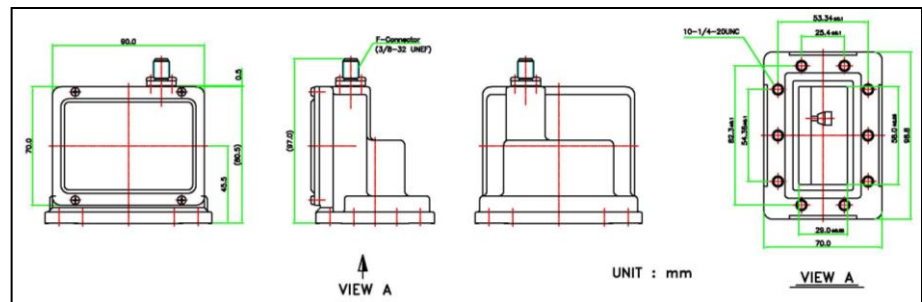


C-Band PLL LNB



A300 series (Internal Reference)

Model No.	Input (GHz)	Output (MHz)	L.O & Stability (over temp.)
A300W	3.4 - 4.2	950 - 1750	5.15GHz +/-5, 10, 25 KHz
A300S	3.625-4.2	950 - 1525	5.15GHz +/-5, 10, 25 KHz
A300R	3.7 - 4.2	950 - 1450	5.15GHz +/-5, 10, 25 KHz
A300i	4.5 - 4.8	1150-1450	5.95GHz +/-5, 10, 25 KHz

A300X series (External Reference)

Model No.	Input (GHz)	Output (MHz)	L.O & Stability (over temp.)
A300XW	3.4 - 4.2	950 - 1750	5.15GHz, Depends on ext. ref.
A300XS	3.625-4.2	950 - 1525	5.15GHz, Depends on ext. ref.
A300XR	3.7 - 4.2	950 - 1450	5.15GHz, Depends on ext. ref.
A300Xi	4.5 - 4.8	1150-1450	5.95GHz, Depends on ext. ref.

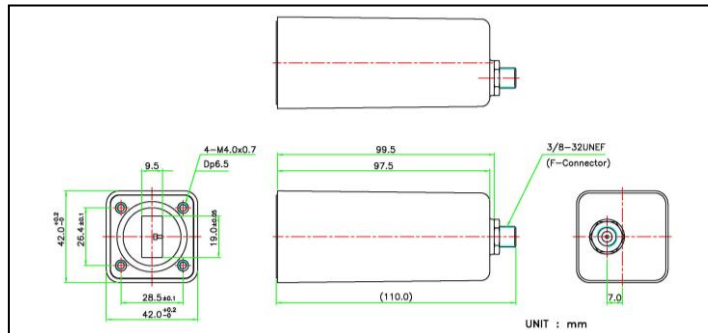
A800 series (Internal Reference)

Model No.	Input (GHz)	Output (MHz)	L.O & Stability (over temp.)
A800W	3.4 - 4.2	950 - 1750	5.15GHz +/-100, 200, 500 KHz
A800S	3.625-4.2	950 - 1525	5.15GHz +/-100, 200, 500 KHz
A800R	3.7 - 4.2	950 - 1450	5.15GHz +/-100, 200, 500 KHz
A800i	4.5 - 4.8	1150-1450	5.95GHz +/-100, 200, 500 KHz

Ku-Band Single LO PLL LNB

A700S(X) series

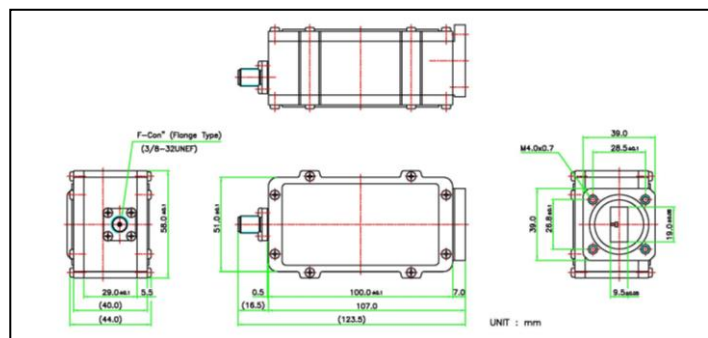
(X=External Reference)



