

Spectrum Analyzers

PDC/PHS Receiver Test Set

R31560

Specifications

Frequency

Range:

PDC: 810 to 828 MHz, 940 to 958 MHz,
1429 to 1453 MHz, 1477 to 1501 MHz
PDC Dual band option (OPT 06) 870 to 885 MHz, 925 to 940 MHz PHS:
1885 to 1930 MHz

Resolution: 1 kHz

Level

Range:

RF OUT; -125 to +6 dBm
Tx/Rx; -125 to -7 dBm

Accuracy (at $25 \pm 10^\circ\text{C}$):

For $f \leq 1000$ MHz
 ± 1 dB; -120 to +6 dBm
 ± 2 dB; -125 to -120.1 dBm

For $f > 1000$ MHz
 ± 1 dB; -110 to +6 dBm
 ± 2 dB; -125 to -110.1 dBm

Frequency characteristic: ≤ 1 dB_{pp}

Signal Purity

Harmonic spurious: ≤ -30 dBc

Non-harmonic spurious:

≤ -70 dBc 10 kHz $\geq$ offset, in PDC/PHS bands
 ≤ -75 dBc 50 kHz $\geq$ offset, in PDC/PHS bands
 ≤ -50 dBc outside PDC/PHS bands

Adjacent channel leakage power: ≤ -60 dB

Modulation

Format: $\pi/4$ DQPSK

Transmission speed: 42 kHz (PDC)/384 kHz (PHS)

Vector error: $\leq 3\%$ rms

Internal modulation data:

Non framing/PDC framing/PHS framing

PDC framing:

Device/Up/Down, PN9/PN15/ALL0, ALL1,
FULL/HALF rate, scramble function

PHS framing:

Device/Up/Down, Synch, PN9/PN15/ALL0, ALL1,
scramble function

Burst function:

ON/OFF ratio ; > 70 dB (arbitrary slot ON/OFF)
Rise/fall time; < 2 symbols

BER Measurement

Bit length: 10^3 to 10^6 bits

Clock polarity: POSI/NEGA can be selected

Data polarity: POSI/NEGA can be selected

TCH frame: POSI/NEGA/OFF can be selected

Averaging function: 1 to 32 times

Frequency Reference Source

Internal reference source accuracy: 2×10^{-6} /day, 1×10^{-7} /year

Internal reference source output: 10 MHz, ≥ 0 dBm

External reference source input: 10 MHz, ≥ 0 dBm

Other Functions

External interface: GPIB

Maximum inverse input power: Tx/Rx terminals 2 W,
RF OUT 10 W

Analyzer output:

22 dB level loss (typ.) from Tx/Rx terminals,
 ≤ 2 dB_{pp} frequency characteristic (DC to 6 GHz)

General Specifications

Operating temperature range: 0 to $+50^\circ\text{C}$

Storage temperature range: -20 to $+60^\circ\text{C}$

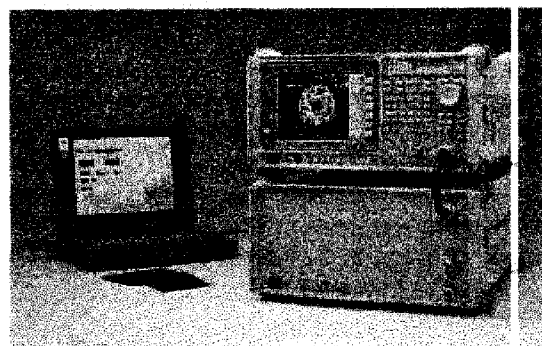
Power voltage: AC 100 to 120 V, AC 220 to 240 V

Power frequency: 50/60 Hz

Power consumption: 300 VA max.

Weight: 20 kg max.

External dimensions: Approx. 177 (H) $\times$ 350 (W) $\times$ 420 (D) mm,
excluding handle, front cover and feet



▲ Shown connected to R3465