

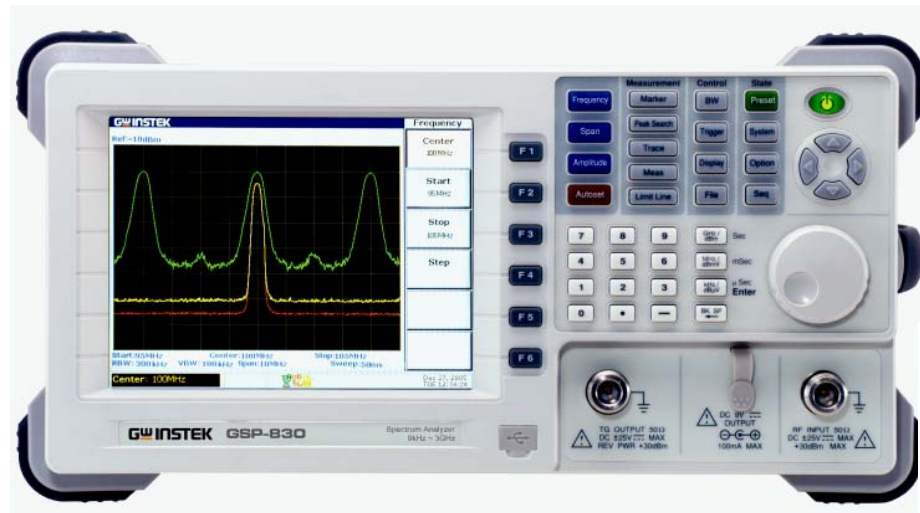
# Introduction to GSP-830 3GHz Spectrum Analyzer

**GW INSTEK**

Made to Measure

固緯電子實業股份有限公司

# New 3GHz Spectrum Analyzer



*Front View*



*Rear View*

① Frequency Adjustment

② Ref. Input

③ Ref. Out

④ Ext. Trigger

⑤ GPIB

⑥ RS232

⑦ USB

⑧ VGA Output

⑨ Ear Phone

⑩ DC Input

⑪ Battery Pack

⑫ AC power switch

⑬ AC power socket

## Great RF Characteristics

---

- **Very Low Noise floor:-117dBm @1GHz, 3k RBW**
- **Spurious:-60dBc under Reference Level**
- **3rd Intermodulation: -70dBc,  
two tones -40dBm, 2MHz apart**
- **Amplitude Accuracy :1dB**
- **Frequency Flatness:1dB**
- **Display Range Linearity:1dB over 70dB**
- **RBW:3k, 30k, 300k, 4M (standard), Accuracy:15%**
- **VBW:10Hz~1MHz in 1-3 steps**

