

YSC-7061U & YSC-7061D

6GHz Up/Down Converter

At a Glance

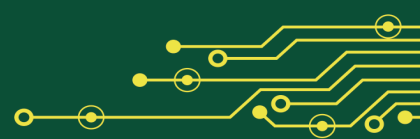
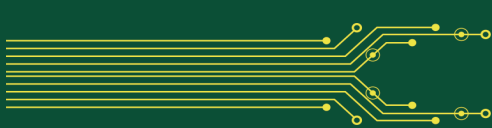
The YSC-7061U up-converter delivers RF output spanning 400 MHz to 6000 MHz, while the YSC-7061D down-converter accepts RF input from 20 MHz to 6000 MHz. Both PXIe bus-interfaced units adopt a 3U module occupying two slots, enabling up-converter functionality control and debugging via PXIe.

The solution provides PXI instrument drivers with C/C++ API support for parameter configuration, functional control, status monitoring, and reference clock configuration, and includes Windows 10 operating system drivers.



Technical Specifications - YSC-7061U (Up-converter)

Parameter	Specification
Up-converter IF Input Specifications	
IF Input Frequency	30–110 MHz
IF Bandwidth	80 MHz
Max. IF Input Power	2 Vpp
Up-converter RF Output Specifications	
RF Output Frequency	400 MHz – 6 GHz
Output Power	-70 dBm – +13 dBm
Gain Flatness	$\leq \pm 0.75$ dB
Output P1dB	≥ 15 dBm
Up-converter Frequency Conversion Parameters	
Link Gain	-70 dB – +20 dB (at 15 dBm OP1dB)
Spurs	< -60 dBc
LO Phase Noise	< -100 dBc/Hz @ 10 kHz
Programmable Attenuation	0–90 dB, Step: 1 dB
Power Consumption	≤ 25 W



Technical Specifications - YSC-7061D (Down-converter)

Parameter	Specification
Down-converter IF Output Specifications	
IF Output Frequency	70 MHz
IF Bandwidth	80 MHz
Max. IF Output Power	15 dBm
Gain Range	25 ± 3 dB (Normal mode)
	40 ± 3 dB (Low-noise mode)
IF Flatness	≤ 3 dB (1dB compression point at 15 dBm)
Output P1dB	≥ 15 dBm
Down-converter RF Input Specifications	
RF Input Frequency	20 MHz – 6 GHz
Max. Input Power	27 dBm
RF Flatness	≤ ± 0.75 dB
Down-converter Frequency Conversion Parameters	
Input VSWR	< 2.5
Spurious Suppression	≤ 50 dB (Typ)
Programmable Attenuation	0–60 dB, Step: 1 dB
LO Phase Noise	< -100 dBc/Hz @ 10 kHz
Power Consumption	≤ 25 W

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Specifications subject to change without notice. Per AS/NZS standards.

