



Agilent 8648A Pager Test Option



**Pager testing you can depend on
for POCSAG, FLEX, and FLEX-TD**



Agilent Technologies
Innovating the HP Way

Easy, Economical, One-Box Pager Testing

Agilent Technologies introduces a new pager test option (1EP), for the Agilent 8648A RF signal generator. The 8648A Option 1EP provides a complete, economical, one-box pager test solution. It includes the digital pager encoder that supports the most popular worldwide standard, Post Office Code Standardization Advisory Group (POCSAG), and the promising new paging standards, FLEX and FLEX-TD (RCR-43, for Japan).

Offering Key FLEX Specifications

The specifications of the 8648A Option 1EP is ideal for the stringent FLEX and FLEX-TD test requirements. It offers ± 60 Hz frequency shift keying (FSK) deviation accuracy within specific pager service bands—this is the most important FLEX specification. Also it typically offers ± 40 Hz carrier frequency accuracy (relative to CW in dc FM).

Faster, Easier Testing

Now test time is reduced and simplified with the 8648A's semi-automated features:

- Customize your result with user-defined messages of up to 40 characters.
- Reduce test time with 5 built-in test messages.
- Increase test reliability with 70 internal storage registers capable of storing the entire protocol configuration.

Performance Summary

Frequency: 100 kHz to 1 GHz

Frequency Accuracy with Option 1E5: Typically $\pm 0.15 \times 10^{-6}$ x carrier frequency in Hz or Typically $\pm 0.092 \times 10^{-6}$ x carrier frequency in Hz within 90 days of calibration

Output Level: +10 dBm to -136 dBm

Output Level Accuracy: ± 1 dB (> -127 dBm)

Carrier Frequency Accuracy (relative to CW in dcFM): ± 100 Hz (typically 40 Hz), deviation < 10 kHz (within one hour after dc FM calibration)

Pager Signaling

Supported Pager Protocols: POCSAG, FLEX, and FLEX-TD (FLEX is a trademark of Motorola, Inc.)

POCSAG

Speed: 512, 1200, and 2400 bps

Message Format: Tone only, Numeric, Alphanumeric

FLEX/FLEX-TD

Speed: 2 Level FSK: 1600 and 3200 bps

4 Level FSK: 3200 and 6400 bps

Message Format: Tone only, Numeric (Standard and special), Alphanumeric, HEX/Binary

Address Type: Short, Long Messaging Accessible From Front Panel or GPIB

Message Types: Five fixed (built-in), one user-defined Message

Length: 40 characters maximum

Repetition Modes: Single, Burst, Continuous Messaging Accessible Only Over GPIB

FLEX/FLEX-TD: 128 Frames

POCSAG: 128 batches

Data Rate Accuracy: ± 5 ppm

Ordering Information

Compatible Spectrum Analyzer

- 8648A

Required Configuration

- Option 1EP, pager signaling option
- Option 1E5, high stability time-base, (FLEX, FLEX-TD only)

By internet, phone, or fax, get assistance with all your test and measurement needs.

Online Assistance

www.agilent.com/find/assist

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Printed in U.S.A. 9/00
5964-6686E



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