



## **NDC4070I0218N17 FEATURES**

### RF Frequencies

**Band 1: 40-50 GHz**

**Band 2: 50-60 GHz**

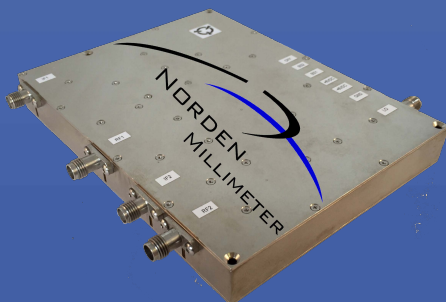
**Band 3: 60 – 70 GHz**

### IF Frequencies

**Band 1: 17.6-7.6 GHz**

**Band 2: 14-4 GHz**

**Band 3: 2.4 – 12.4 GHz**



### LO Frequencies

**Band 1: 14.4 GHz**

**Band 2: 16.0 GHz**

**Band 3: 14.4 GHz**

Norden Millimeter offers the NDC4070I0218N17 as part of its standard catalog of frequency converter products. The NDC4070I0218N17 is a three-band down converter operating with 40-70 GHz RF frequencies. It uses a sequential band operation with a band switch time of 250 uSec. The converter noise figure is 17 dB max.

Norden is able to provide the NDC4070I0218N17 converters with a fast turnaround time at the current specifications. We are also able to provide custom assemblies. Features include internal LOs, variable attenuation, and custom mechanical housings. Our products are used for military, commercial, or test applications.

We encourage you to contact our sales team at 530-642-9123 to discuss your questions and applications. With 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.

# NDC4070I0218N17

40-70 GHz DOWN CONVERTER

# SPECIFICATIONS

RF1 Input Frequency		
Band 1	40-50	GHz
Band 2	50-60	GHz
RF2 Input Frequency		
Band 3	60-70	GHz
IF1 Input Frequency		
Band 1	17.6-7.6	GHz
Band 2	14-4	GHz
IF2 Input Frequency		
Band 3	2.4-12.4	GHz
LO Input Frequency		
Bands 1, 3	14.4	GHz
Band 2	16	GHz
LO Drive Level	0 to -3	dBm
RF / IF / LO Input Port VSWR	2.5:1 max	
Noise Figure	17	dB Max
RF / IF Gain	5-10	dB nom
IIP3	0	dBm min
Image Rejection (referenced to either RF input)	65	dBc min
Single Tone Spurious	-40dBc max. (<-60dBc typ.) at -40dBm RF input	
Connectors		
RF1 input (40 – 60 GHz)	1.85 mm-F (40 – 60 GHz)	
RF2 input (60 – 70 GHz)	1.85 mm-F (60 – 70 GHz)	
LO Input	SMA-F	
IF1 / IF2 output	SMA-F	
DC power / Control	Solder pins (+8v, +6v, BS1, BS2, Off)	
Band Turn-On / Switching Time	250 uSec max.	
Band Operation	Sequential (non-simultaneous)	
Power Dissipation	+8v, 300mA Nom, 50mA Max Power Down +6v, 1000mA Nom, 50mA Max Power Down	
Specified Performance Temperature	25c+/-5	°c
Operating Temperature	-20 to 60	°c

