Unique Broadband Systems Ltd.

RF Signal Analyzer

Model: TSA 5000

Product Features

- *Can be used as a receiver for remote monitoring of the transmitted signal quality*
- *Supports ATSC, CMMB, DTMB, DVB-T and DVB-T2 waveform measurements*
- *Covers VHF (170 to 230 MHz) and UHF (470 to 862 MHz) frequency bands (L-Band or S-Band available on request)*
- *Highly informative GUI with extensive transmitted signal quality measurements:*
  - *Spectrum*
  - *MER/SNR*
  - *PAR*
  - *Constellation*
  - *Spectral Regrowth (Shoulders)*
  - *Group Delay*
- *Web and SNMP interfaces provide local/remote monitoring and control*

Front Panel

Rear Panel

Product Description

The new RF Signal Analyzer from UBS is a highly informative tool that can be used to evaluate the output performance of a UHF Transmitter or Repeater. The RF Signal Analyzer can be used as a receiver for remote transmitter signal quality monitoring.

The RF Signal Analyzer supports ATSC, CMMB, DTMB, DVB-T and DVB-T2 waveform measurements across VHF (170 to 230 MHz) and UHF (470 to 862 MHz) frequency bands. L-Band or S-Band frequency ranges are available upon request.

Using a PC GUI application installed on a laptop or PC, the RF Signal Analyzer will display a Spectrum measurement along with MER/SNR, PAR, Constellation, Spectral Regrowth (Shoulders) and Group Delay measurements. Active modulation parameters are also displayed.

Web and SNMP interfaces provide local/remote monitoring and control. A set of alarm relays can be activated upon alarm.

The Signal Analyzer is intended for indoor use and can be fitted with a bracket that allows it to be mounted securely in a 19" wide rack.

Head Office - 400 Spinnaker Way - Vaughan - Ontario - Canada - L4K 5Y9 - Tel: **905 669 8533** - North America Toll Free: **1 877 669 8533** - **www.uniquesys.com** - Email: **sales@uniquesys.com**

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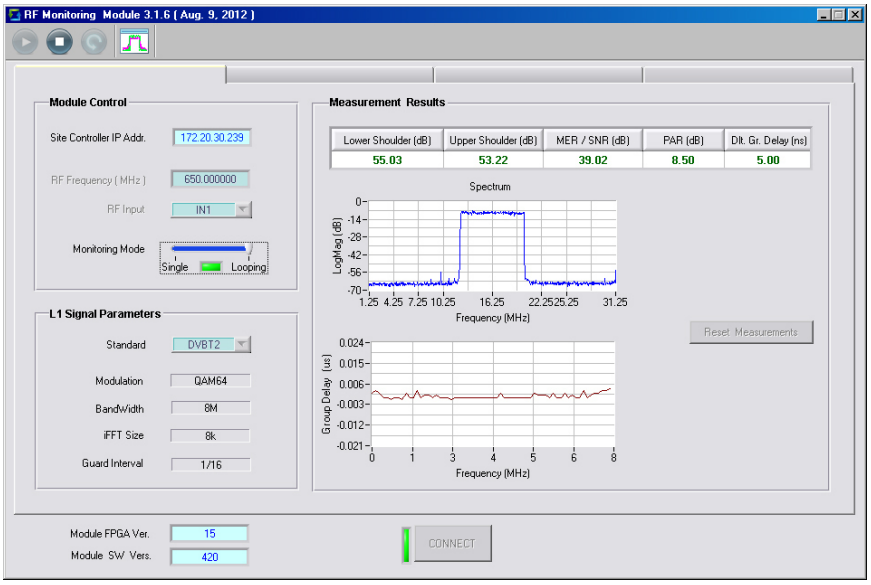
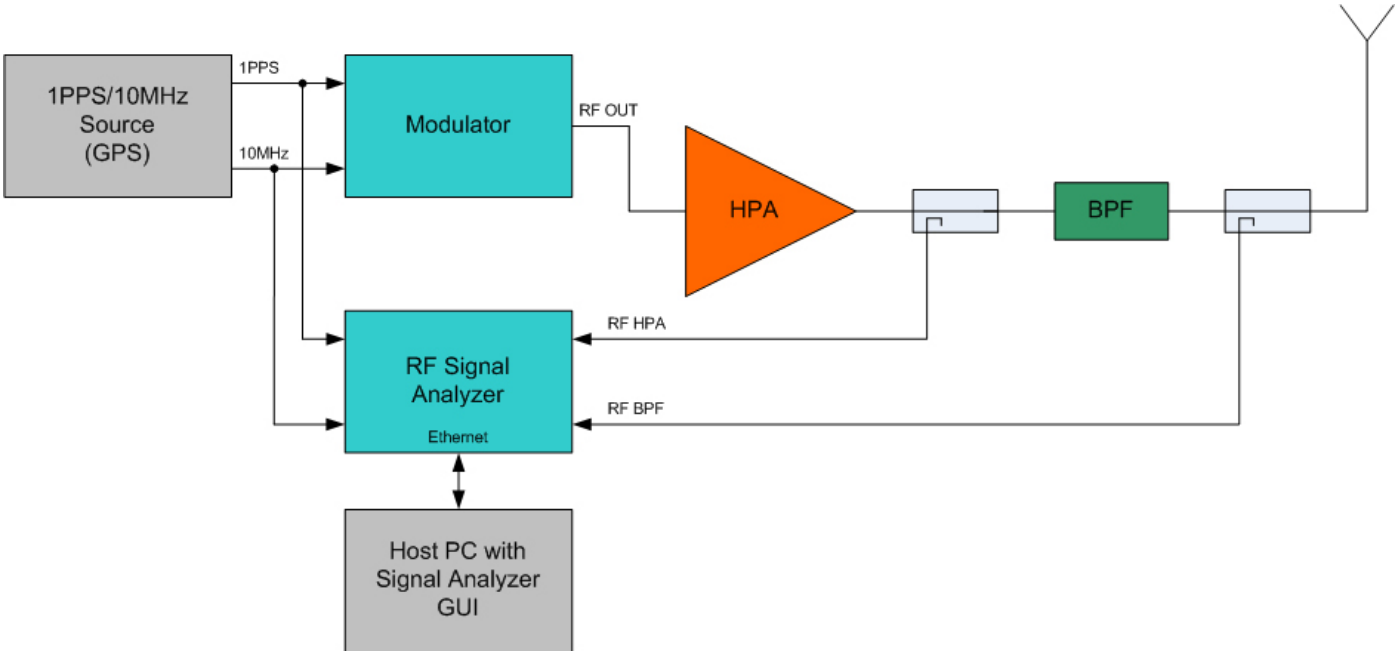
Signal Analyzer PC GUI



