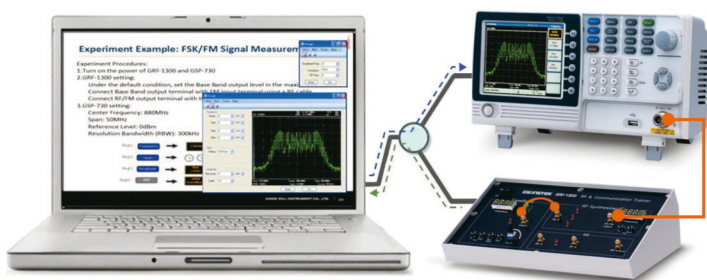




Turn-key Solution for RF and Communication Experiment Courses

FI 8020AS is a 3 GHz Spectrum Analyzer mainly developed to fulfill the demands of RF Communication educations. Budget constraint and inadequate of teaching tools are normally the two hurdles for schools to provide high-quality courses for RF communication experiments. FI 8020AS is a spectrum analyzer of full functions, with appropriate combination with the training kit, FI 802GF, provide customers an economic turn-key solution for 3GHz RF Communication Experiment Courses.

With its components, FI 8020AS Spectrum Analyzer, FI 802GF RF and Communication Trainer and a PC, properly connected, a tangible system is integrated for performing ongoing experiments while the lecture is being given. Using a PC, the teacher can present teaching material with PowerPoint slide and simultaneously control FI 8020AS and FI 802GF to perform experiments and get spectrum displays and parameter readings on the PC screen. FI 8020AS and FI 802GF easily transferred the current teaching materials, including the PowerPoint slides, textbook, and the remote control software, into electronic-teaching system.



Fully-electronic RF Training System

The combination of FI 8020AS and FI 802GF forms a fundamental training system for RF communication and telecommunication classes in the universities, colleges, vocational schools, and the training centers in military as well as the private companies. Instead of the tremendous cost of the installation of new training system, the conjunction of FI 8020AS and FI 802GF provides an economic solution to eliminate two obstacles, budget constraint and insufficiency of teaching tools.

FI 8020AS et FI 802GF

FEATURES

FI 8020AS Spectrum Analyzer

- Frequency Range : 150kHz ~ 3GHz
- Autoset Function
- Noise level : $\leq -100\text{dBm}$
- RBW Range : 30kHz, 100kHz, 300kHz, 1MHz
- ACPR/CHPW/OCBW Measurement
- 3 Traces in Different Colors
- Split Window Function
- Limit Line Function
- Remote Control Software
- Presentation Material for Training Courses
- Support Interface : USB Device/Host, RS-232C
- 5.6" TFT LCD with VGA Output

FI 802GF RF and Communication Trainer

- Waveform Support :
Sine Wave : 0.1 ~ 3MHz
Square Wave : 0.1 ~ 3MHz
Triangle Wave : 0.1 ~ 3MHz
- RF Frequency : 870 ~ 920MHz
- AM Modulation & FM Modulation
- 5 On/Off Switches and 5 Test Points to Simulate 8 Failure Conditions for Learning Outcome Test
- USB Interface to Provide Remote Control

APPLICATIONS

- Education, Training
- Fourier Theory Investigation
- Motherboard Circuit Measurement
- Wireless Communication Signal Measurements
 - GSM, 3G, 4G Mobile Phone
 - Bluetooth, Zigbee, Wi-Fi
 - AM/FM Modulation
- Remote Controller Maintenance

SPECIFICATIONS

FI 8020AS

FREQUENCY	Frequency Range	Setting Range	150kHz ~ 3GHz
	Center Frequency	Setting Resolution	0.1MHz
	Frequency Span	Accuracy	within ± 50 kHz (frequency span : 0.3GHz ~ 2.6GHz, 20 $\pm 5^\circ$ C)
	Resolution Bandwidth	Setting range	1MHz ~ 3GHz
AMPLITUDE	SSB Phase Noise	Accuracy	within $\pm 3\%$ (frequency span : 0.3GHz ~ 2.6GHz, 20 $\pm 5^\circ$ C)
	Inherent Spurious Response	Setting Range	30KHz, 100KHz, 300KHz, 1MHz
	Reference Level	Input Range	+20 ~ -40dBm
	Average Noise Level	Accuracy	Within ± 2 dB (1GHz) ; SPAN : 5MHz
SWEEP	Frequency Characteristic	Unit	dBm, dBV, dB μ V
	Input	Input Impedance	50 Ω
	Sweep Time	Input VSWR	less than 2.0@input att ≥ 10 dB
	Communication Interface	Input damage level	+30dBm (CW average power), 25VDC
GENERAL	VGA Output	Input connector	N connector
	Power Source	Setting Range	300ms ~ 8.4s, auto (not adjustable)
	Operating Temperature	Accuracy	within $\pm 2\%$ (frequency span : full span)
OTHER	Operating Humidity	640 x 480 RGB color LCD	
	Storage Temperature	RS-232C	Sub-D female-D 9 pins
	DIMENSIONS & WEIGHT	USB Connector	USB Host/Device full speed supported
FI 802GF	Power Source	Sub-D female 15 pins	
	Operating Temperature	AC 100~240V, 50/60Hz	
	Operating Humidity	296(L) x 153(W) x 105(H) mm / 11.6(L) x 6(W) x 4.1(H) in	
BASE BAND	Waveforms	Approx. 2.2kg / 4.9lb	
	Frequency Range	Sine, Square, Triangle	
	Amplitude	0.1 ~ 3MHz ; Step : 10kHz	
RF/FM GENERATOR	Harmonics Distortion	≥ 1.5 Vpp	
	Frequency Accuracy	≥ -30 dBc	
	Adjustable Range	± 0.15 MHz	
FM	Power Range	≥ 45 MHz (870M ~ 920MHz) ; Step: 1MHz	
	Max Frequency Deviation	≥ -15 dBm	
AM	Peak Difference	> 3 MHz	
INTERFACE	USB	≥ -18 dBm	
DIMENSIONS & WEIGHT	USB	USB Device	
DIMENSIONS & WEIGHT		165(W) x 155(H) x 90(D)mm / 6.5(W) x 6.1(H) x 3.5(D)im	
		Approx. 1.2kg / 2.6lb	

Specifications subject to change without notice. SP-730GD1DH

ORDERING INFORMATION

FI 8020AS 3GHz Spectrum Analyzer
FI 802GF RF and Communication System Trainer

ACCESSORIES

FI 8020AS: Quick start manual x 1, User manual CD x 1, Power cord x1
FI 802GF :Experiment text book of student version, Power point file and remote control software CD,
RF cable x 3, Antenna x 1, N to SMA adaptor connector, Power cord x 1

OPTION

GBK-001 Experiment text book of teacher version

FREE DOWNLOAD

PC Software Training system remote control software