

YSC-7431U & YSC-7431D

43GHz Up/Down Converter

At a Glance

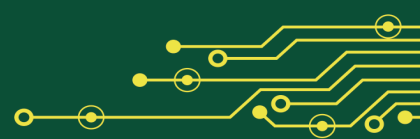
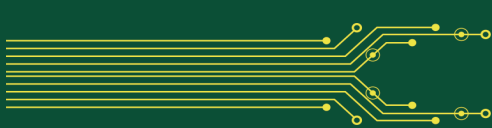
The YSC-7431U up-converter delivers RF output spanning 9 kHz to 43 GHz, while the YSC-7431D down-converter accepts RF input from 9 kHz to 43 GHz. Both units feature a compact modular design that ensures high performance while providing excellent adaptability for highly integrated and complex applications.

They can be integrated with SGR RF transceivers to build wideband signal generation and analysis systems covering an even broader frequency range. Additionally, the up-converters and down-converters support external LO signal input, making them highly suitable for applications requiring high phase synchronization, such as MIMO.



Technical Specifications - YSC-7431D (Down-converter)

Parameter	Specification
Down-converter IF Output Specifications	
IF Output Frequency	1875 ± 500 MHz
IF Output Power	0 dBm
Down-converter RF Input Specifications	
RF Input Frequency	9 kHz – 43 GHz
Max. Input Power	15 dBm
Down-converter Frequency Conversion Parameters	
Gain Range	-35 dB – 25 dB (Normal mode)
	-15 dB – 45 dB (Low-noise mode)
Gain Flatness	0 ± 2.5 dB
Conversion Spurious	≤ -60 dBc
Image Rejection	≥ 60 dB
LO Phase Noise	≤ -104 dBc/Hz @ 10 kHz
LO Step Size	10 MHz
Reference Clock	10 MHz (Output: 9 ± 1 dBm)
Frequency Stability	0.05 ppm
Power Consumption	42 W



Technical Specifications - YSC-7431U (Up-converter)

Parameter	Specification
Up-converter IF Input Specifications	
IF Input Frequency	1875 $\pm$ 500 MHz
IF Input Power	-5 dBm
Up-converter RF Output Specifications	
RF Output Frequency	9 kHz – 43 GHz
Max. Output Power	15 dBm
Up-converter Frequency Conversion Parameters	
Gain Range	-10 dB – 20 dB
Gain Flatness	0 $\pm$ 2.5 dB
Conversion Spurious	$\leq$ -60 dBc
Image Rejection	$\geq$ 60 dB
LO Phase Noise	$\leq$ -104 dBc/Hz @ 10 kHz
LO Step Size	10 MHz
Reference Clock	10 MHz (Output: 9 $\pm$ 1 dBm)
Frequency Stability	0.05 ppm
Power Consumption	42 W

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

