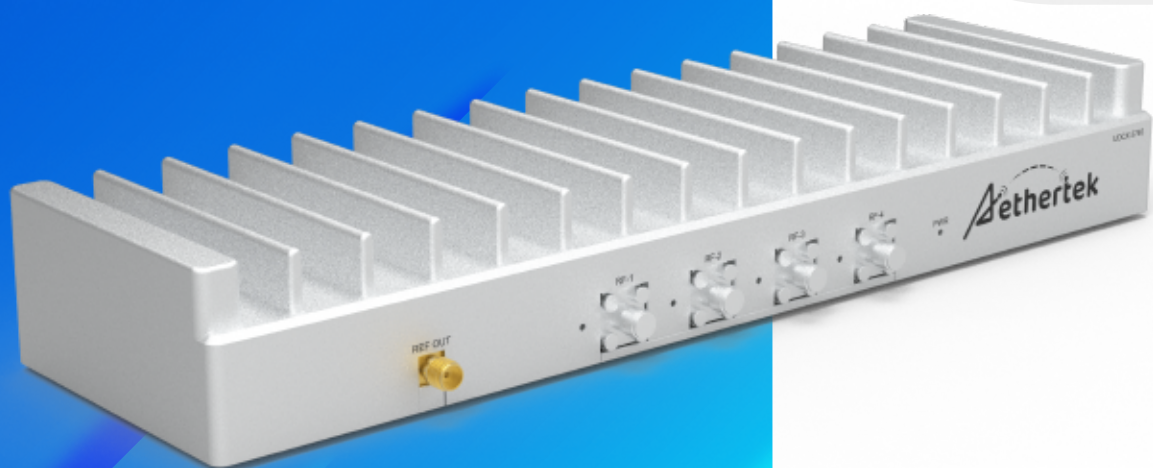




UDCX-3740

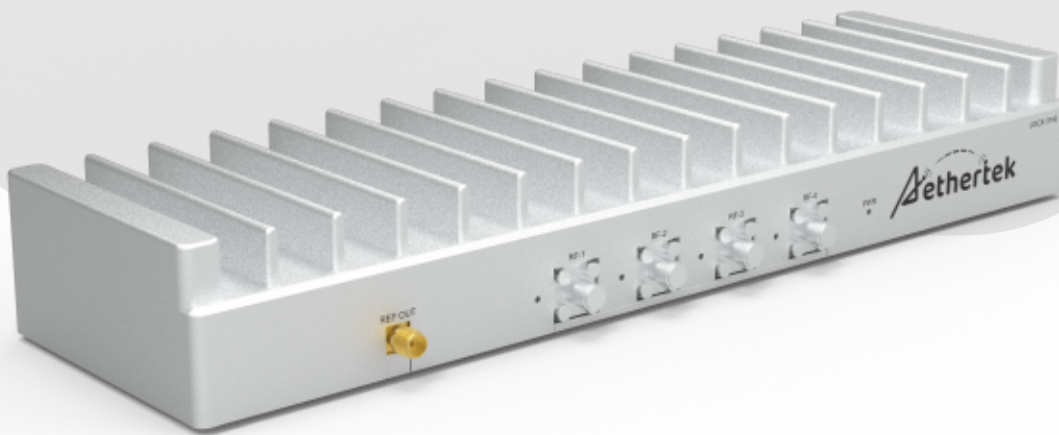
mmWave Solution



**DATA
SHEET**

UDCX-3740

mmWave Solution



1. UDC Overview

Aethertek's up down converter "UDCX-3740" is designed for testing mmWave devices, including CPE, FWA, and Radio Unit, offering a cost-effective solution by integrating with mass production testers. Its built-in GPS functionality ensures stable clock sources, enhancing frequency stability.