Model No.	Input (GHz)	Output (MHz)	L.O & Stability (over temp.)
A710S(X)	10.7 - 11.8	950 - 2050	9.75 GHz +/- 5, 10, 25 KHz
A720S(X)	10.95 - 11.7	950 - 1700	10.0 GHz +/- 5, 10, 25 KHz
A740S(X)	11.7 - 12.2	950 - 1450	10.75 GHz +/- 5, 10, 25 KHz
A749S(X)	11.7 - 12.75	950 - 2000	10.75 GHz +/- 5, 10, 25 KHz
A760S(X)	12.2 - 12.7	950 - 1450	11.25 GHz +/- 5, 10, 25 KHz
A770S(X)	12.25 - 12.75	950 - 1450	11.3 GHz +/- 5, 10, 25 KHz

K500S(X) series

(X=External Reference)

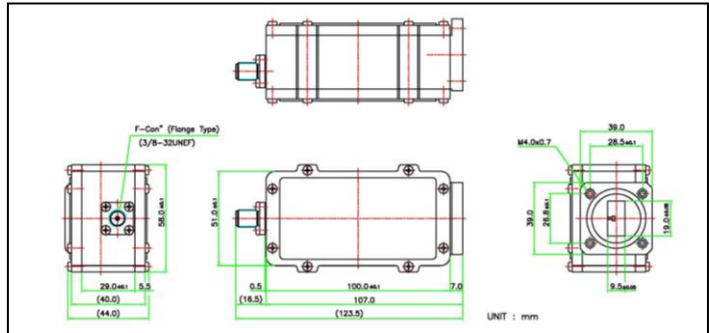


Model No.	Input (GHz)	Output (MHz)	L.O & Stability (over temp.)
K510S(X)	10.7 - 11.8	950 - 2050	9.75 GHz +/- 5, 10, 25 KHz
K520S(X)	10.95 - 11.7	950 - 1700	10.0 GHz +/- 5, 10, 25 KHz
K540S(X)	11.7 - 12.2	950 - 1450	10.75 GHz +/- 5, 10, 25 KHz
K549S(X)	11.7 - 12.75	950 - 2000	10.75 GHz +/- 5, 10, 25 KHz
K560S(X)	12.2 - 12.7	950 - 1450	11.25 GHz +/- 5, 10, 25 KHz
K570S(X)	12.25 - 12.75	950 - 1450	11.3 GHz +/- 5, 10, 25 KHz

Ku-Band Multi LO PLL LNB

Ku-Band Dual LO : K500D(X) series

(X=External Reference)



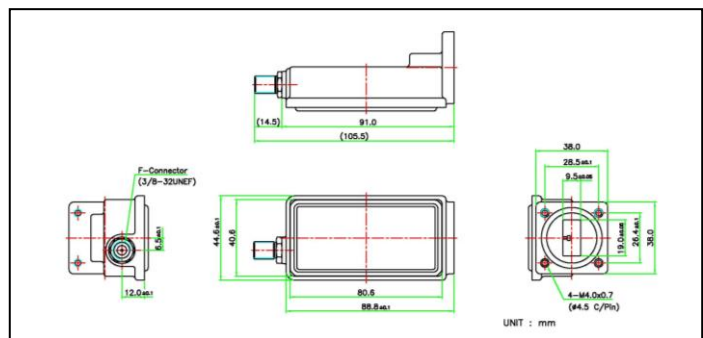
Model No.	Band	Input (GHz)	Output (MHz)	L.O (GHz), Switching
K510D(X)	Band 1	10.7 - 11.7	950 - 1950	9.75 @ 13 VDC
	Band 2	11.7 - 12.75	1100 - 2150	10.6 @ 18 VDC

Ku-Band Quad LO : K500Q(X) series

(X=External Reference)

Model No.	Band	Input (GHz)	Output (MHz)	L.O (GHz), Switching
K510Q(X)	Band 1	10.7 - 11.7	950 - 1950	9.75 @13 VDC
	Band 2	10.95 - 11.7	950 - 1700	10.0 @13 VDC / 22KHz on
	Band 3	11.7 - 12.75	950 - 2000	10.75 @18 VDC
	Band 4	12.25 - 12.75	950 - 1450	11.3 @18 VDC / 22KHz on