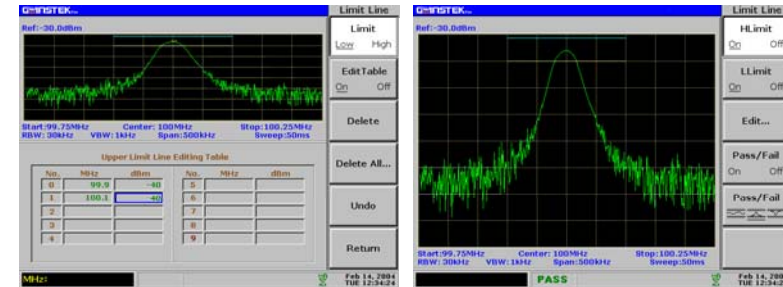
# Advanced Automation Functions

# Features

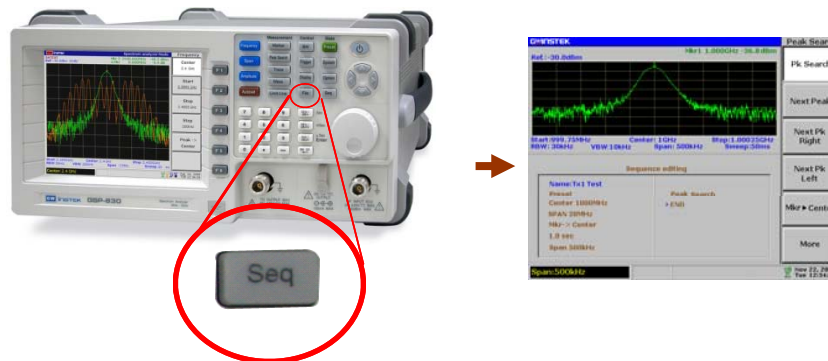
## \*AutoSet function



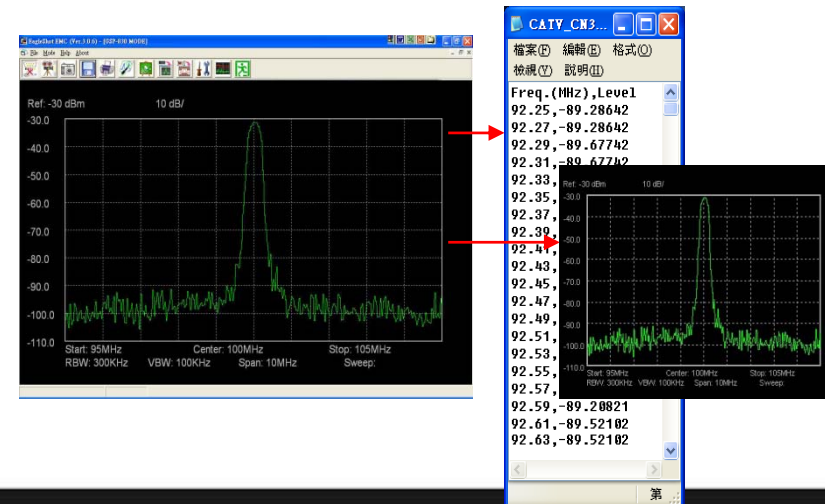
## \*GO/NG Test



## \*Sequence programming functions

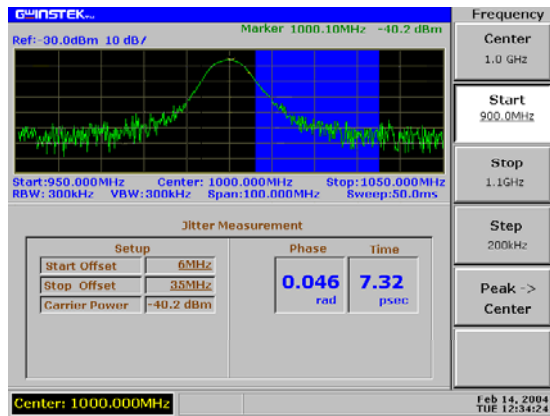


## \*PC Software, EagleShot

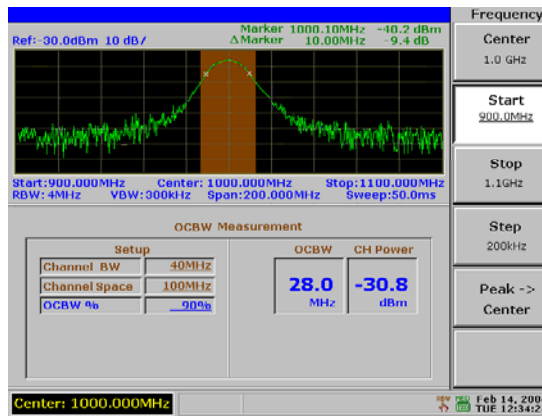


# Abundant Measurement Functions Features

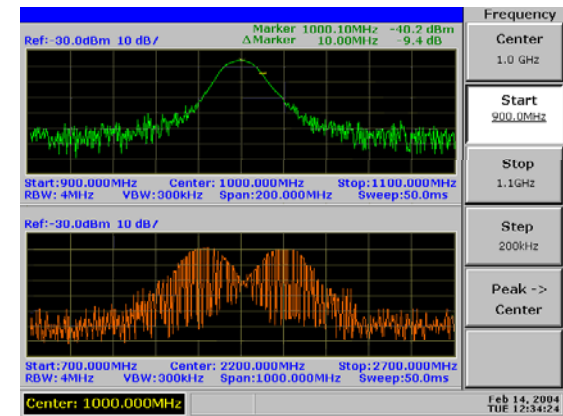
## \*Jitter Measurement



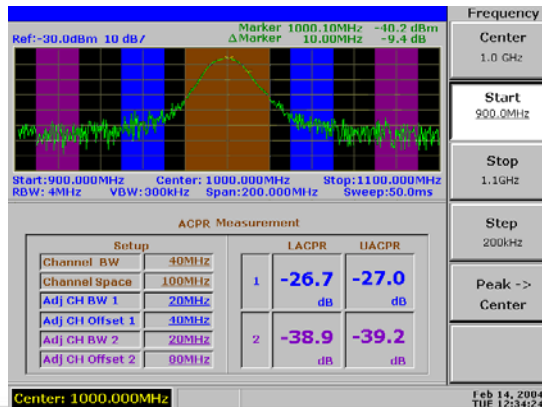