2. Key Features

- Supports 5G NR FR2 bands n260
- Compliant with 3GPP Rel 16 5G-NR standards
- 256QAM DL / UL modulation
- Maximum carrier bandwidth 1GHz
- Synchronization modes : GPS, Internal REF, External REF IN
- Includes a 10MHz output
- Ensures +/- 10 ppb frequency stability of the internal clock
- Features a USB Type-C control interface

3. UDC X - 3740 Radio Specification

Parameters	Min	Typ.	Max	Unit	Note
RF frequency range	37	-	40	GHz	
IF frequency range	3.3	-	6.7	GHz	
LO frequency range	32	-	36	GHz	LO, Low side injection
REF IN	-	10	-	MHz	Adjustable
REF Out	-	10	-	MHz	Adjustable
Up-Conversion Gain	-	15	-	dB	
Down-Conversion Gain	-	0	-	dB	
RF Output P1dB	-	7	-	dBm	
IF Output P1dB	-	0	-	dBm	

4. UDC X - 3740 Absolute Maximum Rating

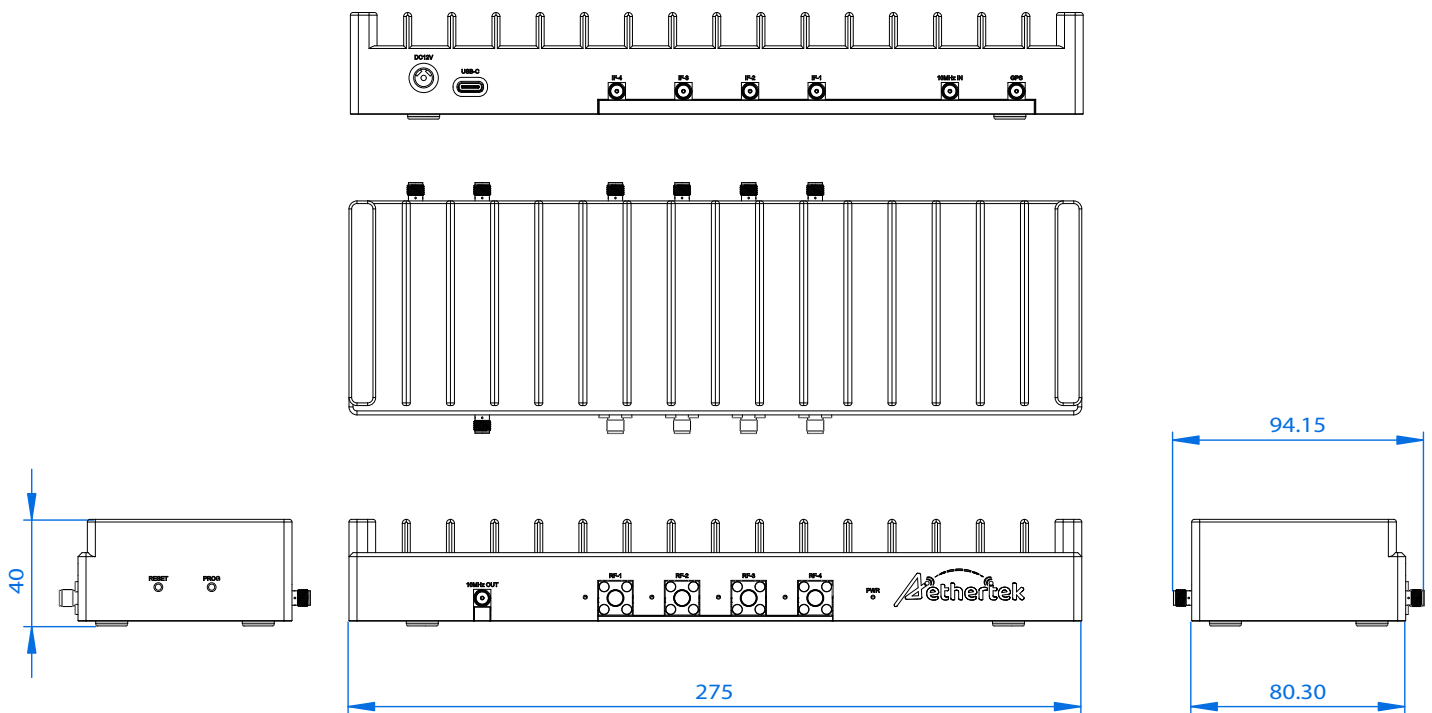
Parameters	Min	Typ.	Max	Unit	Note
RF Ports	I/O	-	-	See Note	LO, Low side injection
IF Ports	I	-	-	-20	[1]
External REF IN	I	-	-	5	
REF Out	O	-	-	5	