Ku-Band Dual LO : SM-690



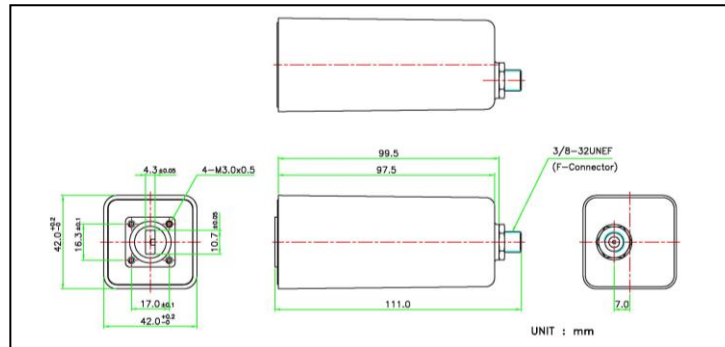
Model No.	Band	Input (GHz)	Output (MHz)	L.O & Stability), Switching
SM-690	Band 1	10.7 - 11.7	950 - 1950	9.75GHz +/-250KHz, @ 13 VDC
	Band 2	11.7 - 12.75	1100 - 2150	10.6GHz +/-250KHz, @ 18 VDC



Ka-Band Single LO PLL LNB

A600S(X) series

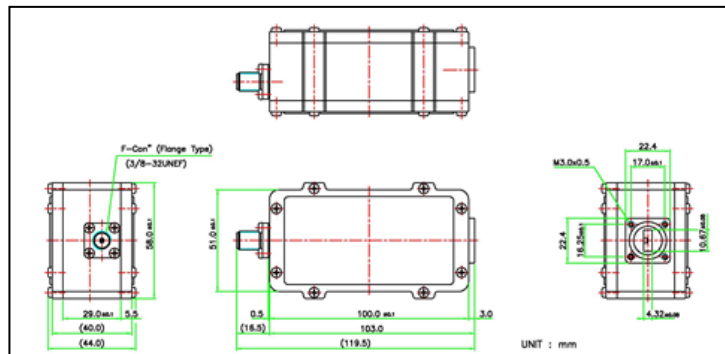
(X=External Reference)



Model No.	Input (GHz)	Output (MHz)	L.O & Stability (over temp.)
A610S(X)	17.2 - 18.2	950 - 1950	16.25 GHz +/- 25, 50 KHz
A620S(X)	18.2 - 19.2	950 - 1950	17.25 GHz +/- 25, 50 KHz
A630S(X)	19.2 - 20.2	950 - 1950	18.25 GHz +/- 25, 50 KHz
A640S(X)	20.2 - 21.2	950 - 1950	19.25 GHz +/- 25, 50 KHz
A650S(X)	21.2 - 22.2	950 - 1950	20.25 GHz +/- 25, 50 KHz

K900S(X) series

(X=External Reference)

