# decontis.

## Digital TV
## Mobile DTV

## Monitoring

# ISDB-T

# ISDB-T$_b$

# 1seg

# SAM-MT 500

## ISDB Monitoring Probe
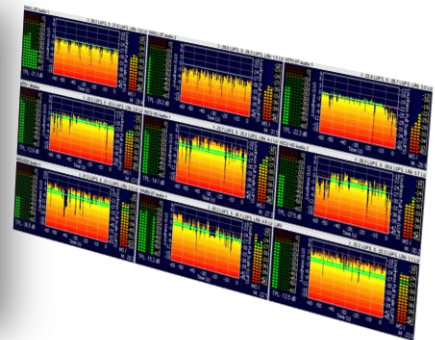


### ◇ Key Features

- **24/7 real-time monitoring of hundreds of parameters on all technical layers**
  - RF
  - MPEG TR 101 290
  - PID- and Program Bitrate Measurement
  - EPG
  - Closed Captions
  - Audio/Video
  - Loudness acc. ITU-R BS.1770.3, EBU R-128
  - Conditional Access
- **monitoring up to 8 multiplexes (MPTS) simultaneously**
- **support of a wide variety of input and output interfaces**
  - RF
  - ASI
  - IP
  - File

  also in mixed configurations

- **streaming and transcoding the entire A/V content to any remote location**
- **TS snapshot creation and TS streaming for in-depth problem analysis**
- **individual configuration of error/warning thresholds and SNMP Traps**
- **completely remote configurable via SNMP or Remote Desktop**
- **comprehensive logging all events**

### ◇ SAM-MT 500  At a Glance

SAM-MT 500 is a cost efficient turnkey solution based on common server- and interface hardware. It enables network operators to monitor ISDB-T/Tb and 1seg broadcasts area wide.

Up to 8 multiplexes (MPTS)  can be monitored in real-time and simultaneously on a single device, providing a very small footprint and affordable CAPEX and OPEX.

The solution offers a wide range of use cases:
- SNMP based monitoring of hundreds of parameters in real-time
- visual monitoring all DTV and MDTV services simultaneously
- in-depth remote problem analysis on all technical layers

SAM-MT 500 is suited for operation in the head-end, at transmitter side and in the field.

## Solutions for Analysis and Monitoring

## ◇ Application

**(1) DTV + MDTV Monitoring Network**

Monitoring Probes **SAM-MT 500** receive the broadcast via RF, ASI or IP. Hundreds of parameters are analyzed simultaneously in real-time on all technical layers. The monitoring results and alarms are sent to the operation centers. Additionally the Audio/Video content can be transcoded and streamed to any remote location.

**(2) Administration + Maintenance**

Network administration and maintenance staff or system engineers can access the monitoring probes via SNMP or via Remote Desktop using the comfortable GUI. Beside all configuration tasks a remote problem analysis can be performed either by streaming the entire TS to the remote location or by creation of TS snapshots. With **isdbSAM Analysis Pack** the TS can be analyzed in any regard up to the last bit.

**(3) Operation Center**

The Network Management System (NMS) running in the operation center receives all monitoring results and alarms and visualize these for the operators service staff. Especially the decontis **isdbSAM Operation Center Solution** provides a lot of unique features and thus qualified perfectly as central operator component.

**(4) Status View**

A monitoring viewer application collects and aggregates the monitoring status of all isdbSAM based monitoring probes operated by one or several operation centers. It visualizes the current status of all monitoring probes within comfortable Status View and map displays in a read-only manner.

