ELITE RF
RF Amplifiers & Systems

It's New / Fast / Compact / Cost Effective

***ELITE RF** Introduces the S-SERIES a Fully Integrated RF Test System*

It's a 4.4 GHz Spectrum Analyzer
It's a 4.4 GHz RF Tracking Generator
It's a 13.6 GHz Dual Signal Generator
It's a 4.2 GHz Dual RF Power Amplifier
It's a 200 MHz 4 Channel Scope
It's a 8 GHz RF Power Meter

Features :

7" inch display	HDMI output	LAN
RF power relay	RF power attenuator	USB 2.0 ports
Remote control	Internet access	Wireless keyboard/mouse

S – Series (X –Standard / O- Optional)		Model	Model
Description		*SA441*	*SPA441*
Spectrum Analyzer	10 HZ - 4.4 GHz	X	X
Dual Signal Generator	54 MHZ - 13.6 GHz	X	X
Four Channel Scope	4 CH - 200 MHz	X	X
Tracking Generator	10 HZ - 4.4 GHz	O	X
RF Power Meter - CW/Pulse	1 MHz - 8 GHz		X
Power Amplifier - 1	5 Watts / 500 - 4200 MHz		X
Power Amplifier - 2	20 Watts / 20 - 1000 MHz		O
RF Relay - SPDT	35 Watts / DC - 18 GHz		X
RF Attenuator	10 Watts / DC - 18 GHz		X

Other Models

12.4 GHz system
Model SA1241
Model SPA1241

Custom Models available upon request.

ELITE RF

RF Pallets
RF Modules
RF Amplifiers
RF Lab Amps
RF Systems
Test Equipment
Custom Products

2 Year Warranty

MADE IN THE USA
AMERICAN PRODUCT

Independent control of each RF system allows for maximum test flexibility

The S - Series multi-purpose RF test system can be used in many applications such as R&D lab, ATE factory testing, EMC testing, field testing, and general purpose RF design. The **S - Series** is a flexible alternative to expensive and bulky RF test equipment. As shown in the setup in the upper right the S-Series system can be utilized to simultaneously provide all RF functions using its 7 inch front panel display or can be connected to a larger monitor for ease of viewing multiple windows at the same time. For more information and specifications on the S-Series please visit our website or contact us at 847-592-6350.

2155 Stonington Ave. Suite 217 Hoffman Estates IL. 60169
Phone: 847-592-6350 www.eliterfllc.com Email us at: sales@eliterfllc.com

ELITE RF
RF Amplifiers & Systems

S-Series Test System Specifications

Spectrum Analyzer and Measuring Receiver

FREQUENCY

- Frequency Range: 1Hz to 4.4GHz (RF Preamp Off); 500kHz to 4.4GHz (RF Preamp On)
- Internal Frequency Reference Accuracy: ±1 ppm
- Counter Accuracy: ± (1Hz + time-base error)
- Resolution Bandwidth: 0.1Hz to 250kHz and 5MHz

AMPLITUDE (RBW ≤100 KHZ)

- Range: +10dBm to Displayed Average Noise Level (DANL)
- Absolute Accuracy: ±1.5dB (0dBm to DANL); ±2.0dB (+10dBm to >0dBm)

Displayed Average Noise Level: (dBm/Hz with 0dB input attenuation)

FREQUENCY	RF PREAMP OFF	RF PREAMP ON
10Hz	-124 dBm	NA
100Hz to 10kHz	-135 dBm	NA
10KHz to 500kHz	-142 dBm	NA
500kHz to 10MHz	-142 dBm	-153 dBm
10MHz to 100MHz	-148 dBm	-161 dBm
100MHz to 1GHz	-144 dBm	-158 dBm
1GHz to 2.6GHz	-139 dBm	-151 dBm
2.6GHz to 3.3GHz	-135 dBm	-151 dBm
3.3GHz to 4.4GHz	-128 dBm	-134 dBm

