

MAKING
COMMUNICATIONS
BETTER

930i

MOST VERSATILE NEX GEN AND LEGACY TEST SET



930i FEATURES A POWERFUL NEXT GENERATION VOICE SUITE

CAPABILITIES

Quality Voice Services

- Test the network's ability to transmit distortion free voice in both directions
- Provides Clarity Merit Score (MOS)
- Measures audio level
- Measures background noise

Bad MOS Scores?

- Detect and measure packet loss
- Detect and measure voice clips
- Detect and measure noise hits

Isolate echo problems

- Detect and measure echo
- Verify echo cancellation

Verify End-to-End Network Performance and Provisioning

- Measure network delay
- Measure jitter buffer performance
- Verify codec type
- Measure call completion time (post dial delay)

930i Transmission Features

- Level and Frequency (20Hz – 5000Hz)
- Noise (Psophometric and 3KHz Flat Weighted)
- Noise-to-Ground
- Signal-to-Noise Ratio
- Return Loss (2- and 4-wire)
- Frequency Sweep
- Dual Tone Gen (level, freq, cadence)
- Echo Canceller Disabler Tone

The 930i is a multi-functional portable unit that features a powerful Next Generation Voice Test Suite. It offers a laboratory quality VFTIMS, a full featured BERT, RS-232 and a host of other functions as standard equipment.

The 930i's versatile signaling features enable it to simulate, test and monitor at almost any point in a hybrid network. It is equally at home at the IAD, gateway, switchroom, PBX closet, customer or carrier DEMARC, in the lab or on the production floor. Its ability to simulate and monitor both sides of a connection makes it an indispensable troubleshooting tool.

- Perform voice processing design verification
- Characterize & Test Echo Cancellers
- Troubleshoot and Quantify packet voice impairments

continued

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CAPABILITIES *continued*

930i Digital Features

- 2.048 Mbit/s E1 (PCM30/31, CRC4, HDB3/AMI)
- Internal High Stability Clock or Loop
- Terminate and dual direction drop, insert or monitor modes
- Real time display & cntrl of ABCD bits
- aLaw or uLaw encoding
- Voltage measurement
- Full rate and 64kbit BERT
- Generate and detect Alarm
- DSO Loop back with gain control

930i Analogue Signaling Capabilities

- Loop Start (contact/battery)
- Ground Start (contact/battery)
- E&M Types I-V (Send-M, Send-E)
- Dry (no supervision)
- Wink Detection and Timing
- Delay and Immediate Dial
- DP, MF, and DTMF addressing

930i Signaling Capabilities

- POTS, DTMF signaling
- R1 (wink start signaling, MF signaling)
- R2 (Simple, ITU, Country Spec)
- Clear Channel
- R2 Protocol Analyzer

PHYSICAL CHARACTERISTICS

- E1: 120/75 Ω
- Telset & Butt-Set Interfaces
- E1 span status LEDs
- Com Port: RS-232 (EIA 9-Pin)
- Power 120/240VAC
- Size: 14" x 6" x 12.5"
- Available with rack mount kit

OTHER FEATURES

- Real-time clock for time stamping
 - Store and Recall up to 999 Results
 - Speaker & Volume Control
- Certifications: UL, CE

OPTIONS

- 7930-2000-01** Base Unit
- 7930-2100-01** Advanced TIMS Package
- 7930-2110-01** Voice Circuit Test Package
- 7930-2130-01** Next Gen Voice Test Pack
- 7930-2013-01** Ring Generator & Load
- 7930-2040-01** Wideband TIMS
- 7930-2011-01** ATME 0.22
- 7930-2154-01** 23 Tones
- 7930-2055-01** Echo Sounder
- 7930-2056-01** Echo Gen and Test Line
- 7930-2068-01** ITU G.168 Suite
- 7930-2075-01** Packet Voice Impair Test
- 7930-2076-01** SMOS Packet Voice Test
- 7930-2070-01** Complex Impedance
- 7930-2051-01** Fractional E1
- 7930-2150-0X** OPT 150, MFC-R2

ACCESSORIES

- 7901-0000-01** Universal Audio Adapter
- 9400-2425-01** Talon 93X T-TIMS GUI

For the most current information please visit
www.sageinst.com/930.html



930i APPLICATIONS

Voice Quality • Echo Canceller • Computer Telephony • Qualification
Manufacturing • Laboratory Standard