### Digital TV + Mobile DTV Network
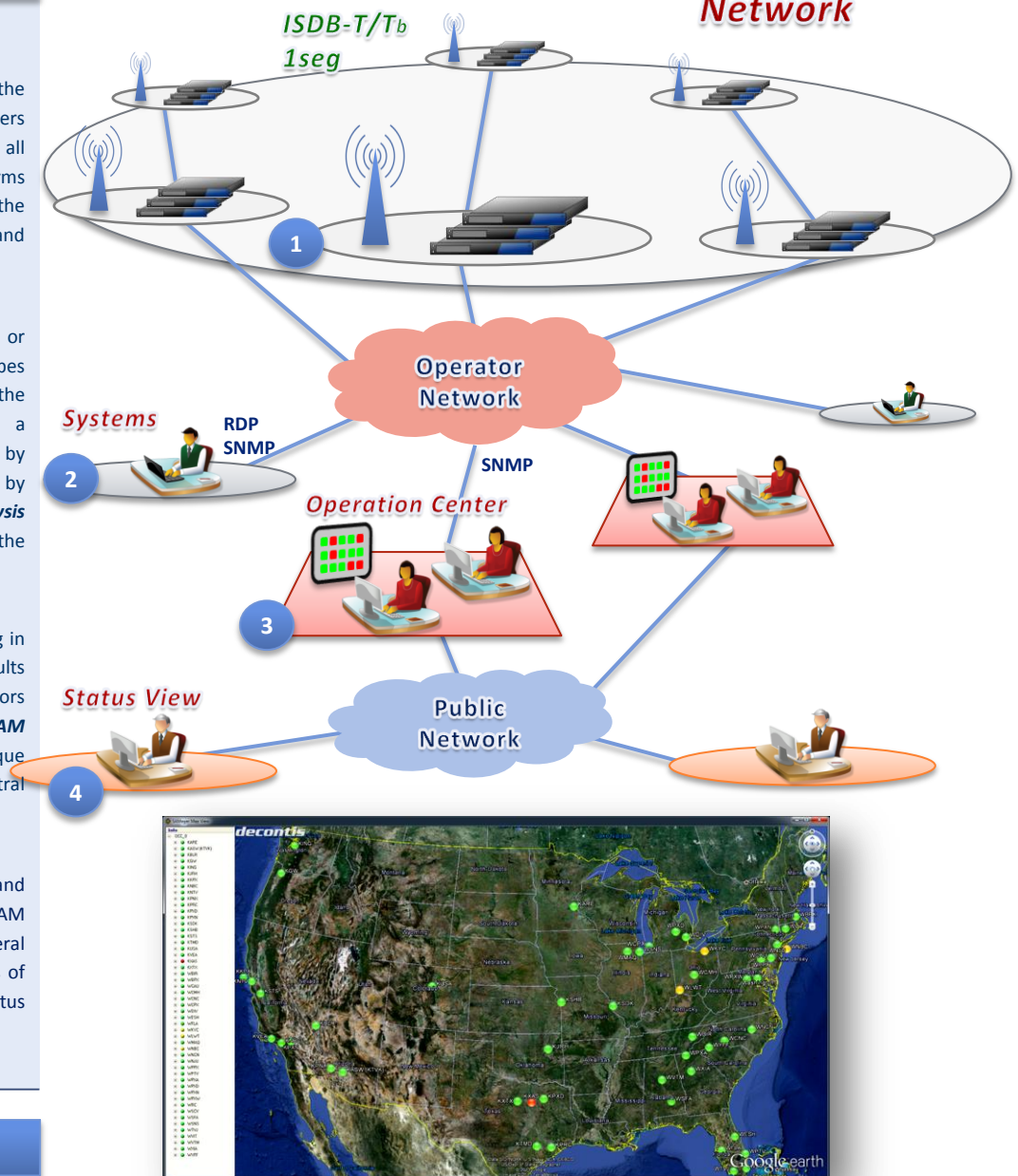


## ◇ Technical Specification

### Interfaces - MPTS [1]

|  | RF | ASI | IP |
|---|---|---|---|
| Rack Server 1HU | 1..2 | 1..4 | 1..8 |
| Rack Server 2HU | 1..4 | 1..8 | 1..8 |
| Tower Server | 1..4 | 1..8 | 1..8 |

[1]  ISDB-T/T$_b$, 1seg

### RF Input

|  | ISDB-T/T$_b$, 1seg |
|---|---|
| Input | 75 Ω |
| Freq. Range | VHF/UHF |

### ASI Input

| Input | 75 Ω |
|---|---|
| Bit Rate | 0..214 Mbit/s |
| Packet Size | 188/204 Bytes |

### IP Input

1000 Mbit/s Ethernet

### System [2]

| Processor | Intel Core i7 |
|---|---|
| RAM | 8 GByte |
| HD | 500 Gbyte |
| USB | 2.0 / 3.0 |
| Voltage | 110 .. 220 V AC |

[2]  system components are individual configurable

### OS

Windows 7 professional / ultimate / enterprise

Windows Server 2008

### Dimensions [3]

|  | Dimension | Weight |
|---|---|---|
| Rack Server 1HU | 483 x 43 x 600 mm | 10 kg |
| Rack Server 2HU | 483 x 87 x 684 mm | 25 kg |
| Tower Server | 360 x 175 x 417 mm | 9 kg |

[3]  depends on actual configuration