The DVB-T/H Analyzer GOLDENEAGLE® is a sophisticated reception equipment dedicated for network monitoring, analyzing and validation of compliance with the DVB-T and DVB-H standard.

The DVB-T/H Analyzer GOLDENEAGLE® is compatible with all DVB-T and DVB-H broadcasting systems and provides real-time, centralized control of broadcasting signal quality featuring multi-layer protocol analysis (RF, DVB-T, DVB-H, IP) enabling operators to ensure maximum network uptime, improve user satisfaction and reduce operating costs.

The unique DVB-T/H analyzing functionalities make it also an ideal reference receiver, laboratory tester and development tool for mobile TV equipment manufacturers, service designers, broadcast operators, system integrators and semiconductor suppliers.

GOLDENEAGLE® remote multi-site management mechanisms, based on the SNMP standard, ensure continuous full visibility of the entire DVB-T/H network status, as well as automated detection and alarm in case of non-nominal behaviour in any part of the broadcasting system. The centralised alarms information based on multiple parameter thresholds ensures that all potential problems are quickly isolated and solved.

The DVB-T/H Analyzer GOLDENEAGLE® incorporates friendly graphical user interface, designed to reduce the cost of maintenance for large commercial-scale networks, as well as to accelerate the time of development and testing for all new DVB-T/H products and services in R&D labs.

The equipment can be located anywhere in the reception area, and be operated remotely via any connection supporting TCP/IP, thus allowing for example a central NOC to perform an "end-of-the-chain" test. The input signal is taken both from "off-the-air" or ASI interface, therefore the DVB-T/H Analyzer GOLDENEAGLE® can be installed directly within the transmission chain, or any remote location, where the real reception conditions can be met.

Optionally for the network planning and service coverage applications the DVB-T/H Analyzer GOLDENEAGLE® can be mounted in a vehicle to allow mobile monitoring.
BENEFITS FOR MOBILE TV BROADCASTERS & CELLULAR OPERATORS

- **Lower network maintenance costs**
  - Reduced on-site and remote intervention in case of failure
  - Centralized system control
- **Higher usage of Mobile TV**
  - Availability of service enables and encourages users to watch more and to subscribe for premium services
- **Reduced churn**
  - Increased customer’s satisfaction and loyalty
- **Faster network deployment**
  - Monitoring and analyzing simplifies complex deployment decisions
  - Dynamic adjustment in network parameters
- **Increased advertising revenues**
  - Control of the quality of service
  - Visual service proofs
- **Ready for future network evolutions**
  - Efficiently managed digital switch-over
  - Early detection of eventual problems due to change of spectrum allocations and launch of new services

SPECIFICATIONS & FEATURES

**Hardware Description**
- 2U - 19”
- DVB-H receiver band III / IV / V
- ASI Input for reception and monitoring of MPEG transport stream
- RF input (input level from 30 to 80 DBµV)
- Channel bandwidth: 6, 7 and 8 MHz
- Compatible: QPSK, 16 QAM, 64 QAM

**Communication ports**
- Ethernet connection: RJ45 connector 10/100 Base-T port
- Local console link: COM port
- USB port: used to connect an optional webcam

**Communication protocols**
- TCP/IP, UDP, HTTP (+CGI scripts), FTP, SMTP, TELNET, SNMP (MIB integrated), PPP (client & server)

**Options**
- Broadcast MANAGER server software

**RF Layer Analysis**
- RF level
- Carrier / noise measurements
- Modulation: constellation analysis, MER, BER
- Channel impulse response visualization and MIP analysis (for SFN networks)
- Compatible with 2K, 4k and 8k COFDM modulation modes

**MPEG2 Layer Analysis**
- DVB-T 1st, 2nd and 3rd priority monitoring (TR101290)
- Detection of all PIDs
- Transport packets usage withMPE/MPE-FEC sections and SI/PSI tables
- Jitter analysis

**MPE Layer Analysis**
- Visualization of the DVB-H burst structure & measurement of delay for each DVB-H packet
- Clear text output of the SI/PSI tables
- Visualization of the Delta-T information
- Measurement of uncorrected MPE-FEC frames

**IP Layer Analysis**
- Time reference of each received IP packet
- Source and destination IP addresses and UDP ports