

# Surveillance System

## Application

The surveillance system is used to monitor the status of the active equipment of a wireless distributed communication system. The offered surveillance system can be easily adapted to the requirements of the actual communication installation. For example, it could be a highly sophisticated and complex subway system or an in-building system. In all cases the system owner requires a centralized surveillance from an operation room. The location of this operation room is independent of the system to be monitored.

The monitoring operator uses a standard PC being linked via modem and the public telephone network to one or several master unit(s) depending on the size of the communication system. The operator is able to call the actual status of the active equipment. Vice versa, each equipment is able to send alarm messages to the operator.

The surveillance system bases on the PROFIBUS platform which is a well introduced industrial standard. The transmission of the data could be done on copper using the protocols RS-485 or RS-232. For longer distances the fiber optic solution is available.

## Features

- Surveillances system for active equipment
- Monitoring the status of the equipment
- Equipment sends alarm messages to the operation room
- Operator calls the actual status from the various active equipment
- PROFIBUS platform
- Wired and optical transmission
- Flexible adaptation from small to complex surveillance solutions
- Control center based on PC running under Windows®
- Alarm documentation:
  - Print-out
  - Log file, incl. location and time
- Optional extensions for alarms messages:
  - Pager
  - LAN
  - TCP/IP protocol
  - ASCII for the text messages
  - Automatic appearance of status information window on the screen

## SYSTEM DATA

Platform	PROFIBUS standard
Surveillance modes	1. supervision of one line (master unit mode) 2. supervision of several lines (OEM mode)
Interface master unit level	RS-485
Interface OEM level	RS-232
No. of functions per unit	max. 8, monitoring dry relay contacts
No. of units per location	max. 5
No. of locations per master unit	max. 20
No. of sub-systems in OEM mode	max. 10
Extension of the above limitations	optional, on request
Computer equipment	PC, running Windows®

## ELECTRICAL TRANSMISSION

Transmission modus	wired transmission using modems
Electrical transmission length	max. 1.2 km (0.75 miles) per segment, max. 9 segments using RS-485 links
Cable type	PROFIBUS cables for RS-485 links, common twisted pair cables for RS-232 links

## OPTICAL TRANSMISSION

Transmission modus	optical transmission using optical modules
Optical transmission length	max. 10 km (6.2 miles) per segment, no. of segments not limited
Wave length	1310 nm
Cable type	mono mode