

# Instrumentation Grade RF & Microwave Subsystems



## RF Signal Sources

SignalCore signal sources are designed to meet demanding RF and microwave applications in academia, military, and commercial markets. Our broadband CW signal sources offer low phase noise performance, fast frequency locking, and fine resolution tuning. All products are provided with software front panel GUI, driver, and programming API.

	SC5510A/SC5511A	SC5502A/SC5503B	SC5505A/SC5506A	SC800
Frequency Range	100 MHz - 20 GHz	50 MHz - 10 GHz	25 MHz - 6 GHz	25 MHz - 6 GHz
Phase Noise @ 10 kHz, 1GHz	-137 dBc/Hz	-121 dBc/Hz	-115 dBc/Hz	-112 dBc/Hz
Amplitude Range	-30 dBm to +13 dBm	-60 dBm to +10 dBm	-50 dBm to +10 dBm	7 dBm typ
RF List Mode	✓	-	-	✓
Architecture	VCO	YIG	VCO	VCO
Platform	PXIe/USB-SPI-RS232	PXIe/USB-SPI-RS232	PXIe/USB-SPI-RS232	SMT, USB-SPI



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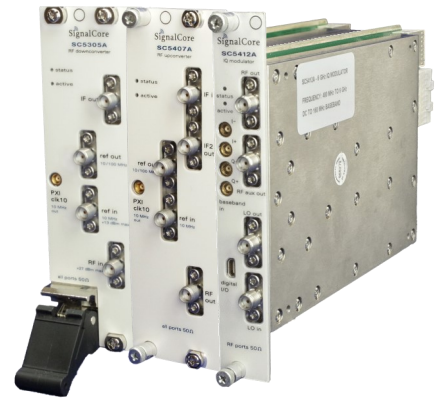
## RF Downconverters

With low phase noise, high dynamic range, fine tuning steps, continuous broadband coverage, and the ability to lock to a precision external reference source, SignalCore Downconverters focus on preserving signal integrity for subsequent digitizing and signal processing, providing our customers with the tools they need for precise frequency translation.

	SC5312A /SC5313A	SC5307A/SC5308A	SC5305A/SC5306B	SC5360A/SC5360B
Frequency Range	300 MHz - 6 GHz	100 kHz - 6 GHz	1 MHz - 3.9 GHz	9.05 GHz - 9.55 GHz
Phase Noise @ 10 kHz offset, 1GHz	-	-100 dBc/Hz	-107 dBc/Hz	-100 dBc/Hz
Input Noise Floor	-165 dBm/Hz	-165 dBm/Hz	-166 dBm/Hz	-168 dBm/Hz
IIP3	20 dBm	18 dBm	20 dBm	-13 dBm
Architecture	Direct IQ	Multi-Stage	Multi-Stage	Multi-Stage
Platform	PXIe/USB-SPI-RS232	PXIe/USB-SPI-RS232	PXIe/USB-SPI-RS232	PXIe/USB-SPI-RS232

## RF Upconverters

Designed to meet today's demanding wireless applications, SignalCore's RF Upconverters can easily be integrated into many signal generation systems. Pair them with our RF downconverters to form transceiver pairs. Our converters are available for PXI and other serial platforms such as USB, SPI, and RS232.



	SC5412A/SC5413A	SC5407A/SC5408A	SC5405A/SC5406B
Frequency Range	80 MHz - 6 GHz	100 kHz - 6 GHz	1 MHz - 3.9 GHz
Phase Noise @ 10 kHz offset, 1GHz	-	-100 dBc/Hz	-107 dBc/Hz
Output SNR	140 dB/Hz	148 dB/Hz	150 dB/Hz
OIP3	27 dBm	32 dBm	39 dBm
Architecture	Direct IQ	Multi-Stage	Multi-Stage
Platform	PXIe/USB-SPI-RS232	PXIe/USB-SPI-RS232	PXIe/USB-SPI-RS232

"Our mission is to provide our customers with high-performance, flexible, small form factor, and cost effective sub-systems, enabling their integration into high-end RF and microwave solutions."