Monitoring and Configuration of all SPEED-System Modules



- » SNMPv1, v2c or v3 management
- » User-friendly and intuitive web interface (HTTP/HTTPS)
- » RADIUS user authentication
- » SSHv2 (incl. SCP) or telnet access
- » Port based alarm lock (time controlled alarm activation)
- » Configuration storage and software update of all slots via NMS module
- » Automatic configuration update after replacement of a module



SPEED-NMS Module for Monitoring of a SPEED-CARRIER System

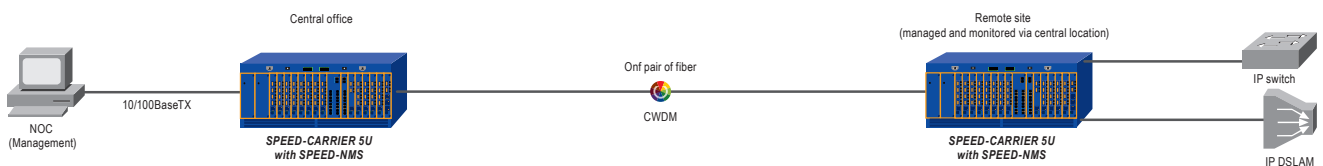


The SPEED-NMS module is the central management hub of the SPEED-OTS-5000 system. Configuration and monitoring of integrated modules are performed by a graphical HTML-based interface (Web GUI), SNMP or Command Line Interface. Using the corresponding Pan Dacom Direkt MIB table the SPEED-OTS-5000 can be integrated into existing SNMP based management systems. With extensive monitoring features (such as

transceivers RX-/TX-level, temperature etc.) the system status can be analyzed. SNMP traps are sent constantly for each status change. Furthermore the SPEED-NMS module supports an intuitive web interface which encrypts all data transfers (HTTPS). This enables an easy configuration and provides a consolidated overview of the entire system. For quick troubleshooting all slots and ports are color-coded within the web interface according to their status. In

addition an „Active Alarms List“ is available which shows an overview of all the critical states. All alarms are stored in an alarm history file. Individual port labels enable a fast assignment of errors to a client or service. Physical access to the SPEED-NMS module is provided by a RS232 interface or an integrated 4-port Ethernet switch supporting two 10/100BaseTX and two SFP ports.

Remote Management, Third Party Ethernet Management and automatic Configuration Updates



A connection to the remote site can be established via an in-band channel of an amplifier, a TDM card or using an own CWDM or DWDM wavelengths for the management information. With the integrated Ethernet switch additional network units can be managed by Ethernet at a location

where a SPEED-CARRIER system is installed. In this case, the Ethernet management port of a network unit can be connected directly to a switch port of the SPEED-NMS module. So management information and additional data are transmitted using a dedicated wavelength. No additional transponder

module is needed. In the case that a module has to be replaced on site, the whole configuration of this module is redundantly saved on the NMS card and will automatically be updated on the new module. So there is no site configurations needed.

Specifications

Physical interfaces

- 1 x Console port: RS.232 (V24)
- 2 x Ethernet ports 10/100BaseTX, RJ-45 AUTO MDI-X
- 2 x Ethernet ports 100BaseFX (SFP based)
- 1 x floating alarm relay (opening or closing)

Hardware

- Dimension (H x W x D): 20 x 129 x 175 mm
- Operating temperature: 5 to 40°C
- Humidity: 10 to 80% (non-condensing)
- Power consumption: 4 W (without SFPs)
- Compliance: EN 55022/C1, B, EN 55024, EN 60950
- Design: 3U

Supported protocols (disabled on demand)

- SNMPv1, v2c and v3
- SNMPv2 Traps
- HTTP/HTTPS
- SSHv2
- SCP
- Telnet
- TFTP server and client
- NTP client/time zone configurable
- Radius user authentication

Miscellaneous

- Factory Default per DIP