

EDGEPROBE NANO

DVB-T/T2

Combined with a **Network Monitoring System** or not, the EdgeProbe Nano provides a powerful network alert & diagnosis tool allowing DTV network operators to monitor global trends and anticipate potential failures.

EdgeProbe Nano is able to monitor **DVB-T** and **DVB-T2** signals at transmitter outputs through its **RF input**. It can continuously logs all events & measurement values in an archive file, and can send SNMP traps if selected parameters' values exceed defined thresholds. For troubleshooting, a low bandwidth remote Web GUI gives access to all monitored parameters, from RF to baseband.

EdgeProbe Nano provides monitoring of the signal at different levels:

- **RF transmission:** measures key RF signal parameters (Level, MER, SNR, BER) and indicates the modulation parameters as well as the **Channel Impulse Response (CIR)**.
- **MPEG-2 TS:** checks the ETSI TR 101 290 (Priority 1, 2 & 3) conformance and provides optional Quality of Service indicators (Service Availability, Service Degradation). The **Service Plan** provides the means to check the **description of your multiplexes** and verify your **regional services**.

The **Scanning** provides a powerful tool for **sequential monitoring** of **multiple channels** (frequencies/PLPs) with a single probe.

With its **ASI output** it can also be used as a powerful rebroadcasting receiver, while the **IP forward** is the gateway from RF to IP networks.

NEW Coupled with a **TRANSBOX** device, EdgeProbe Nano provides **service compression** (transcoding) and **streaming** to third-party analysis systems for **confidence monitoring**.

CHARACTERISTICS

1x RF in, 1x ASI out, 1x IP Control/Data in/out (VLAN support)
DVB-T, DVB-T2, DVB-T2 Lite support
RF accurate measurements: Level, SNR, MER, BER
Channel Impulse Response monitoring
Multiplex & Service Plan check
ETSI TS 101 290 validation: Priority 1, 2, 3 and QoS SAE/SDE
MPEG-2 TS over ASI out or IP forward for video QoE monitoring
Service Compression and Streaming via TRANSBOX
32 GB storage for MPEG-2 TS record and 6 months logs & trends

EDGEPROBE NANO IS THE MOST TINY AND COMPACT RF PROBE WITH NO COMPROMISE ON QUALITY!

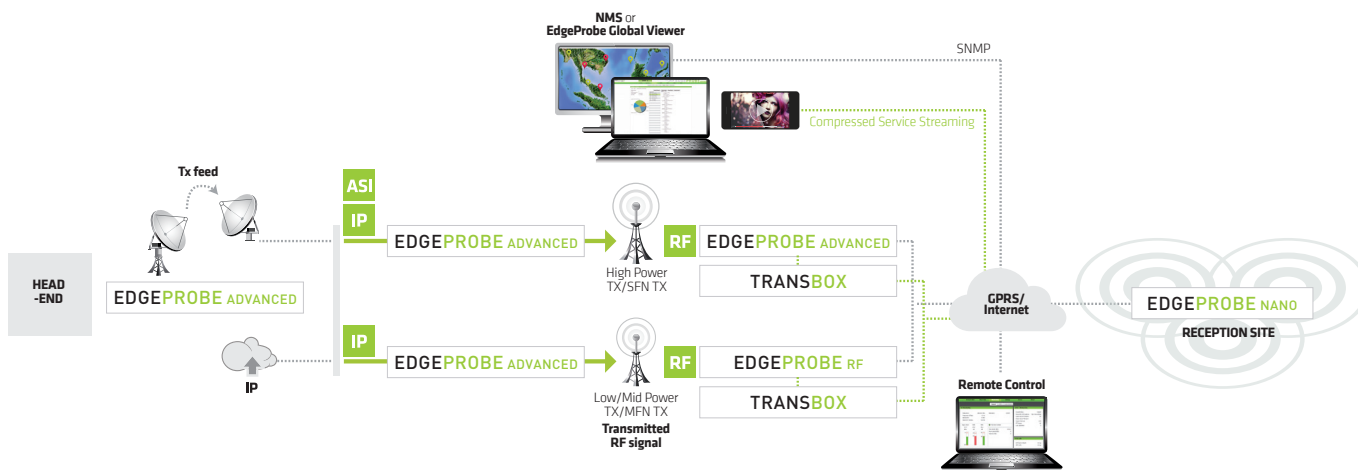


APPLICATIONS

- **Network operators:**
 - automate the tests of new transmitter
 - temporary monitoring/investigation tool
 - rebroadcasting receiver: RF to ASI or IP
- **Broadcasters:** off-air monitoring probe to validate the on-air content
- **TV/STB producers:** automated tests against a professional receiver
- **Labs:** easy & simple access to live DT sources via RF