## \*OCBW



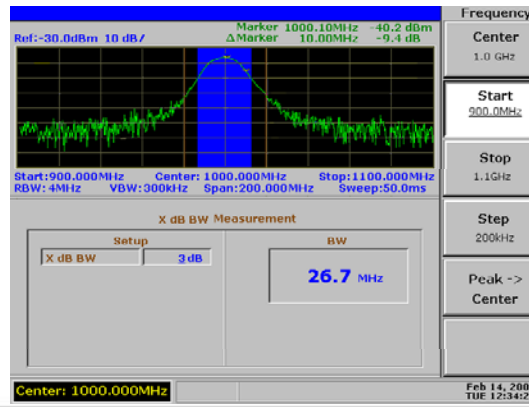
## \* Split Windows



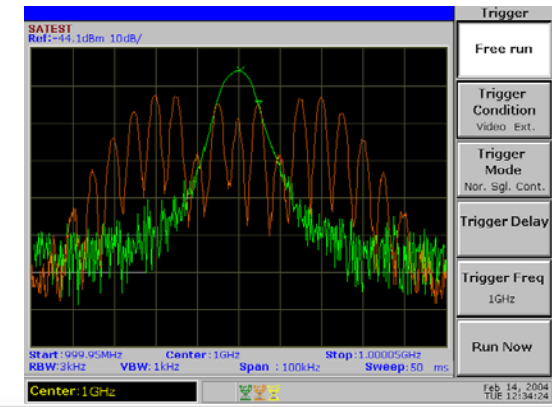
## \*ACPR



## \*N-dB Measurement

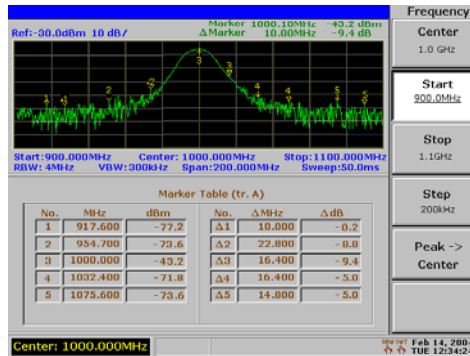


## \*Trigger



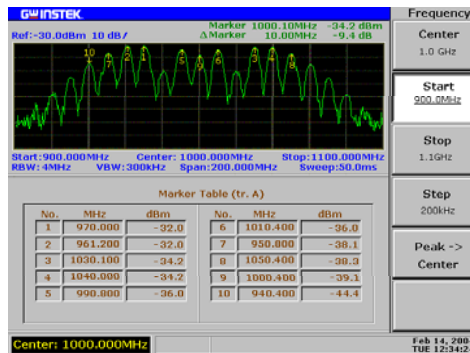
# Features

## Complete Marker functions



- 10 markers divided into 5 pairs of Marker-ΔMarker

- Peak, next peak, left peak, right peak functions



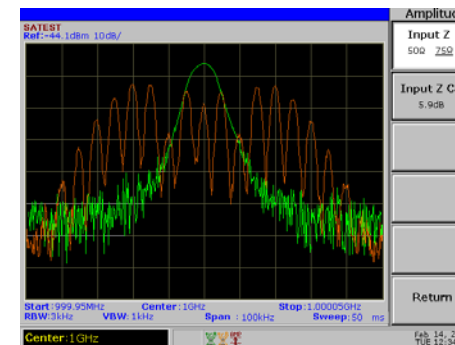
- Peak track, Peak to Center functions

- Peak table sorted by amplitude or frequency

