## **TZ-900**

### **Timewave**

# **AntennaSmith**<sup>tm</sup>

## Antenna Impedance Analyzer







#### Day/Night Always-Visible Display

Day or night, the Timewave TZ-900 AntennaSmith<sup>tm</sup> is a bright colorful window to your antenna system. The transreflective TFT LCD color display is brilliantly visible in direct sunlight - no lost data from a washed-out display!

#### Full Graphics - Rapid update

The AntennaSmith<sup>tm</sup>'s rapid sweep updates the data graph every two seconds. Quickly set the start, stop or center frequencies to see the data as you want it. A tap on a button gives you a different parameter. Tap another button to store a graph to print later or to display as a reference while you optimize your antenna system. Instantly see the effect of an adjustment or a change!

#### Adjustable Frequency Cursor/Generator

Quickly tune the cursor to check your antenna system at the desired frequency while looking at the big picture on a graph. The Direct Digital Synthesizer makes a great RF signal generator in the Synthesizer mode. Easily calibrate to WWV with 1 Hz frequency resolution.

#### **Features**

- Full Color TFT LCD Graphic Display
- 0.5 60 MHz
- SWR
- Impedance (Z)
- Reactance (r+jx)
- Reflection coefficient (ρ,θ)
- Smith Chart

#### Remote control

Use your PC or laptop to run the AntennaSmith<sup>tm</sup>! The included AntennaSmith<sup>tm</sup> remote control program gives you the same displays and controls as the AntennaSmith<sup>tm</sup> itself.

#### Rugged and Portable

The AntennaSmith<sup>1m</sup> rugged extruded aluminum case holds four AA NiMH cells for hours of operation. A 12 VDC power supply/ charger (117VAC/60Hz) is included.

#### **Specifications**

#### **Analysis**

Parameters:	SWR, Complex Impedance, R+jX, reflection coefficient, Smith Chart
Sweep rate:	2 seconds
Memory	10 sweep and 10 reference data memories
Input/Output Antenna interface:	UHF female. BNC, N optional
Analyzer Frequency:	1 MHz to 55 MHz
Synthesizer :	Direct Digital Synthesis with 1 Hz resolution
Synthesizer Frequency:	0.5 MHz to 60 MHz
Synthesizer output level:	0 dBm, nominal
Serial data rate	115 kbps bps
Serial Port	RS-232C compatible - 3.5mm phone jack
Serial data protocol	ASCII
Power jack:	5.5 mm x 2.1 mm coaxial power jack
Physical Enclosure	Extruded Aluminum
Size	7.4 in. wide x 4.2 in. deep x 1.6 in. high
Weight	1.45 lb.
Operating Temp.:	0 degrees C to 50 degrees C
Power:	+9 to $+18$ VDC @250mA, 4 internal NiMH AA cells

