

CODAN 8800 DMR MINet overview

CODAN Digital Microwave Radio MINet Concept

A network management system (NMS) is a system that monitors the status of elements within a given network. It adjusts their parameters as necessary to ensure proper communications and displays network elements and their attributes.

Using MINet, operators can configure a CODAN 8800 system, monitor and analyse events, make adjustments and report network events based on displayed information.

MINet uses the familiar Microsoft Windows environment and the Simple Network Management Protocol (SNMP) to communicate and manage links having management platforms based on TCP/IP.

The screenshot displays the MINet software interface. At the top, there is a menu bar (File, Link Operations, View, Functions, Options, Window, Help) and a toolbar. Below the menu is a graphical representation of a network link with two radio units. Each unit has three status indicators: Tx Power (green), RSL (red), and ODR (yellow). Below the units are two 'Link Settings' windows. The left window is for 'Codan DMR000004' and the right window is for 'Codan DMR000008'. Both windows show a table of parameters and their values.

Parameter	Value
Link Name	Codan DMR
Link ID	1
DIU Number	08-08307-001
DIU Description	E3 (BNC-75ohm) + 16 E1 (RJ48-120ohm)
ODU Part Number	03-00000-000
ODU Description	ETSI Standard, 13GHz (256), Freq.Band 1
Link Capacity	E3
Channel Number	168 (12793.00 Mhz)
Tx Power	27 dBm
System Up-Time	3:13:13 (h:m:s)

Parameter	Value
Link Name	Codan DMR
Link ID	1
DIU Number	08-08307-001
DIU Description	E3 (BNC-75ohm) + 16 E1 (RJ48-120ohm)
ODU Part Number	03-00000-000
ODU Description	ETSI Standard, 13GHz (256), Freq.Band 3
Link Capacity	E3
Channel Number	168 (13059.00 Mhz)
Tx Power	27 dBm
System Up-Time	3:13:22 (h:m:s)

At the bottom of the interface, there are status indicators for the link: ONLINE, NORMAL, ONLINE, NORMAL, ADVANCED, SUPER.

MINet and 8800 DMR Digital Microwave Radio

The 8800 series digital microwave radio is equipped with a network management system (NMS). The CODAN 8800 NMS contains two components:

- an SNMP-based management system called MINet that is installed on a PC
- an SNMP agent that is physically embedded in the IDU.

The management system and agent communicate with one another using the SNMP protocol over TCP/IP. The SNMP agent contains a database of standard and private SNMP Management Information dataBases (MIBs). To acquire information, the management communicates with the agent's database. Thus, the management system generally functions as a master and the agent as a slave.

An exception to this master-slave relationship is the handling of important alarm notifications. These agent-initiated messages or alarms, which are sent to the management system, are called traps.

Note that MINet does not have a capability to receive the traps itself directly but rather re-directs the traps to specific user-determined trap recipient IP addresses. HP OpenView and some Windows Operating Systems, for

example, have in-built trap manager capabilities.

MINet Features

MINet, provides the following features:

- **A Graphical User Interface (GUI) based windows environment**
- **Ability to configure and set a terminal's properties**
- **Ability to view all data port information**
- **Remote access over the Internet**
- **Traffic monitoring**
- **Alarm, status, security, performance, test and configuration management**
- **Ability to download firmware upgrades to local, remote and network terminals**

Digital Microwave Radio | Network Management

CODAN 8800 DMR MINet overview

http://digital-microwave-radio.at-communication.com/en/at/digital_microwave_radio_8800_minet.html