

IP Distribution Monitoring Probe

VB12



The VB12 is the most portable broadcast monitoring and measurement platform available. Featuring both optical and electrical GigE Ethernet inputs, separate management port and both ASI input and output, the VB12 has the widest range of built in interfaces in the industry.

The ability to continuously monitor 10 services (expandable to 50) with full TR 101290 alarming and analysis makes the portable VB12 invaluable for field use. Its ruggedized exterior and fanless design give engineers the perfect fault-finding tool or for permanent placement in harsh environments. With full TR 101290 alarming and all modern codecs, the VB12 is built for real-world use.

Critical parameters such as RFC4445 - MDI and detailed jitter values give accurate readings of network performance. With the RFC4445 based patented MediaWindow™, historical data can be easily accessed for meaningful visualization of media flow in an IP network.

The power of confidence monitoring is further enhanced by continuous monitoring of TR 101290 parameters, bandwidth overflow/underflow and signal loss. With advanced threshold settings including error-seconds, alarm granularity can be set to reflect actual status.

SNMP trapping and XML export enables the IP Probes to be implemented in any NMS system (with alarm generation either directly from the probes themselves, or via the VBC server) for advanced alarm correlation and filtering.

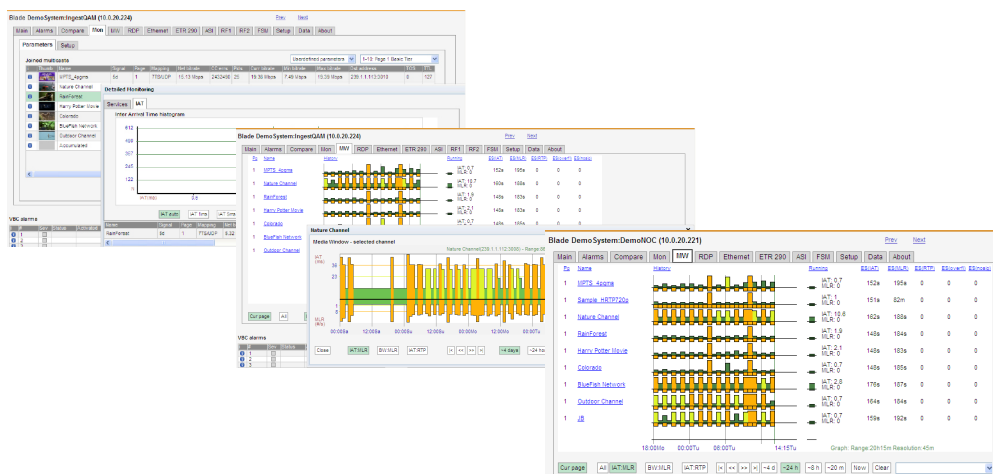
Each VB12 runs an integral HTTP server with the client as a web browser, so no need to install custom software on computers needing access to the measurement data. Basic setup is achieved through the built-in USB to RS232 converter, eliminating the need for an external interface and facilitates setting of IP addresses for access to the VB12. The device can also be controlled remotely via TELNET or XML configuration commands.