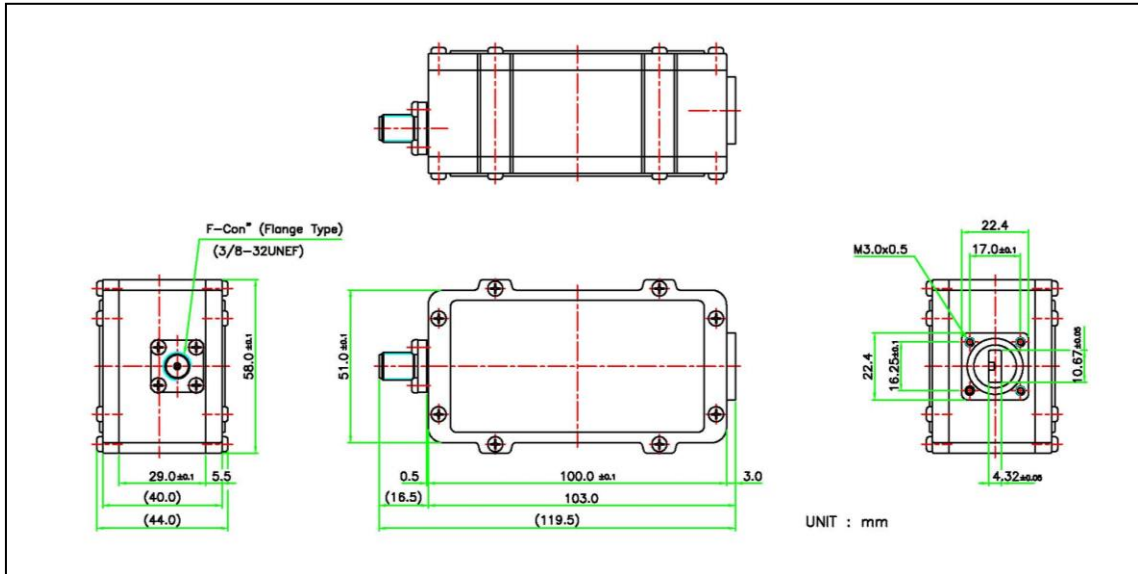


Model No.	Input (GHz)	Output (MHz)	L.O & Stability (over temp.)
K910S(X)	17.2 - 18.2	950 - 1950	16.25 GHz +/- 25, 50 KHz
K920S(X)	18.2 - 19.2	950 - 1950	17.25 GHz +/- 25, 50 KHz
K930S(X)	19.2 - 20.2	950 - 1950	18.25 GHz +/- 25, 50 KHz
K940S(X)	20.2 - 21.2	950 - 1950	19.25 GHz +/- 25, 50 KHz
K950S(X)	21.2 - 22.2	950 - 1950	20.25 GHz +/- 25, 50 KHz

Ka-Band Multi LO PLL LNB

Ka-Band Dual L.O : K900D(X) series

(X=External Reference)



Model No.	Band	Input Freq.(GHz)	Output (MHz)	L.O(GHz), Switching
K910D(X)	Band 1	18.20 - 19.20	950 - 1950	17.25 @13VDC
	Band 2	19.20 - 20.20	950 - 1950	18.25 @18VDC
K920D(X)	Band 1	19.20 - 20.20	950 - 1950	18.25 @13VDC
	Band 2	20.20 - 21.20	950 - 1950	19.25 @18VDC
K930D(X)	Band 1	20.20 - 21.20	950 - 1950	19.25 @13VDC
	Band 2	21.20 - 22.20	950 - 1950	20.25 @18VDC

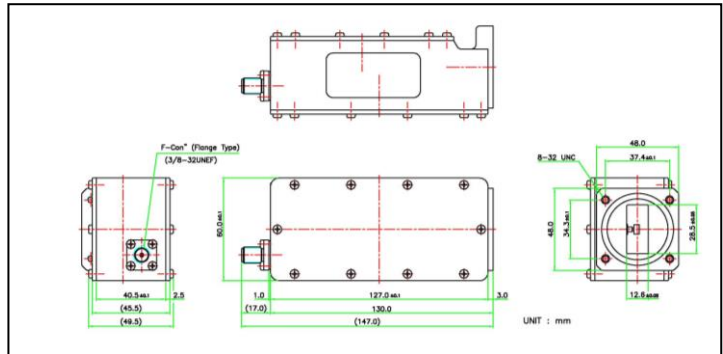
Ka-Band Triple L.O : K900T(X) series

(X=External Reference)

Model No.	Band	Input Freq.(GHz)	Output (MHz)	L.O(GHz), Switching
K910T(X)	Band 1	18.20 - 19.20	950 - 1950	17.25 @13VDC
	Band 2	19.20 - 20.20	950 - 1950	18.25 @18VDC
	Band 3	20.20 - 21.20	950 - 1950	19.25 @13VDC / 22KHz on
K920T(X)	Band 1	19.20 - 20.20	950 - 1950	18.25 @13VDC
	Band 2	20.20 - 21.20	950 - 1950	19.25 @18VDC
	Band 3	21.20 - 22.20	950 - 1950	20.25 @13VDC / 22KHz on

X-Band PLL LNB

K100 series (Internal Reference)



