## Radio communications system

This set constitutes a homogeneous complete system (generator + analyzer + PC link + assignments) for moderate acquisition cost.

From a PC, the user can:

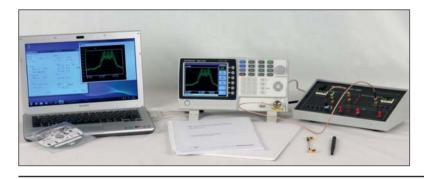
- control the spectrum analyzer and the bench
- make screen copies

The set also operates autonomously without PC.

DOSSIER PÉDAGOGIQUE ELEVE + PROFESSEUR



ref. GSP-T



## Scope of supply

- One main console
- One spectrum analyzer
- One student book containing 9 Practical Assignment modules:

Experiment 1: Basic operation of a spectrum analyzer

Experiment 2: Measurement of a baseband signal

Experiment 3: Different wave forms in baseband and their harmonic measurements

Experiment 4: Measurement of the RF carrier

Experiment 5: Measurement of the AM signal

Experiment 6: Measurement of the FM signal

Experiment 7: Using a spectrum analyzer in Communication Systems

Experiment 8: Measurement on communication products

Experiment 9: Remote control of the analyzer and the generator on PC

- One manual for the instructor, with practical assignment answers
- One CD with the remote control program.
- 3 RF cables, 1 antenna, one N / SMA adapter, mains cord.
- 2 USB cables for control link by PC.

## FEATURES OF THE CONSOLE

5 test points accessible on the front, in particular for controlling the levels of AM and FM signals, for doing the practical assignments.

Buttons for step control of the carrier and signal frequencies.

Two displays show the signal and carrier frequencies respectively.

Remote control of the console is accessible from PC by a USB port

Dimensions/Weight: 165 x 155 x 90 mm / 1.2 kg

FUNCTION	FORM OF THE SIGNALS	Sine, square, triangle
SIGNAL	Frequency band	0,1 ~ 3MHz
	Adjustment	in steps of 10kHz
	Amplitude	1.5Vpp
	Harmonic distortion	-30dBc
	Accuracy of the frequency	±0.15MHz
RF/FM generator 870-920 MHz		45MHz (870 ~ 920MHz)
		in steps of 1MHz
	Power	-15dBm
FM	Max frequency deviation	>3MHz
AM	Peak to peak difference	-18dBm

## FEATURES OF THE SPECTRUM ANALYZER

GSP730 is a spectrum analyzer adapted for teaching, including use help functions: Autoset, Screen share (the same signal shown by 2 different scans), template creation, power measurement of RF signals, program for remote control from PC, simple and user friendly.

FREQUENCY	
Range	150kHz à 3GHz
Central frequency	Resolution 0,1MHz / Accuracy 50kHz
Frequency deviation	1 MHz to 3GHz. Accuracy 3%
Width of RBW filter	30 - 100 - 300 - 1000kHz
AMPLITUDE	
Ratings / Units	-40dBm to + 20dBm / dBm dBV dBµV
Max level	30dBm
Mean noise	≤ -100dBm
Input impedance	50 ohms connector N
SCANNING	
Ratings / accuracy	300ms to 8,4s / 2%
OTHER FEATURES	
Interface	USB full speed / RS232
VGA output	Sub D
Screen	colors LCD 14 cm
Dimensions/Weight	196x153x105 mm / 2,2 kg