## Amplitude compensation functions



- Correction table --Pre-compensate the measurement in Amplitude, 3 tables allowed. Ex. Antenna gain compensation

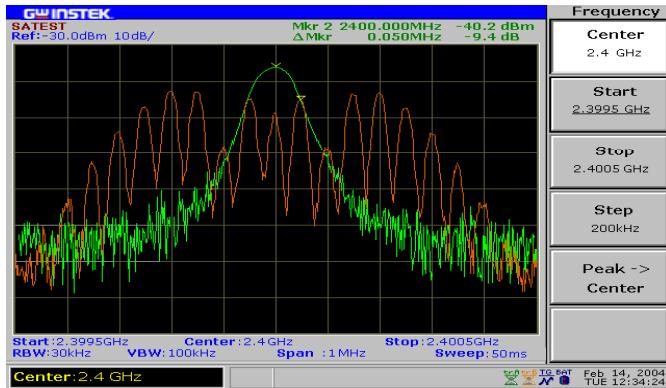


- 50/75 Input impedance (Z) calibration --The 50/75 Ω adaptor loss can be counted in.

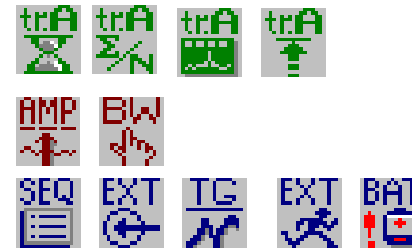
# Friendly User's Interface

## Features

\*6.4" TFT color LCD,  
resolution: 640x480

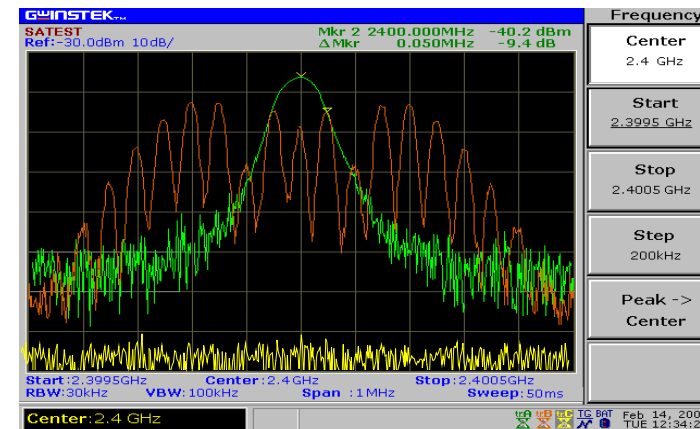
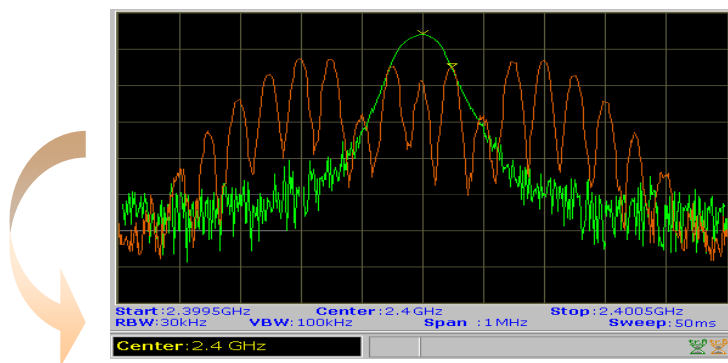