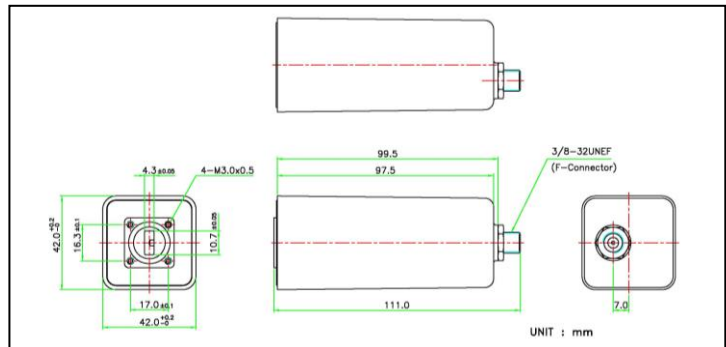
Model No.	Input (GHz)	Output (MHz)	L.O & Stability (over temp.)
K110	7.25 - 7.75	950 - 1450	6.3GHz +/-5, 10 KHz

K100X series (External Reference)

Model No.	Input (GHz)	Output (MHz)	L.O & Stability (over temp.)
K110X	7.25 - 7.75	950 - 1450	6.3 GHz, Depends on ext. ref.

Ka-Band DRO LNB

A200 series



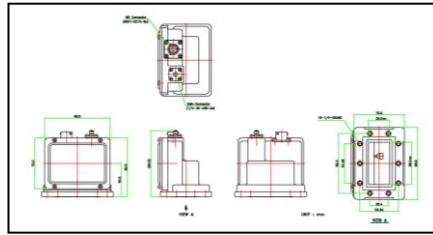
Model No.	Input (GHz)	Output (MHz)	L.O & Stability (over temp.)
A210	18.2 - 19.2	950 - 1950	17.25 GHz +/-2 MHz
A220	19.2 - 20.2	950 - 1950	18.25 GHz +/-2 MHz
A230	20.2 - 21.2	950 - 1950	19.25 GHz +/-2 MHz
A240	21.2 - 22.2	950 - 1950	20.25 GHz +/-2 MHz
A250	19.7 - 20.2	950 - 1450	18.75 GHz +/-2 MHz

LNA (Low Noise Amplifier)



C-Band LNA

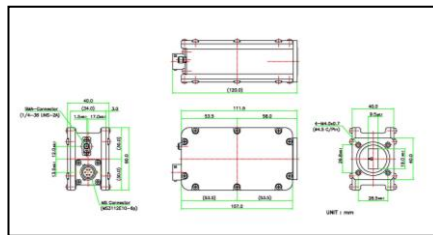
LNA-300 series



Model No.	Freq. Range	N/T	Gain	P1dB
LNA-310	3.4 – 4.2 GHz	20'K	55 dB	+5 dBm
LNA-320	4.5 – 4.8 GHz	20'K	55 dB	+5 dBm

Ku-Band LNA

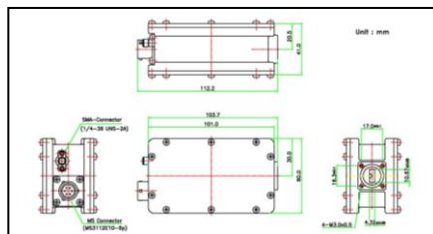
LNA-500



Model No.	Freq. Range	N/F	Gain	P1dB
LNA-510	10.7 – 12.75 GHz	0.8 dB	55 dB	+5 dBm
LNA-520	10.7 – 11.70 GHz	0.8 dB	55 dB	+5 dBm
LNA-530	11.7 – 12.75 GHz	0.8 dB	55 dB	+5 dBm

Ka-Band LNA

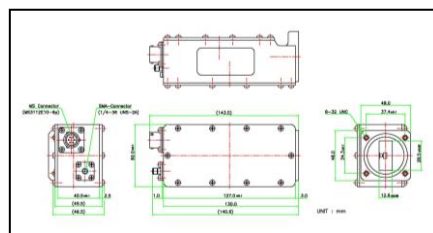
LNA-900



Model No.	Freq. Range	N/F	Gain	P1dB
LNA-910	17.2 – 18.2 GHz	1.5 dB	55 dB	+5 dBm
LNA-920	18.2 – 19.2 GHz	1.5 dB	55 dB	+5 dBm
LNA-930	19.2 – 20.2 GHz	1.5 dB	55 dB	+5 dBm
LNA-940	20.2 – 21.2 GHz	1.5 dB	55 dB	+5 dBm
LNA-950	21.2 – 22.2 GHz	1.5 dB	55 dB	+5 dBm

