

MAKING
COMMUNICATIONS
BETTER

935AT

POWERFUL PACKET VOICE AND LEGACY COM TEST SET



The 935AT is a multi-functional portable unit that features a powerful Next Generation Voice Test Suite. It offers a laboratory quality VF TIMS, a full-featured BERT, RS-232, and a host of other functions as standard equipment.

The 935AT's versatile signaling features enables it to simulate, test and monitor at almost any point in a hybrid network. It is equally at home at the IAD, IP phone, 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.

- Performs voice processing design verification
- Characterized & Test Echo Cancellers
- Troubleshoot and Quantify packet voice impairments

935AT FEATURES A POWERFUL NEXT GENERATION VOICE SUITE

CAPABILITIES

Qualify Voice Services

- Test the networks 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)

935AT Transmission Features

- Level and Frequency (20Hz – 5000Hz)
- Noise (C– Message and 3Khz Flat)
- Noise-to-Ground
- Signal-to-Noise Ratio
- Return Loss (2– and 4–wire)
- Frequency Sweep
- Dual Tone Gen (level, freq, cadence)
- Programmable Echo Can Disable Tone
- 100/102/105 Test Line

continued

935AT

MOST VERSATILE LEGACY AND NEXT GENERATION TEST SET

CAPABILITIES *continued*

935AT Digital Features

- 1.544 Mbit/s T1 (D4/SF, ESF and SLC-96 framing)
- Internal High Stability Clock or Loop
- Terminate dual direction drop and insert or monitor modes
- Real time display & cntrl of ABCD bits
- uLaw or aLaw encoding
- Voltage measurement
- Full rate and 64kbit BERT measurements (G.821 and M.2100)
- Generate and detect Alarms
- DSO Loop back with gain control

935AT Signaling Capabilities

- Loop start (2/4-wire, contact, normal and reverse battery)
- Ground Start (2/4-wire, contact, normal and reverse battery)
- E&M Types I-V (Send-M, Send-E)
- PCM (Normal, FXO/FXS and CCIS supervision)
- Dry (no supervision)

PHYSICAL CHARACTERISTICS

- Test Interface: T1, 2/4-wire Analog Bantam and 310 jacks
- Telset & Bertset Interfaces: 310 jacks and terminal blocks

- T1 span status LEDs
- Com Port: RS-232
- Power 120VAC
- Size: 14"x6"x12.5"
- 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

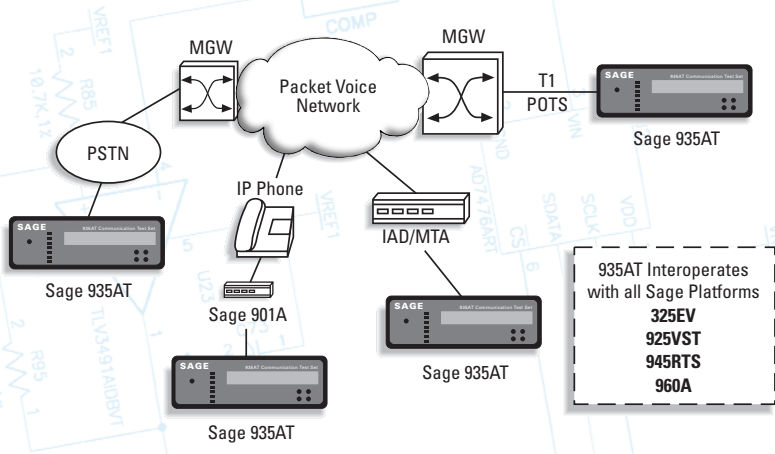
OPTIONS

Standard Features: See http://www.sageinst.com/935AT_Tech.html

- 7935-0000-01** Base Unit
- 7935-0100-01** Advanced TIM Package
- 7935-0110-01** Voice Circuit Test Package
- 7935-0130-01** Next Gen Voice Test Pack
- 7935-0200-01** BERT & DDS Test Package
- 7935-0210-01** SS7 Call Trace & Error
- 7935-0246-01** B8ZS Mismatch DSO
- 7935-0330-01** Ring Generator
- 7935-0340-01** Wideband TIMS
- 7935-0348-01** 48 VDC Power Supply
- 7935-0505-01** ROTL 105
- 7935-0522-01** ATME 0.22
- 7935-0523-01** 23 Tones
- 7935-0555-01** Echo Sounder
- 7935-0556-01** Echo Gen and Test Line
- 7935-0568-01** ITU G.168 Suite
- 7935-0575-01** Packet Voice Impair Test
- 7935-0576-01** SMOS Packet Voice Test

935AT APPLICATIONS

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



ACCESSORIES

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