

## C-Band, X-Band and Ku-Band Block Downconverters

MODEL	Input Frequency (GHz)	Output Frequency (MHz)	Frequency Sense	Gain @ F <sub>CENTER</sub> (dB)
DC-3A44A2-1047	3.4 to 4.2	1,900 to 1,100	Inverted	47 ± 2 dB
DC-5A06A5-1047	5.0 to 6.5	2,450 to 950	Inverted	47 ± 2 dB
DC-6A47A8-1047	6.4 to 7.8	950 to 2,350	Non-inverted	47 ± 2 dB
DC-7A08A0-1047	7.0 to 8.0	1,000 to 2,000	Non-inverted	47 ± 2 dB
DC-7A59A0-1047	7.5 to 9.0	950 to 2,450	Non-inverted	47 ± 2 dB
DC-12A514A0-1045	12.5 to 14.0	950 to 2,450	Non-inverted	45 ± 2 dB
DC-13A7514A50-1045	13.75 to 14.50	950 to 1,700	Non-inverted	45 ± 2 dB
DC-14A015A5-1045	14.0 to 15.5	950 to 2,450	Non-inverted	45 ± 2 dB

Other frequency bands available. Contact ITS for details.

The downconverters receives data in the C-band, X-band or Ku-band and down convert to the L-band. It is used in radio platforms supporting 128 or 256 QAM modulations.



Output Power @ 1dB GCP:	+10 dBm Minimum	
Full Band Gain Ripple:	± 2 dBpp Maximum	
Noise Figure:	4.5 dB Typical,	
	5.0 dB Maximum	
Output Harmonics		
@ P <sub>out</sub> = 0 dBm:	-45 dBc Typical	
In-band Output Spurious		
$@ P_{OUT} = 0 dBm:$	-60 dBc Typical	
Out-of-band Output Spurious		
$@ P_{OUT} = 0 dBm:$	-65 dBc Typical	
LO Leakage:	-55 dBm Maximum	
Additive Phase Jitter	0.3° RMS Typical,	
(100 Hz to 10 MHz):	0.4° RMS Maximum	
LO Frequency Stability:	±0.5 ppm Maximum	
Input VSWR:	1.9:1 Maximum	
Output VSWR:	1.5:1 Maximum	
DC Input:	<sup>→</sup> 15 V <sub>DC</sub> @ 1.2 A Max.	
RF I/O Connectors:	SMA Female	
DC Input Connector:	Solderable Pin	
Enclosure Rating:	IP-65	
Dimensions:	5.0" × 5.0" × 2.2"	
Operating Temperature:	-40°C to +60°C	
Non-Operating Temperature:	-50°C to +70°C	
Humidity	Up to 100%	
Altitude	10,000 Feet AMSL	

Specifications are Subject to Change without Notice Errors & Omissions Excepted