



DATASHEET

Norden Millimeter is the leading developer of microwave and millimeter wave products, creating standard and custom RF amplifiers, frequency multipliers, frequency converters, and custom assemblies.

NUC0618I0102

FEATURES

Input Frequency
1.3 - 2.3 GHz

Output Frequency
06 - 18 GHz

Channel Bandwidth Flatness
+/- 2.5 dB

Conversion Gain Min
12 - 20 dB

RF Output Noise Density
-135 dBm/Hz

RF Output P1dB
14 dBm

Norden Millimeter has an extensive catalog of standard up converters, with applications in the commercial, military, and test space. Within this product line is our NUC0618I0102 up converter with an output frequency of 06 - 18 GHz.

Included in Norden Millimeter's standard catalog parts, the NUC0618I0102 is an example of our extensive engineering and prototyping capabilities. Our up converters are carefully engineered to meet the needs of your operations.

We encourage you to contact our sales team at 530-719-4704 to discuss any questions you may have along with what is best for your application. With amplifiers, down converters, up converters, transceivers, and other products operating between 0.5 and 110 GHz, Norden Millimeter is the top choice for both standard products and custom assemblies.

Norden Millimeter is ISO 9001:2015 and AS 9100D Certified.

NUC0618I0102

06 - 18 Up Converter

SPECIFICATIONS

IF Input Freq (GHz)	1.3-2.3
IF Input Power Level, Maximum No Damage (dBm)	10
RF Output Freq (GHz)	6-18
Band 1 (GHz)	6-13.5
Band 2 (GHz)	12.5-18
LO Swept (GHz) RF Step Size 4x LO Input Step	9.0-10.625 B1 9.05-10.3 B2
LO Fixed (GHz)	6.925/5.35 OR B1 13.85/ B2 10.7
Channel Bandwidth (MHz)	1000
RF Output Spurious within IBW $\pm 10\%$, IF Input -10 dBm (dBc)	-60
Nominal Attenuation with respect to 0 dB setting (dB)	56
Nominal IF/RF Output Attenuation step resolution (dB)	1
Conversion Gain min (dB)	12-20
Channel Bandwidth Flatness (dB)	± 2.5
RF Output Noise Density (dBm/Hz)	-135
RF Output P1dB (dBm)	14
LO1/IF Leakage (dBm)	-60
LO1/RF Leakage (dBm)	-55
LO2/IF Leakage (dBm)	-60
LO2/RF Leakage (dBm)	-60
IF/RF/LO1/LO2 VSWR	2.0:1
RF/IF/LO Connectors	SMA Female
LO Input Power (dBm)	0-5
Input Voltage (VDC)	+15, +5, -15
Nominal Current (A)	0.7, 1.4, 0.1
Outline	OL-06311
Base Plate Operating Temp (deg C)	-20 - 65

DC Control Connector	Pin 13 - GND	Molex PN 501-876-2440
Pin 1 - +15V	Pin 14 - RF Attn 16dB	
Pin 2 - GND	Pin 15 - GND	Input Logic 3.3V or 5V TTL
Pin 3 - +5V	Pin 16 - IF Attn 1dB	Compatible
Pin 4 - Band select	Pin 17 - GND	
Pin 5 - +5V	Pin 18 - IF Attn 2dB	Band select:
Pin 6 - Temperature	Pin 19 - N/C	H=Band 2
Pin 7 - +5V	Pin 20 - IF Attn 4dB	L=Band 1
Pin 8 - N/C	Pin 21 - RF Attn 1dB	
Pin 9 - -15V	Pin 22 - IF Attn 8dB	All Attn Controls Active High
Pin 10 - RF Attn 4dB	Pin 23 - RF Attn 2dB	
Pin 11 - GND	Pin 24 - IF Attn 16dB	Temperature 1mV/deg C
Pin 12 - RF Attn 8dB		0.298V Nominal @ 25 deg C



5441 Merchant Circle
 Placerville, CA 95667
 (530) 719-4704
www.nordengroup.com