KEY FEATURES

- 1x 10/100/1000T Mbps Ethernet port
- 1x SFP GigE port
- 1x 10/100/1000T Mbps Ethernet management port
- 1x ASI Input and 1x ASI output port
- Ruggedized chassis
- Built-in 100-240VAC PSU
- Built-in USB to RS232 converter
- Concurrent analysis of 10 services - expandable to 50
- Full real-time ETSI TR 101 290 alarming and analysis (Pri 1, 2, 3) for each enabled input (multiple available for Ethernet input)
- Configurable round-robin functionality for each ETSI TR 101 290 analysis engine
- Conforms to both DVB and ATSC specifications
- Table and descriptor parsing of PSI/SI and PSIP presented as table summary and full table breakdown (including hex dump)
- Bitrate monitoring and alarming (TS, service and PID level)
- Monitoring of vital CA parameters
- Compare view for comparison of transport streams and services across different interfaces
- Sophisticated threshold template system for detailed alarm handling control at transport stream, service and component level
- Alarm triggered recording of a multicast/unicast or selectable service from any enabled input
- RDPT™ of transport stream or selected service from any enabled input
- OTT/ABR monitoring option features constant checking of HLS, Smooth Streaming, HDS, MPEG-DASH and RTMP Streams
- Searchable alarm lists
- Built-in web-based management with access control
- Intuitive GUI using patented visualization techniques for ease of system overview: microETR and MediaWindow
- Optional central management via VideoBRIDGE Controller server
- Eii™ External Integration Interface for easy integration into any 3rd party NMS system using well-documented SNMP or XML commands
- SNMP multi-destination trapping
- Compatible with Cisco™ VAMS/CMM
- NTP client functionality (RFC2030)
- DHCP client support (RFC2131)
- Remote software and license upgradable

SPECIFICATIONS

IP Distribution Monitoring Probe VB12



ENVIRONMENT SPECIFICATIONS

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

CONNECTOR SPECIFICATIONS

10/100/1000T GigE input: RJ-45
10/100/1000T Ethernet management: RJ-45
Optical input: SFP Module
ASI input: 75 ohms HD-BNC
ASI output: 75 ohms HD-BNC
Serial port: USB Type A connector
AC power: IEC 320 connector
1 PPS input: 50 ohm SMA Female

POWER SUPPLY REQUIREMENTS

Input voltage: 100 to 240V AC
Power required: 20 VA
Power dissipated: maximum 13W

NETWORK SPECIFICATIONS

10/100/1000 BASE-T Ethernet (802.3u and 802.3ab)
SFP interface for optical networks
10/100 BASE-TX Ethernet management (802.3u)

MECHANICAL SPECIFICATIONS

W x H x D = 4.5 x 2.2 x 15.2 in. (115 x 56 x 385 mm)
Weight: 3.3 lbs (1.5 kg)

IP MONITORING AND ANALYSIS

Real-time monitoring of up to 50 multicasts/unicasts (Expandable to 50)
Monitors Transport Stream in IP according to ETSI TS 102 034
MediaWindow patented intuitive GUI for ease of system overview
Microsoft MediaRoom™ X-bit RTP header extension support
Compatible with Cisco™ VAMS/CMM
IGMPv2 and IGMPv3 SSM support
802.1Q VLAN tagging support and detection

IP MONITORING AND ANALYSIS (cont.)

Thumbnail decoding of MPEG2 and MPEG4 streams, SD and HD
Packet jitter and media loss measurements
Configurable alarm handling including severity level definitions
RTP dropped, duplicate and out-of-order measurements
Type of Service (TOS) and Time to Live (TTL) displaying
Time loss distance measurements (RFC3357)
FEC analysis (COP3)
MediaWindow™ visualization technology

ADVANCED ETHERNET TOOLS OPTION FUNCTIONALITY

FSM™ monitoring of middleware services
IGMP monitoring and logging
Advanced real-time IP protocol breakdown and analysis, with individual bandwidth and frame size displaying

ADDITIONAL ETSI TR 101 290 MONITORING ENGINE OPTION

Full real-time ETSI TR 101 290 alarming and analysis (Pri 1, 2, 3) for additional Ethernet transport streams

ADDITIONAL IP-STREAMS (UP TO 50)

Full real-time Real-time monitoring of IP multicasts/unicasts, can be upgraded to support 50 transport streams in parallel

DVB-T2 ENCAPSULATION MONITORING OPTION

T2-MI encapsulation breakdown and analysis
ETSI TR 101 290 analysis of outer and inner streams

TRAFFIC MODULE OPTION

Detailed traffic protocol breakdown
Traffic graphing

OTT/ABR MONITORING OPTION

Monitor up to 50 HLS, Smooth Streaming, HDS, MPEG-DASH and RTMP Streams