



DGQoS

Stay tuned

Meter

Digital television requires significantly fewer measurement parameters to evaluate the quality of the transmitter output signal. Broadcasters and Network Operators are increasingly interested in knowing the real performance of terrestrial DTT networks, critical especially after the introduction of SFN transmission.

The DGQoS Meter allows operators to accurately verify the quality of signals received in viewers' homes emulating the reception quality of set-top boxes and TVset.

The DGQoS Meter performs a significant amount of measurements: RF signal level, MER, BER in key decoding spots and PER.



SPECIFICATIONS

SUPPORTED STANDARDS

- DVB-T/T2
- DVB-C
- ISDB-T

RF INPUT

- 1 x F connector – 75 Ω
- Input level: -20 to -65dBm on 75 ohms resolution ± 0.1 dB, precision ± 1 dB
- 48 MHz to 862 MHz in DVB-T/T2 and ISDB-T/Tb
- Bandwidth: 6, 7 or 8 MHz
- Loopthru connector for user convenience

INTERFACE

- 10/100 Electrical Base-T
- Local data on a 3" touchscreen monitor
- Raw TCP connection with ASCII communication protocol (for OEM)

RF ANALISYS

- Input level: -20 dBm to -65 dBm
- MER: 20 dB to >38 dB, resolution 0.1 dB, precision ± 1 dB
- BER pre Viterbi, resolution down to 1×10^{-8}
- BER post Viterbi, resolution down to 1×10^{-6}
- TPS monitoring and comparing of all TPS parameters (fft, coderates, guard interval etc..) included reserved TPS content

MEASUREMENT DATA

- Signal Power Bar graph
- SFN Window

GRAPHICAL INFO

- Constellation Pattern
- Channel Impulse Response
- MER carrier per carrier
- Percentage bars for MER, BER
- Channel power, wireless modem reception

CONTROL/TRANSMISSION DATA

- 2G/3G Mobile data connection
- DSL
- HTTP control interface (optional)
- Control protocol:
 - ASCII over raw TCP connection
- SNMP v2C (optional)
- FTP server for accumulated data download and firmware upgrade (optional)

PHYSICAL

- Supply voltage: 9-14v AC/DC – 5W (7W avg during mobile trasmission)
- Compact aluminium package (220 x 150 x 50 mm)
- Operating temperature range: 0°C to 50°C

FUNCTIONAL MODES

▪ Sequencing Mode

Connects to the internet thru 2G/3G or DSL and remains in this condition. Monitors programmed channels in round robin mode.

▪ Real Time mode

Used to monitor in real time all available Datapoints. The user sends a request, the answer from the probe is sent as soon as possible which usually means a few seconds (channel power, MER, BER) to about a minute (constellation diagram, Echo pattern).

▪ Efficient mode (soon available)

Monitors programmed channels in diluted intervals, connects to the internet a few times a day but remains in listen mode in order to be called.

▪ Low power mode (soon available)

Monitors a few times a day then turns off. Connects to the internet only for downloading data.

SEQUENCING AND REAL TIME MODES

There are 2 ways of operating the probe in normal mode: SCAN and REAL TIME. In SCAN the probe sequences thru the programmed channels and logs the data to the control center. The amount of data is user programmable. SCAN mode can be switched to REAL TIME. Once in REAL TIME the probe awaits user commands. The probe becomes a slave, it answers any user queries.

The probe returns to SCAN mode automatically after a user programmed amount of time if no further command is received.