X-Band LNA

LNA-100

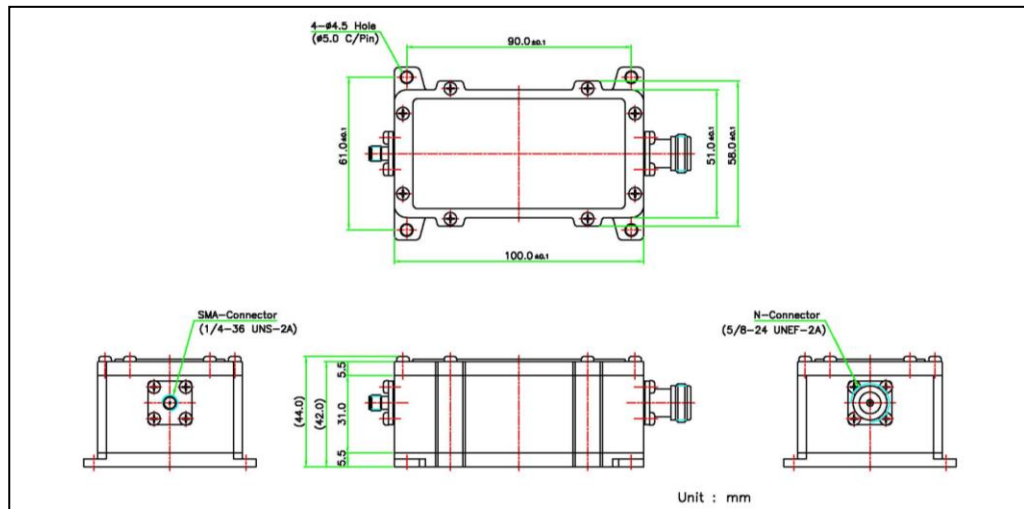


Model No.	Freq. Range	N/F	Gain	P1dB
LNA-100	7.25 – 7.75 GHz	0.7 dB	55 dB	+5 dBm

BDC (Block Down Converter)



Mechanical drawing : All models are common.



C-Band BDC : **BDC-300(X) series** (X=External Reference)

Model No.	Input (GHz)	Output (MHz)	L.O & Stability (over temp.)
BDC-310(X)	3.4 - 4.2	950 - 1750	5.15 GHz +/-5, 10, 25 KHz
BDC-320(X)	4.5 - 4.8	1150 - 1450	5.95 GHz +/-5, 10, 25 KHz

Ku-Band BDC : **BDC-500(X) series**

Model No.	Input (GHz)	Output (MHz)	L.O & Stability (over temp.)
BDC-510(X)	10.7 - 11.8	950 - 2050	9.75 GHz +/- 10, 25 KHz
BDC-520(X)	10.95 - 11.7	950 - 1700	10.0 GHz +/- 10, 25 KHz
BDC-540(X)	11.7 - 12.2	950 - 1450	10.75 GHz +/- 10, 25 KHz
BDC-549(X)	11.7 - 12.75	950 - 2000	10.75 GHz +/- 10, 25 KHz
BDC-560(X)	12.2 - 12.7	950 - 1450	11.25 GHz +/- 10, 25 KHz
BDC-570(X)	12.25 - 12.75	950 - 1450	11.3 GHz +/- 10, 25 KHz

Ka-Band BDC : **BDC-900(X) series**

Model No.	Input (GHz)	Output (MHz)	L.O & Stability (over temp.)
BDC-910(X)	17.2 - 18.2	950 - 1950	16.25 GHz +/- 25, 50 KHz
BDC-920(X)	18.2 - 19.2	950 - 1950	17.25 GHz +/- 25, 50 KHz
BDC-930(X)	19.2 - 20.2	950 - 1950	18.25 GHz +/- 25, 50 KHz
BDC-940(X)	20.2 - 21.2	950 - 1950	19.25 GHz +/- 25, 50 KHz
BDC-950(X)	21.2 - 22.2	950 - 1950	20.25 GHz +/- 25, 50 KHz

X-Band BDC : **BDC-100(X) series**

Model No.	Input (GHz)	Output (MHz)	L.O & Stability (over temp.)
BDC-110(X)	7.25 - 7.75	950 - 1450	6.3 GHz +/-5, 10 KHz