BENEFITS

- **Small, Silent & Magnetized:** can be installed anywhere
- Easy to use and configure
- **Standalone:** no need for PC
- Enables **SNMP test automation**
- Low power consumption **8W**



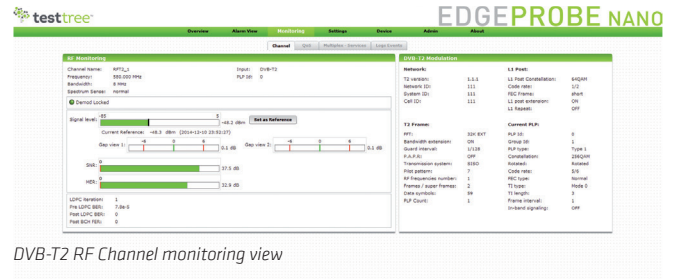
INTERFACES

Control/Data	1x Gigabit Ethernet for Web GUI, SNMP-V2C and IP Data in/out (VLAN support)
RF	1 x RF input (N-type female - 50 Ω)
Standard	DVB-T, DVB-T2 (including 1.3.1), DVB-T2 Lite
Frequency range	40 to 1000 MHz
Sensitivity	-80 to -5 dBm
Channel bandwidth	1.7, 5, 6, 7 & 8 MHz
MPEG-2 TS	1x ASI output (BNC-type female - 75 Ω)



MONITORING FEATURES

RF Monitor	Demodulation status: Lock / Unlock Signal level: -90 to -5 dBm ±1 dBm, typically ±0.5 dBm, resolution 0.2 dBm MER: 0 to 40 dB (0 to 36 dB: ±1 dB, 36 to 40 dB: ±2 dB) SNR: 0 to 40 dB ±1 dB BER (DVB-T): Pre/Post-Viterbi, Post-RS BER (DVB-T2): Pre/Post-LDPC, Post-BCH Modulation parameters: L1 signaling in DVB-T2, TPS in DVB-T Channel Impulse Response (CIR)
TS Monitor Base	ETSI TR 101 290 Priority 1 and 2
TS Monitor Advanced	ETSI TR 101 290 Priority 3
QoS Monitor	SAE (Service Availability Error) SDE (Service Degradation Error)
Service Plan	Verify regional services Service & PID bitrates, Scrambling, Service & PID presence
Scanning	Monitor sequentially multiple channel frequencies over 1 RF input
Extended Memory	32 GB of internal storage for: · Event logs up to 6 months · Trends up to 6 months · TS recording
TRANSBOX	Combined with a TRANSBOX device, EdgeProbe Nano provides service compression (transcoding) and streaming to third-party analysis systems



DVB-T2 RF Channel monitoring view



Channel Impulse Response monitoring view

PHYSICAL

Height: 30 mm / 1.2 in, Width: 144 mm / 5.6 in, Depth: 137 mm / 5.3 in
Power supply: 12 VDC, 100-240 VAC to 12 VDC adapter provided
Power consumption: 8W

ENVIRONMENT

Operating temperature: -20 to 55°C / -4 to 131°F
Storage temperature: -20°C to 70°C / -4°F to 158°F
Humidity: 0 to 95%, non condensing

ORDERING CODES

EdgeProbe Nano	DVB-T/T2 Nano Monitoring Probe												
<i>Included</i>	RF to ASI, RF to IP, RF + CIR monitoring, VLAN												
<i>SW options</i>	<table border="0"> <tr> <td>Scanning</td> <td>Multiple RF channels sequential monitoring over 1 RF input</td> </tr> <tr> <td>TS Monitor Base</td> <td>ETR290 Priority 1, 2 monitoring</td> </tr> <tr> <td>TS Monitor Advanced</td> <td>ETR290 Priority 3 monitoring</td> </tr> <tr> <td>QoS Monitor</td> <td>SAE, SDE monitoring</td> </tr> <tr> <td>Service Plan</td> <td>Multiplex Service/PID monitoring</td> </tr> <tr> <td>Extended Memory</td> <td>32 GB storage: trends, logs, TS record</td> </tr> </table>	Scanning	Multiple RF channels sequential monitoring over 1 RF input	TS Monitor Base	ETR290 Priority 1, 2 monitoring	TS Monitor Advanced	ETR290 Priority 3 monitoring	QoS Monitor	SAE, SDE monitoring	Service Plan	Multiplex Service/PID monitoring	Extended Memory	32 GB storage: trends, logs, TS record
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<i>HW option</i>	TRANSBOX Stream 1 or 2 compressed service(s)												