

RM5800 DTV Signal Analysis System with 8VSB decoding



RM5800 DTV Measurement Equipment

- Rugged rack-mount design for vehicle or remote site applications
- Measures and records DTV RF and 8VSB decoded parameters
- Incorporates swept spectrum field strength meter, 8VSB decoder, and GPS location receiver
- Includes Z Technology DriveTest software for user-supplied Windows™ PC
- Documents peak and in-channel power, bandpass tilt and notches, total 8VSB tap energy, SNR, SER, eq lock and sync lock status
- Records values for both 8VSB and NTSC signals

The RM5800 Signal Analysis System is a rack mount system for the automatic measurement of terestral digital 8VSB and analog NTSC television signals. When operated in conjunction with a user-supplied Windows™ PC, the RM5800 provides all of the features of the portable DSS5800 DriveTest system, and offers the installation advantage of a permanent configuration.

When installed in a fixed location, the RM5800 and its attached PC can monitor several television station signals on a continuing basis, providing a historic record of performance of critical RF parameters. Commercially available remote PC access software can be used to control and report the system when installed at a remote location.

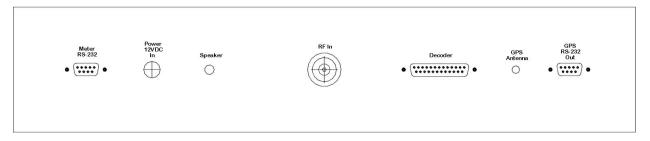
The rack mounting configuration is also convenient for unobtrusive installation, for example in a television newsgathering truck, where the RM5800, and a dedicated laptop PC, can continuously gather data as the vehicle moves about the coverage area. Z Technology DriveTest software and GPS location capabilities are included with the RM5800

The RM5800 integrates the functions of a precision swept spectrum field strength meter, an 8VSB, ATSC compliant DTV decoder, and a GPS location system, along with Z Technogy software

applications to run on a user-supplied Windows $^{\text{TM}}$ PC.

Like the portable system, the rack mounting RM5800 and PC running Z Technology DriveTest software precisely measures and records a comprehensive set of RF and 8VSB decoded

parameters. For the 8VSB digital signal, these parameters include Integrated 6 MHz Power, Tilt, Notches, 8VSB Tap Values, Signal to Noise Ratio, Segment Error Rate, Sync Lock and Equalizer Lock Status, and other important parameters.



RM5800 Rear Panel

RM5800 REAR PANEL CONNECTORS

Meter RS232 - provides communication between swept spectrum field strength meter and PC serial port. 9-pin female D-Sub connector.

<u>Power 12VDC in</u> - Equipment can be powered from 12VDC, ~1.4A, vehicle system or supplied AC adapter.

<u>Speaker</u> - provides demodulated FM audio when field strength meter is tuned to analog TV sound carrier. 1/8" miniature phone jack.

RF In - 50 ohm input impedance, type N connector

<u>Decoder</u> - provides communication between internal 8VSB decoder and PC bi-directional parallel port. 25-pin female D-Sub connector.

<u>GPS Antenna</u> - connection for supplied amplified GPS magnetic mount antenna.

<u>GPS RS232 Out</u> - provides GPS location information to a second PC serial port, in conjunction with Z Technology DriveTest software.

EQUIPMENT SPECIFICATIONS

Performance specifications are the same as the DSS5800 portable system. See DSS5800 data sheet. Application software is supplied by Z Technology for customer installation on a user-supplied Windows $^{\text{TM}}$ PC.

COMPUTER REQUIREMENTS

600 MHz or better Pentium Class Processor

64 Megabytes of RAM

1 GB Hard Disk

1024 x 768 Video display

CD-ROM

Windows 98seTM, Windows 2000TM or Windows XPTM

Two RS-232 COM Ports with 16550 compatible UARTS

One Standard Parallel Port

Z Technology, Inc.

