

To cope with real-life traffic flow of stream-based multicast and unicast media in your IP network, BRIDGETECH is now launching a pre-packaged total solution for your measurement and monitoring needs. Whether you have an existing network and wonder if the network is suitable for IPTV services, or you have deployed streaming services, the IPTV Starter Kit is the ideal starting point for pro-active service monitoring and fault-finding.

Measuring performance and monitoring service status in an IPTV network is only possible by looking at the signal at multiple locations and correlating data between them. With this information, detection of network characteristics and correct tuning of configuration parameters in routers and L3-switches is possible. The IPTV Starter Kit gives you a cost-effective deployment at 3 separate locations with advanced server-based services for comparative analysis.

The IP-Probes measure MDI characteristics and display results in the highly innovative MDI Media Window (patent pending) for easy comprehension of network behaviour, even for non engineers. All relevant data on the IP transport is measured and all relevant data on the media content is also gathered, with the result being a complete overview of service health in one system.

The channel monitoring functionality gives you overall performance in real-time, and with complete drill down functionality, even diagnostics are simple.

The IPTV Starter Kit with the advanced IP-Probes and the VBC Controller Server will give you the total picture of network health, service delivery status, ultra-fast fault finding and comparative multi-geographical site measurement and monitoring. The system can easily be expanded to hundreds of probes dispersed on a national network level.

The IPTV Starter Kit does what its name implies, it gets you started, in both understanding the issues involved in monitoring video over IP as well as forming a basis upon which to build a network-centric approach to quality of service and proof of carriage. Make no mistake, issues such as high service latency, erratic packet interarrival times, network induced jitter, media continuity problems, packet-loss etc., all conspire to destroy any commercial business case for IPTV. Dedicated router-based tools, laboratory measuring devices or software only monitoring are all flawed. Only 24/7, monitoring using dedicated cost-effective and network-wide dedicated hardware probes, measures up to ensureing your IPTV roll out success.

## **IPTV Starter Kit components:**

- 1 VB100 Rack Chassis AC PSU
- with 1 VB110 IP-Probe blade - and 1 VB130 Generator blade
- 1 VB100 Rack Chassis AC PSU
- with 1 VB110 IP-Probe blade
- and Optional DC 48v PSU
- 1 VB10 Portable IP-Probe
- 1 VBC Controller Server software and hardware
- with 5 IP-Probe licence

## IP-PROBE features & highlights:

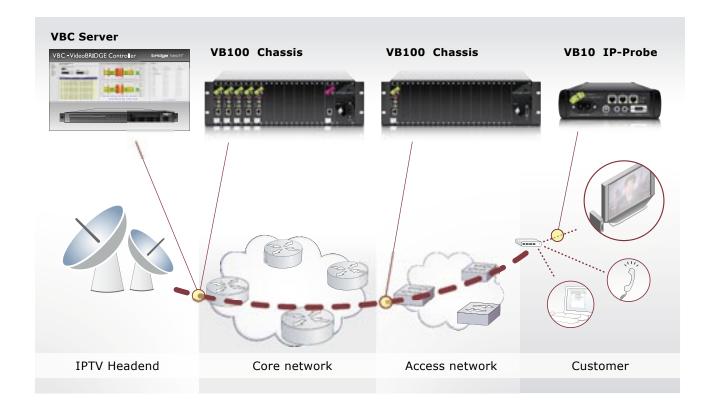
- · Intuitive web-based user interface
- · Analysis of 10 IP multicasts per unit
- · Analysis of both video and network parameters
- MPEG-2, h.264/AVC and WM9/VC-1 analysis
- MDI measurement and analysis
- · MDI Media Window (patent pending)
- · PSI/SI table analysis
- Time Synchronisation with server, RFC 868
- Optional central management via VBC Server
- Video and audio output
- · Local RS232 port for initial setup

## VBC Controller Server features & highlights:

- · Element control through HTTP/web · Real-time channel status
- Secure remote access via internet
- · XML parsing and export of alarms and events
- · Hierarchical equipment view
- · Multi-level alarm reporting and history
- File-based configuration storage and restoration
- · Configuration profiles and templates



The VB10 IP-PROBE won Broadcast Engineering's exclusive annual Pick-Hit award for most innovative product in its class at NAB 2005 in Las Vegas.



The illustration shows a simplified system diagram of the complete measurement and monitoring IPTV Starter Kit also consist of embedded hardware starting in the Head End with a VB100 rack-chassis with 1 VB110 IP-Probe module. The Head End is also equipped with a reference signal generator; the VB130 for RTP or UDP packet generation. The IPTV Starter Kit also consist of a 5 IP-Probe licence VBC Server for aggregated measurement and analysis comparison.

Downstream a VB100 chassis with 1 VB110 module gives full monitoring capability on the hand-over points from the core network to a local access network. The access network can be FTTH or xDSL, and typically a DC 48v powered VB100 chassis with a VB110 IP-Probe module is situated at the DSLAM site or the distribution L3-switch in a FTTH network.

For tracing customer image quality issues, the portable and ruggedized VB10 is built for this purpose. The unit is fanless and has a built-in switch, making it ideal for unattended operation at customer premises for over-night monitoring and data gathering.