MEASURING RECEIVER

- Operating Frequency 150kHz to 4.4GHz
- FM Accuracy ±1% typical
- AM Accuracy ±1% typical
- Synchronous Level Detector ±0.25dBc ([0dBm to –125dBm 150kHz to 1GHz] and [0dBm to – 115dBm, 1GHz to 4.4GHz])

Average power sensor

Specifications:

- Wide bandwidth, 1 to 8000 MHz
- 50 dB Dynamic Range, -30 to +20 dBm
- Good VSWR, 1.1:1 typ.
- Fast measurement speed, 30 msec typ.
- Automatic frequency calibration & temperature compensation
- Multi-sensor capability (up to 24)
- Built in Application Measurement Software
- Remote operation via internet
- Effective, easy-to-use Windows® GUI

Amplifier 1

Specifications:

Frequency: 500 to 4200 MHz
Power Output: 5 watts
Gain: 25

Amplifier 2

Specifications:

Frequency: 20 to 1000 MHz
Power Output: 20 watts
Gain: 50

Dual Channel RF Signal Generator

54 MHz – 13.6 GHz

Features

Open source Labveiw GUI software control via USB
96MHz 32 bit ARM processor on board
Two channel frequency, phase and amplitude control
Quadrature (or other phase) LO signal generation
0.1Hz or less frequency resolution
2.5ppm generator frequency accuracy
01 degree phase control on each channel
4mS RF lock time standard
70uS RF lock time (TBD) (subject to export control)
Up to +20dBm output power
16 bit 0.01dB amplitude resolution
Over 50dB of power control
Absolute power display on Software GUI
Calibration option
10MHz – 100MHz external reference input
Selectable 10 or 27 MHz internal reference output
Internal and external FM, AM, Pulse Modulation
Pulsed FMCW Chirp
External Sweep, Step and modulation Trigger
100 point Frequency and Amplitude Hop Table
Dual Channel Frequency and Amplitude Lock
Daughter card expandability (custom applications)
Channel enable / disable saves energy

Tracking Generator

FREQUENCY

Frequency range: 100 kHz to 4.4 GHz
Frequency Accuracy: ±1ppm
Frequency steps: 19 selectable step sizes from 10 Hz to 10 MHz (100 kHz to 4.4 GHz range)

AMPLITUDE

Amplitude range: -30 dBm to -10 dBm
Absolute Amplitude accuracy ±2 dB
Amplitude steps: 1 dB

Four Channel Digital Oscilloscope

Features:

Bandwidth	100MHz
Channel	4 CH
Real-time Sampling Rate	1GSa/s
Memory Depth	64K
Time Base Precision	±50ppm
Time Base Range	2ns/div-1000s/div (1-2-4 sequences)
Input Impedance	1MΩ 25pF
Input Sensitivity	2mV/div～10V/div
Vertical Displacement	2mV～10V/div @ x1 probe;
20mV～100V/div	@ x10 probe ；
200mV～1000V/div	@ x100 probe;
2V～10000V/div	@ x1000 probe
Trigger Source	CH1, CH2, CH3, CH4
Waveform Frequency	DC~25MHz
DAC	2K~200MHz adjustable
Frequency Resolution	0.10%
Channel	1CH waveform output
Waveform Depth	2KSa
Vertical Resolution	12 bit
Frequency Stability	<30ppm
Wave Amplitude	±3.5V Max.
Output Impedance	50 Ω
System BW	25M
Harmonic Distortion	-50dBc(1KHz), -40dBc(10KHz)

Trigger ModeEdge, Pulse, Video, Alternative
Positive Width, Negative Width, Duty Cycle
Arbitrary Waveform Generator Mode

2155 Stonington Ave. Suite 217 Hoffman Estates IL. 60169
Phone: 847-592-6350 www.eliterfllc.com Email us at: sales@eliterfllc.com