Specifications

Linearity :
LOG mode ± 0.15/1 dB, ± 1/10 dB, ± 1.5/70 dB or above
LIN mode ± 5% of fullscale
Reference level :
LOG mode –69 to +40 dBm (40.25 to 150 dBµV for the R4131CN/4131DN)
LIN mode 72.77 µV to 22.36 V (102.9 µV to 31.62 V for R4131CN/4131DN)
Reference level accuracy : ± 1 dB in LOG mode (in the reference level range of 0 to –59 dBm (110 to 51 dBµV for the R4131CN/4131DN), at 200 MHz with input attenuation at 10 dB after level calibration)
Reference level units : Selectable as dBm, dBµV, or dBµV/m
Dynamic range :
Average noise level

R4131C/4131D	R4131CN/4131DN
–116 dBm + 1.55 f (GHz) dB or less	–114 dBm + 1.55 f (GHz) dB or less

With 1 kHz RBW, 10 Hz video filter, input atten 0 dB, frequency 1 MHz or above
2nd and 3rd order distortion 70 dB or greater (when input level is –30 dBm, at 10 MHz or above)
Frequency response (with 10 dB attenuation)

R4131C	R4131D	R4131CN/4131DN
±1 dB or less (100 kHz ≤ f ≤ 2 GHz) ±3.5 dB or less (10 kHz ≤ f ≤ 3.5 GHz)	±1 dB or less (100 kHz ≤ f ≤ 2 GHz) ±2 dB or less (10 kHz ≤ f ≤ 3.5 GHz)	±1.5 dB or less (100 kHz to 1.5 GHz) ±2.5 dB or less (10 kHz to 2 GHz) ±4 dB or less (2 GHz to 3.5 GHz)

Resolution bandwidth switching accuracy : ±1 dB max. (+20 to 30°C)
Gain compression: 1 dB max. for –10 dBm mixer input

Input

RF input: Approx. 50 Ω, N connector (approx. 75 Ω, NC connector for the R4131CN/4131DN)
Maximum input level: +20 dBm (127 dBµV for the R4131CN/4131DN), ± 25 VDC max. (with 20 dB or greater input attenuation)
Input attenuator: 0 to 50 dB in 10 dB steps
Input attenuator switching accuracy: ± 1 dB max. (10 kHz ≤ frequency ≤ 2 GHz) or ± 1.5 dB max.
(2 GHz < frequency ≤ 3.5 GHz), with respect to 10 dB attenuation
Input VSWR (at 10 dB input attenuation or greater):

R4131C/4131CN	R4131D/4131DN
1.5 max. (100 kHz ≤ frequency ≤ 2 GHz) 2.0 max. (2 GHz ≤ frequency ≤ 3.5 GHz)	1.5 max. (100 kHz to 1.5 GHz) 2.0 max. (10 kHz to 2 GHz) 2.5 max. (2 to 3.5 GHz)

Display Section

CRT: 5.5-inch, phosphor, amber display
Trace: WRITE waveform and VIEW waveform (up to 2 waveforms displayed on the CRT)

R4131C/4131CN	R4131D/4131DN
Posi-peak and sample display	Posi-peak, sample and posi/nega display

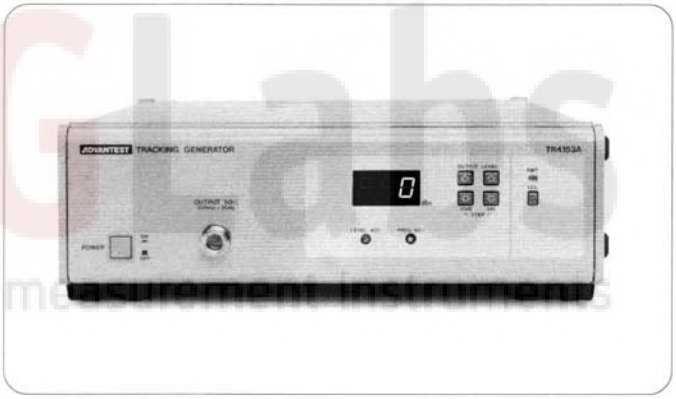
Output

Calibration output signal : 200 MHz ± 30 kHz, –30 dBm (80 dBµV for the R4131CN/4131DN) ± 0.5 dB
Monitor output : Approx. 8Ω, enables monitoring using an earphone
Video output : Approx. 1 V_{P-P}, approx. 75Ω (composite signal output for external CRT)

General Specifications

Save/recall : Maximum 3 types of waveform measurement conditions can be stored in the internal memory.
Operating environment : 0 to +50°C, RH 85% max.
Storage environment : 0 to +70°C
Power requirements : 90 to 132 V, 198 to 250 V, automatic switch
Dimensions: Approx. 300(W) × 177(H) × 460(D) mm
Mass : Approx. 10 kg

TR4153A
Tracking Generator



Specifications

Frequency range: 100 kHz to 2 GHz
Output impedance: Approx. 50 Ω
Output VSWR: 1.5 max. (at –10 dBm output)
Output level flatness: ± 1 dB max. (with respect to 200 MHz output, over an output level range of 0 to –59 dBm and frequency range of 100 kHz to 2 GHz)
Output level variable range: 0 to –59 dBm in 1 dB steps (continuous adjustment over the range 0 to 1.5 dB or greater using the level adjustment)
Output level switching accuracy: ± 0.2 dB/1 dB (0 to –9 dB)± 1.0 dB/10 dB (0 to –50 dB)
Spurious output components: Harmonics ≤ 20 dBc, non-harmonics ≤ 30 dBc (at 0 dBm output)
Tracking generator leakage: –110 dBm
GPIB: Standard functions enables remote control and data output
General Specifications
Operating environment:
Temperature 0 to 40°C, Humidity 85% max. RH
Power requirements: 90 to 132 V, 198 to 250 V
Power consumption: 50 VA max.
Dimensions: Approx. 300(W) × 90(H) × 440(D) mm
Mass: 10 kg max.