\*Icons Indicate of  
Working status



\*3 traces A, B, C

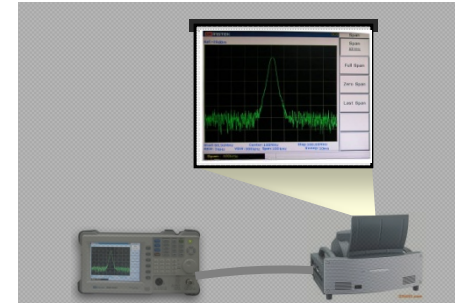
\*Separate Entry Data Area



# Features

## Input / Output connectors

- **Direct VGA output**
- TG output / RF input (N type connector)
- DC 9V output (for Preamplifier GAP-801)
- **USB/RS232/GPIB (optional)**
- Reference input(1M, 1.544M, 2.048M, 5M, 10M, 10.24M, 13M, 15.36M, 15.4M, 19.2M)
- Reference output (10MHz)
- External Trigger input
- Frequency adjustment



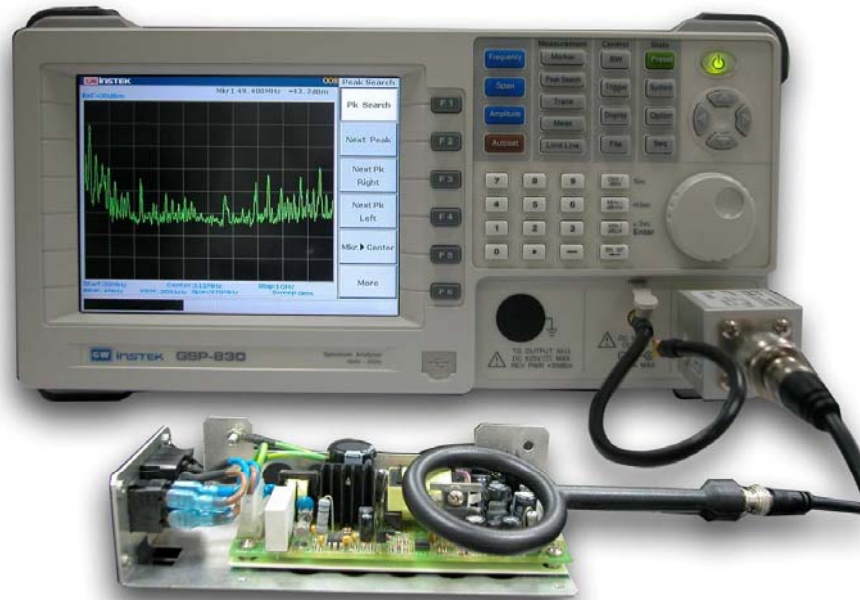
## Portability

- **AC/DC/Battery 3-way power operation**
- **Compact size, 330(W) x170 (H)x340 (D) mm**
- **Light weight of 5.8kg without options**





# Options and Accessories



The most efficient EMI debugging & Pretest tool:

**GSP-830+ GAP-801 + GKT-006**



Parameter	Min.	Typical	Max.	Unit
Frequency Rang	0.009	---	6	GHz
Gain	9	11.5	---	dB
$P_{1dB}$	+13	+14	---	dBm

# Applications



# GSP-830 3GHz Spectrum Analyzer

---

- Possessed of high performance and abundant measurement abilities but offered at an affordable price.
- 3-way power operation, compact size and 5.8kg light weight make this unit suitable in both bench and portable applications.
- Design for RF measurement in the booming wireless era.

