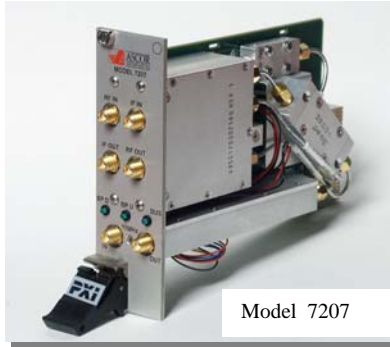


Ascor Block Frequency Converters 4.9 to 6 GHz



Model 7207

The Ascor 7205/6/7 Series of Block Frequency Converters are designed to extend the operation of the National Instruments PXI 5660 RF Analyzer and 5670 Signal Generator into the 4.9 to 6 GHz frequency range giving the capability to test 802.11a systems. Three models are available...The Model 7205 Down Converter, the Model 7206 Up Converter and the 7207 Combination Up/Down Converter. No tuning is necessary...wideband mixing techniques are used throughout. A 10 MHz reference signal is supplied by the PXI 5660 to ensure stable operation.

These modules provide a transparent, cost-effective way to increase the working range of the PXI 5660/5670.

Model 7205 and Down-Converter Section of Model 7207

Frequency Range:	Input	Output	Flatness
	DC to 3 GHz	DC to 3 GHz	± 0.75 dB
	4.9 to 6 GHz	1.1 to 2.2 GHz	± 0.75 dB in any 25 MHz band ± 2 dB over entire range

Frequency Stability is based on the stability of the 10 MHz reference source

Phase Noise	Frequency Offset	dBc/Hz
	10 kHz	-95
	100 KHz	-110
	1 MHz	-125

Spurious Sidebands within ±200 kHz:	< -55 dBc
LO Component present on RF Port:	< -60 dBm
LO Component present on IF Port:	< -70 dBm
RF Frequency Component present on IF port:	< -50 dBm

Amplitude Characteristics for Converter Path	
Max Amplitude with Attenuator set to 0 dBm:	+20 dBm
Linear Operating Range:	-10 dBm to noise floor

Nominal Conversion Gain:	0 dB
Attenuation Error (dB):	<± 0.5 + 5% of Attenuation Setting
Conversion Gain Error (dB):	Attenuation Error + Frequency Response Error

2-Tone Intermodulation Distortion at -20 dBm each separated by 1 MHz:	< -75 dBc
Noise Floor:	< -140 dBm/Hz

Programmable Attenuator Range:	32 dB
Usable Range:	28 dB
Resolution:	0.5 dB

General Characteristics:
User Interface Plug and Play
Size 3U PXI 2-slot
Weight: 3 lbs
Power Consumption TBD

Model 7206 and Up-Converter Section of Model 7207

Frequency Range:	Input	Output	Flatness
	DC to 3 GHz	DC to 3 GHz	± 0.75 dB
	1.1 to 2.2 GHz	4.9 to 6 GHz	± 0.75 dB in any 25 MHz band ± 3 dB over entire range

Frequency Stability is based on the stability of the 10 MHz reference source

Phase Noise	Frequency offset	dBc/Hz
	10 kHz	-95
	100 KHz	-110
	1 MHz	-125

Spurious Sidebands within ±200 kHz:	< -55 dBc
LO Component present on RF port:	< -60 dBm
LO Component present on IF Port:	< -16 dBm
IF (input) Frequency Component present on RF port (output):	< -70 dBm

Amplitude Characteristics for Converter Path:	
Maximum Input Amplitude:	+20 dBm
Output Linear Range:	0 dBm to noise floor

Nominal Conversion Gain:	+5 dB
Attenuation Error (dB):	<± 0.5 + 5% of Attenuation Setting
Conversion Gain Error (dB):	Attenuation Error + Frequency Response Error

2-Tone Intermodulation Distortion at -20 dBm each separated by 1 MHz:	< -75 dBc
Noise Floor:	< -145 dBm/Hz

Programmable Attenuator Range:	32 dB
Usable Range:	28 dB
Resolution:	0.5 dB

General Characteristics:
User Interface Plug and Play
Size 3U PXI 2-slot
Weight: 3 lbs
Power Consumption TBD

Frequency Converters

4.9 to 6 GHz Block Converters

7205 Down Converter

7206 Up Converter

7207 Up/Down Converter

2.7 to 6 GHz Tunable Converters

7208 Down Converter

7209 Up Converter

7210 Up/Down Converter

3.2 to 4.2 GHz Block Converters

7214 Down Converter

7215 Up Converter

7216 Up/Down Converter