

# IP Edge Monitoring Probe

## microVB™



The microVB™ is a breakthrough in both form-factor and functionality for real-time analysis of customer home network performance. This unobtrusive device provides deep packet inspection and end-to-end visibility in broadcast quality media delivery over any IP based infrastructure.

Combined with the Sencore server software, operators can now maintain 24/7 confidence monitoring from head end to customer home. Forget those expensive truck-rolls and keep your OPEX under control. Just pop a microVB™ into an envelope and mail to the subscriber directly. No setup knowledge is required because the microVB™ is literally plug and play.

Upon installation, the microVB™ is auto discoverable and your operations center will be ready to go. Once plugged in you never need to touch the microVB™ again. The microVB™, as its name implies is small, even down to its price tag. The microVB™ will give you instant performance feedback on video quality, packet delivery analysis, set-top-box performance and communications.

Home networking environments are becoming more complex. This complexity makes it semi-impossible to identify whether the problems experienced are due to the home infrastructure or to the network. The introduction of new devices and new services (data, voice, video) compound the whole complexity and error identification process even further. The microVB™ is a revolution in thinking. Now, 24/7 monitoring at the customer site as a part of a network-wide monitoring process is an affordable proposition.

Putting an engineer on-site assumes the problem will manifest itself during the customer call, which is all too often not the case. The microVB™ sidesteps all of the legal, commercial and maintenance risks of hosting software, because it comes on its own hardware which is secure, low cost and non-service affecting.

The microVB™ forwards alarm states to its own microVB™ server system. The whole process is automated and fits into the overall architecture of the total Sencore system. Not only will the operator be able to look at the end-points in a network but by using the industrial strength VideoBridge IP-Probes will also enjoy a system-wide overview. Pinpointing potential and actual problems before they become service

## ABOUT THE microVB™

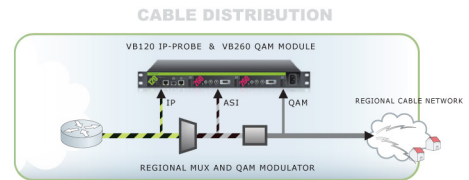
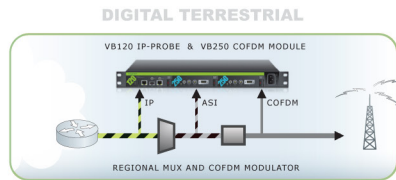
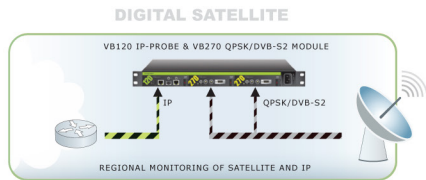
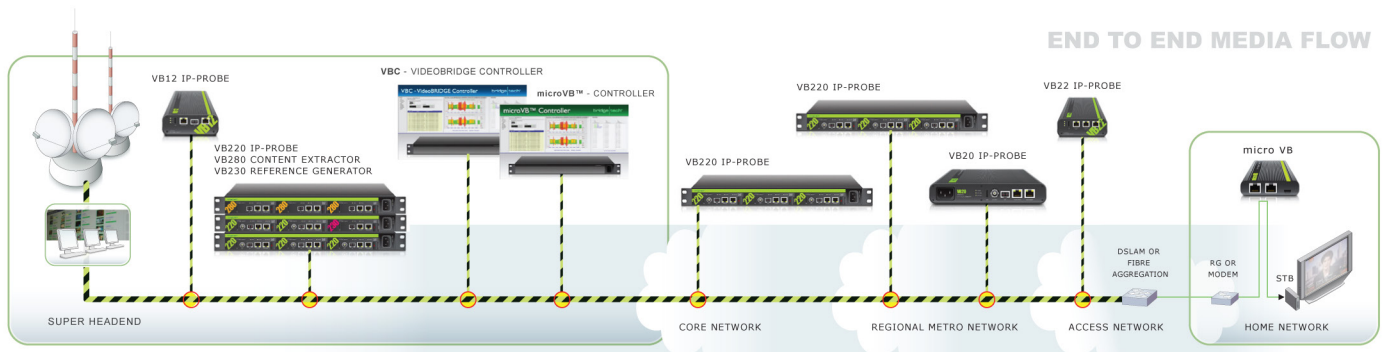
- Saves you a fortune in truck rolls and pays for itself on the first call
- So small you can mail it to subscribers in an envelope
- Dedicated hardware so you don't mess with the Set-top box
- Runs off the Set-top box power supply (or optionally its own)
- No setup required, customer installed
- 24/7 operation and instant performance feedback
- microVB devices automatically report to the Micro Device Controller (MDC)
- MDC can be integrated with the VideoBridge Controller GUI
- MediaWindow™ display of MLR (packet loss) and IAT (packet jitter)
- MediaWindow™ display of bandwidth
- RTP packet loss detection
- Presentation of join latency
- Optional traffic protocol breakdown with bitrates and packet rates, presented as numbers and graphs to show history
- Optional OTT analysis shows 4 concurrent OTT streams and provides statistics on TCP re-transmit and TCP bandwidth
- Optional PCAP capture relays raw ethernet traffic to the MDC for deeper inspection by Wireshark
- User specified whitelist of multicast addresses to be monitored
- Minimum/maximum bitrate check
- Grouping of microVB devices for easy viewing of regional status and history
- Merged stream status and history for groups of microVB devices
- Remote automatic software upgrade

affecting is the only way to lower service costs and hinder subscriber churn.

Packaged as a complete turnkey system, a microVB™ kit consists of microVB™ devices and the server software itself. The system can be expanded to an unlimited number of microVB™ devices. Each microVB™ system can be pre- or retro-fitted to any installation, regardless of set-top box and network architecture.

# SPECIFICATIONS

## IP Edge Monitoring Probe microVB™



### ENVIRONMENT SPECIFICATIONS

Operating temperature: 0°C to 45°C  
 Storage temperature: -20°C to 70°C  
 Operating humidity: 5% to 95% non-condensing

### CONNECTORS

10/100T: RJ-45 input  
 10/100T: RJ-45 output  
 mini USB port

### POWER

Power dissipated by module: < 2.5W

### MECHANICAL SPECIFICATIONS

W x H x D: 2.75 x 0.8 x 5in (70 x 20 x 130 mm)  
 Weight: < 3.5 oz (100 gram)

### CONTROL AND MANAGEMENT:

Control via Micro Devices Controller