[1] To ensure signal quality and compliance with the 3GPP specification TS38.141, the value is defined based on the test condition 5G NR waveform TM3.1a (100 MHz bandwidth, 10 dB PAPR at 0.01% CCDF)

5. UDC X - 3740 Absolute Maximum Rating

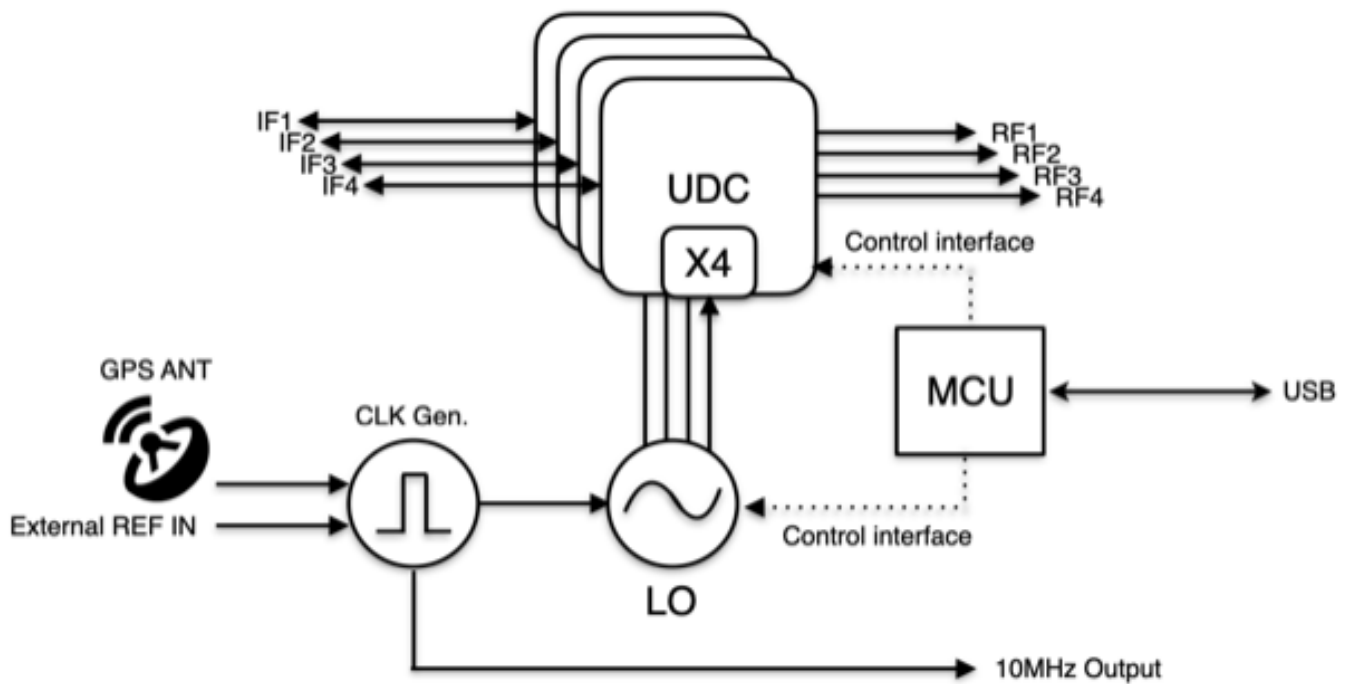
Parameters	Min	Typ.	Max	Unit
Power supply voltage	-	12	-	V
Power supply current	-	-	3	A
Operating Temperature	0	-	40	°C
Storage Temperature	-40	-	85	°C

6. Dimension





7. Block Diagram



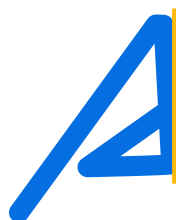
UDCX-3740

mmWave Solution



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Contact us to experience our 5G innovative solutions!



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