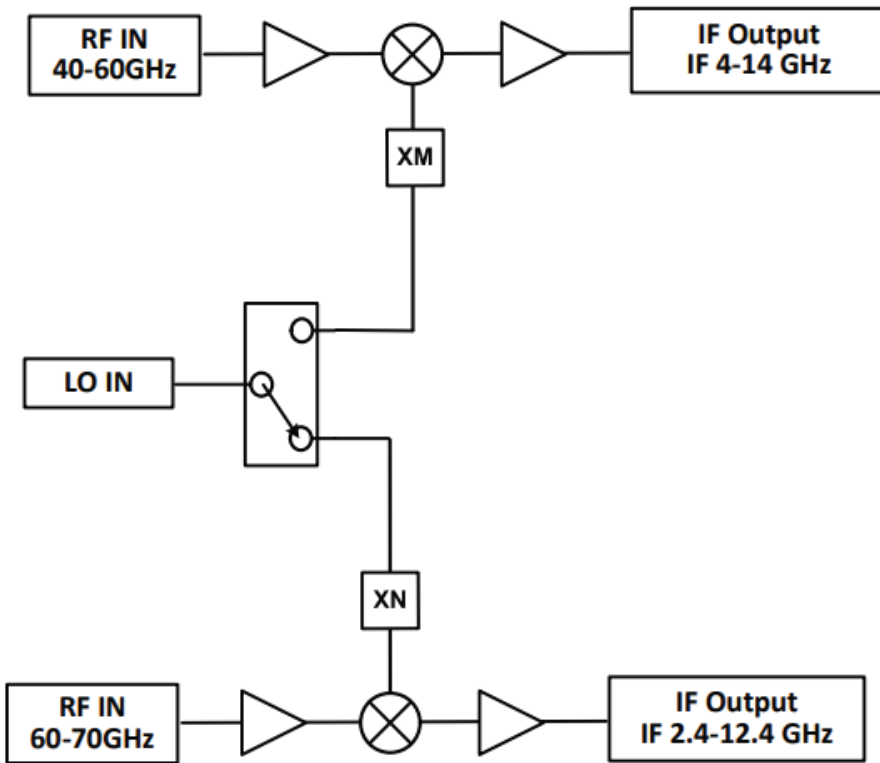


5441 Merchant Circle  
 Placerville, CA 95667  
 (530) 642-9123  
[www.nordengroup.com](http://www.nordengroup.com)

# NDC4070I0218N17

40-70 GHz DOWN CONVERTER

# SPECIFICATIONS



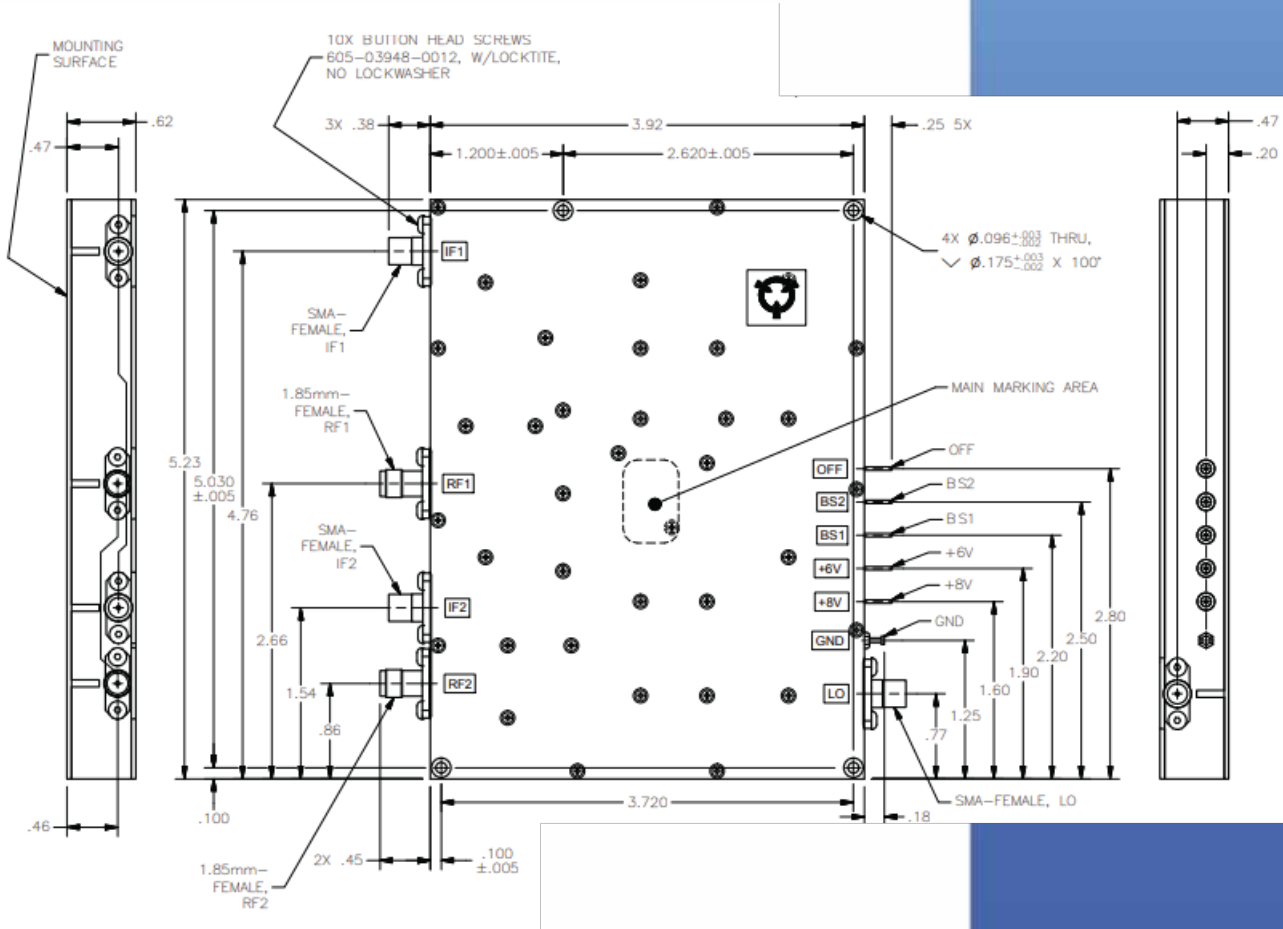
Control, TTL	BS1	BS2	Off
Band 1	0	0	0 (or open)
Band 2	0	1	0 (or open)
Band 3	1	1	0 (or open)
Off	X	X	1

**NORDEN**  
MILLIMETER

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# NDC4070I0218N17

40-70 GHZ DOWN CONVERTER



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