

PowerProbe 50 - Service Level Test Platform

Human Perception of Service Quality

PowerProbe 50



Compatible with the entire line of Tektronix PowerProbes, the PowerProbe 50 is used as an RTP/IP responder.

Multi-Service Testing

Tektronix' PowerProbe 50 is an IP/RTP responder designed for flexibility and control. A highly versatile, compact and cost-effective responder, the PowerProbe 50 allows network engineers to perform multi-service testing of Voice, Data, and Video over IP networks at the enterprise or provider's hub site.

The PowerProbe 50 works with a PowerProbe 6000 or 500 to conduct multi-stream RTP media testing, measuring packet-level statistics such as jitter, packet loss, discard rate, latency and out-of-order packets. MOS and other quality metrics are calculated using industry-standard algorithms. The PowerProbe 50 is future-proofed to serve all your next-generation service testing needs.

Overview

The PowerProbe50 provides active IP-VoIP and Video media quality as well as transmission performance testing over actual media-delivery infrastructures. Using the RTP Streamer test agent, the Power Probe 50 accurately simulates these multi-media streams by supporting over 50 different audio and video codecs, including the latest wideband VoIP, HDTV & IPTV standards.

On-Demand and Scheduled Test Plans

Controlled by Tektronix' DirectQuality R7 active test automation OSS, the PowerProbe 50 can perform on-demand or scheduled tests for monitoring, fault-management, SLA validation, installation troubleshooting and provisioning applications.

Data Collection & Trend Analysis

The PowerProbe 50 is used as an SLA tool in conjunction with Tektronix' DirectQuality Server OSS. It is capable of performing long-term, recurring tests that can be used for trending and performance assessment.

The Complete Solution

Combine active testing with Tektronix' 24/7 passive monitoring solution and you will have the complete solution for your entire network.

Applications

- Proactive End-to-End QoE Monitoring
- VoIP Service Validation
- Remote Troubleshooting
- SLA Validation
- RTP Service Testing
- Auto-discovery for Enterprise Testing
- Bi-directional performance monitoring
- DNS, PING and traceroute testing

Key Quality Measurements

- Packet Transmission
- Packet Loss, Jitter and Delay
- Network Response
- MOS LQ, MOS CQ, R-Factor
- RTCP-XR

Tektronix' Communications Business Division – Active Assurance

Dimensions

- Weight 44.85 lbs, 2.2 kg
- Height 2.75", 7 cm
- Width 8.25", 21 cm
- Depth 10.25", 26 cm
- Form Factor : Mini-ITX

Specifications

- VIA C3 1.4GHz
- 512 MB RAM
- 120/240 VAC
- 10/100 BaseT Ethernet

Environmental

- Operating Temperature : 5°C~40°C (41 F to 104 F)
- Relative Humidity : 10% ~ 90% (non-condensing)

Supported Codecs:

VoIP Narrowband

- ITU-T G.711 - mu-law
- ITU-T G.711 - A-law
- ITU-T G.723.1 - (6.3 kbps)
- ITU-T G.723.1 - (5.3 kbps)
- ITU-T G.726 - (16-40 kbps)
- ITU-T G.728
- ITU-T G.729
- ITU-T G.729A
- ITU-T G.729 + VAD
- ITU-T G.729D
- ITU-T G.729E
- ESTI GSM Full Rate (FR)
- ESTI GSM Enhanced Full Rate (EFR)
- ESTI GSM Half Rate (HR)
- GIBS iLBC
- Comfort noise (CN)
- DVI 4 bits
- Federal Standard 1016
- Linear audio 16 bits (L16)
- Linear audio 8 bits (L8)
- MPEG-2
- QCELP (Qualcomm PureVoice)
- Redundancy format (RED)
- VDVI (Variable-rate DVI4)

TV Audio

- MP2T (MPEG-2 Transport stream)
- MP4T (MPEG-4 Transport stream)

VoIP Wideband

- TU-T G.722
- ITU-T G.722.1
- ITU-T G.722.2 / ETSI AMR-WB
- ITU-T G.729.1

Digital TV

- BMPEG (Bundled MPEG)
- BT.656 - ITU-R digital
- CellB - Sun Microsystems
- ITU-T H.261
- ITU-T H.263-2000
- ITU-T H.263-1998
- JPEG (Joint Photo Experts)
- MP1S (MPEG-1 Systems)
- MP2T (MPEG-2 Transport stream)
- MP4T (MPEG-4 Transport stream)
- MP2T (MPEG-2 Transport)
- MP4T MPEG-4 Transport)
- MP4P (MPEG-2 Program)
- MPV (MPEG Video)
- nv - XEROX video codec

HDTV

- MP2P (MPEG-2 Program)
- MP2T (MPEG-2 Transport)

For Further Information

Tektronix maintains a comprehensive, constantly expanding collection of application notes, technical briefs and other resources to help engineers working on the cutting edge of technology.

Contact Tektronix:

Please visit
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