PC GUI

Transmitter Block Diagram with RF Signal Analyzer



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Product Specifications

Signal Inputs

RF IN1 (HPA Feedback Input)	Connector: SMA (F) Frequency: VHF (170 to 230 MHz) UHF (470 to 862 MHz) (L-Band or S-Band available upon request) Level: -12 dBm ±3 dB Impedance: 50 Ω
RF IN2 (BPF Feedback Input)	Connector: SMA (F) Frequency: VHF (170 to 230 MHz) UHF (470 to 862 MHz) (L-Band or S-Band available upon request) Level: -12 dBm ±3 dB Impedance: 50 Ω

Reference Frequency Inputs

10MHz IN	Connector: SMA (F) Frequency: 10 MHz Level: 0 dBm to 15 dBm Impedance: 50 Ω
1PPS IN	Connector: SMA (F) Frequency: 1 Hz Level: TTL Trigger: Positive transition Impedance: 50 Ω

Reference Frequency Outputs

10MHz OUT	Connector: SMA (F) Frequency: 10 MHz Level: 0 dBm to 15 dBm Impedance: 50 Ω
1PPS OUT	Connector: SMA (F) Frequency: 1 Hz Level: TTL Trigger: Positive transition Impedance: 50 Ω

Control Interfaces

Ethernet Interface	Connector: RJ45 Speed: 10/100 Base-T
USB Interface	Connector: USB Type A
RS-232 Interface	Connector: 9-pin SUB-D Male
Web Interface	Connector: Ethernet
PC GUI	Connector: Ethernet
SNMP Control Interface	Connector: Ethernet Note: MIBs can be provided
Alarm Relays	Connector: RS-232 2 SPDT relays

Power Supply

Voltage	12 VDC
Power Consumption	max. 15 Watts

Mechanical

Dimensions (W x H x D)	261.37mm x 44.894mm x 211.63mm (10.290" x 1.610" x 8.332")
Weight	1 kg (2.2 lbs.)

Environmental

Operating Temperature	+5°C to +45°C (+41°F to +113°F)
Storage Temperature	-30°C to +75°C (-22°F to +158°F)
Relative Humidity	max. 95%, non condensing
Cooling	Internal fan to assist natural convection

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