

# Specifications

FRA 5096/FRA 5095

## ◆ FRA 5096 VS FRA 5095

	FRA 5096	FRA 5095
Model	Frequency Response Analyzer	Frequency Response Analyzer
Frequency range	0.1mHz to 15MHz	0.1mHz to 2.2MHz

## ◆ Oscillator

Output waveform	Sine wave, Square wave, Triangle wave
Frequency range	Sine wave : FRA 5096 0.1mHz to 15MHz : FRA 5095 0.1mHz to 2.2MHz Square, Triangle wave : 0.1mHz to 100kHz Setting Resolution : 0.1mHz
Amplitude	AC : 0V to 10.0Vpeak (No load) DC : -10.0V to 10.0V
Frequency sweep	Logarithmic sweep : 3 to 20,000steps/sweep or 1 to 20,000steps/decade Linear sweep : 3 to 20,000steps/sweep or 0.1mHz to 15MHz/steps(FRA 5096) or 0.1mHz to 2.2MHz/steps(FRA 5095) Automatic high density sweep is available
Isolation voltage	250Vrms (input vs. chassis, vs. analysis section)

## ◆ Analysis Section

Number of input channels	2 channels (CH-1, CH-2)
Isolation voltage	250Vrms (input vs. chassis, vs. oscillator output, and to analysis part input)
Amplitude range	Auto-ranging ,Max 250Vrms
Max. input voltage	AC+DC 350Vpeak
DC bias elimination	Automatically eliminate up to value without error
Dynamic range	no less than 140dB (10Hz to 1MHz)
Delay function	0 to 9,999 sec., 0 to 9,999 cycle
Integration function	0 to 9,999 sec., 1 to 9,999 cycle Available Automatic integration
Amplitude compression function	Automatically control the amplitude of oscillator for keeping the input level of analysis constant
Other functions	Equalize function, Harmonic analysis function
Analysis mode	Ratio : CH1/CH2, CH2/CH1 Level : CH1, CH2
Arithmetic function	Arithmetic operation, Differentiation, Sencod-differentiation, Integration, Double integration, Open loop to closed loop conversion Closed loop to open loop conversion

## ◆ Measurement error

CH1/CH2 mode	20kHz or less	500kHz or less	2.2MHz or less	2.2MHz more *
a, b, R	+/-0.5%	+/-1%	+/-10%	+/-25%
logR	+/-0.05dB	+/-0.1dB	+/-1dB	+/-2dB
Phase	+/-0.3 deg	+/-0.5 deg	+/-2 deg	+/-5 deg

\* FRA 5096

## ◆ Display Section

Display	6.5inch, Color LCD
Graph display	Bode plot/Nyquist plot/Nichols plot/Cole-Cole plot (Reading and auto-scale are available with use of the cursor)

## ◆ External memory

Media	Floppy disk (3.5inch 2HD 1.44MB)
Disk format	Compatible with Windows
Memory contents	Setting conditions, Measurement data

## ◆ Others

Thermal printer	LCD screen hardcopy
GPIB	Setting conditions, Inquiry of conditions & data, Instructions
Plotter output	Hardcopy on LCD screen
DC source output	connector for 5055, +/-24V, Max.100mA
Power requirement	AC100V/120V/230V +/-10% 48 to 62Hz FRA 5096 Max. 100VA, FRA 5095 Max. 80VA
Temperature & humidity range for guarantee	5 deg C to +40 deg C, 10% to 85%RH (with no dew condensation)
Dimensions (mm)	434 (W) * 177 (H) * 500 (D) (projection excepted)
Weight	Approx. 15kg
Accessories	one copy of instruction manual, a power supply cable (3 pole, 2m), a power supply plug converter, a fuse, three pieces of signal cable (BNC-BNC), a type T divider, a thermal paper, the file read-out software (floppy disk, 3.5inches)

## ◆ Impedance display function(option)

Model no. : PA-001-0373 for FRA 5096

Model no. : PA-001-0341 for FRA 5095

## Option accessories

High withstand voltage clip set(3 pcs pair)	model no. : PA-001-0419
High withstand voltage alligator clip cable set(small)(3 pcs pair)	model no. : PA-001-0420
High withstand voltage alligator clip cable set(large)(3 pcs pair)	model no. : PA-001-0421
Alligator clip cable set(large)(3 pcs pair)	model no. : PA-001-0422
High withstand voltage BNC adapter(T-branch)	model no. : PC-001-4503
High withstand voltage BNC cable	model no. : PC-002-3347
High withstand voltage plug-receptacle BNC cable	model no. : PC-007-0364
Printer paper (10 rolls)	model no. : PC-007-0382