

## X Band Block Upconverter (BUC) 7.9 to 8.4GHz, 12W

**LW30-797812**

### TYPICAL APPLICATIONS

- Mobile, Fixed or Fly-away applications
- Common footprint for X band and Ku band variants

### PRODUCT FEATURES

- IESS 308 compliant
- Adjustable gain
- Temperature compensated
- Lock detect output
- Automatic internal/external reference detection and switching
- Internal output protection

### GENERAL DESCRIPTION

The LW30-797812 BUC integrates Linwave's Upconverter and SSPA technologies into a small compact module. Comprehensive monitor & control and user definable options offer flexible solutions to meet customers' requirements.

Extended temperature range and harsh environment models are also available. Please contact factory for alternative connector and frequency options.



### ELECTRICAL CHARACTERISTICS - Operational $T_A = 25\text{ }^\circ\text{C}$ , 50 $\Omega$ System (unless otherwise noted)

PARAMETER	MIN	TYP	MAX	UNITS
RF Output Frequency	7.9		8.4	GHz
IF Input frequency	950		1450	MHz
Small signal gain	60			dB
Output power ( $P_{\text{sat}}$ )		44		dBm
Output power ( $P_{\text{lin}}$ )		41		dBm
Input Return Loss		13		dB
Output Return Loss		13		dB
Noise Figure			18	dB
Gain Flatness (full band)	-2		+2	dB
Spurious Outputs (Signal related in band)		-60		dBc
Spurious Outputs (LO leakage)		-45		dBc
Frequency reference (internal or external on L band input)		10		MHz

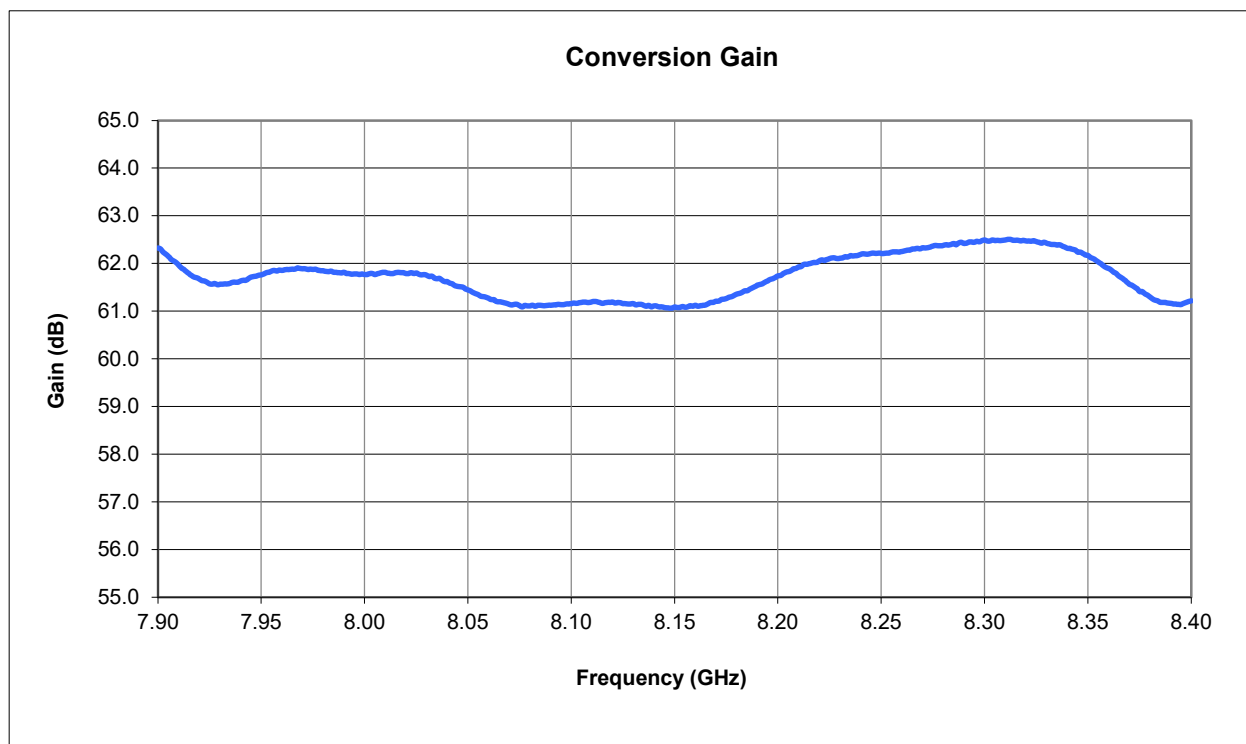
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PARAMETER		MIN	TYP	MAX	UNITS
Phase Noise	100Hz offset from carrier			-61	dBc/Hz
	1kHz offset from carrier			-71	dBc/Hz
	10kHz offset from carrier			-81	dBc/Hz
	100kHz offset from carrier			-91	dBc/Hz
	1MHz offset from carrier			-91	dBc/Hz
Power Consumption +10V (measured at P <sub>lin</sub> )			13	A	
Operating temperature range		-20		60	°C
Storage temperature range		-40		85	°C

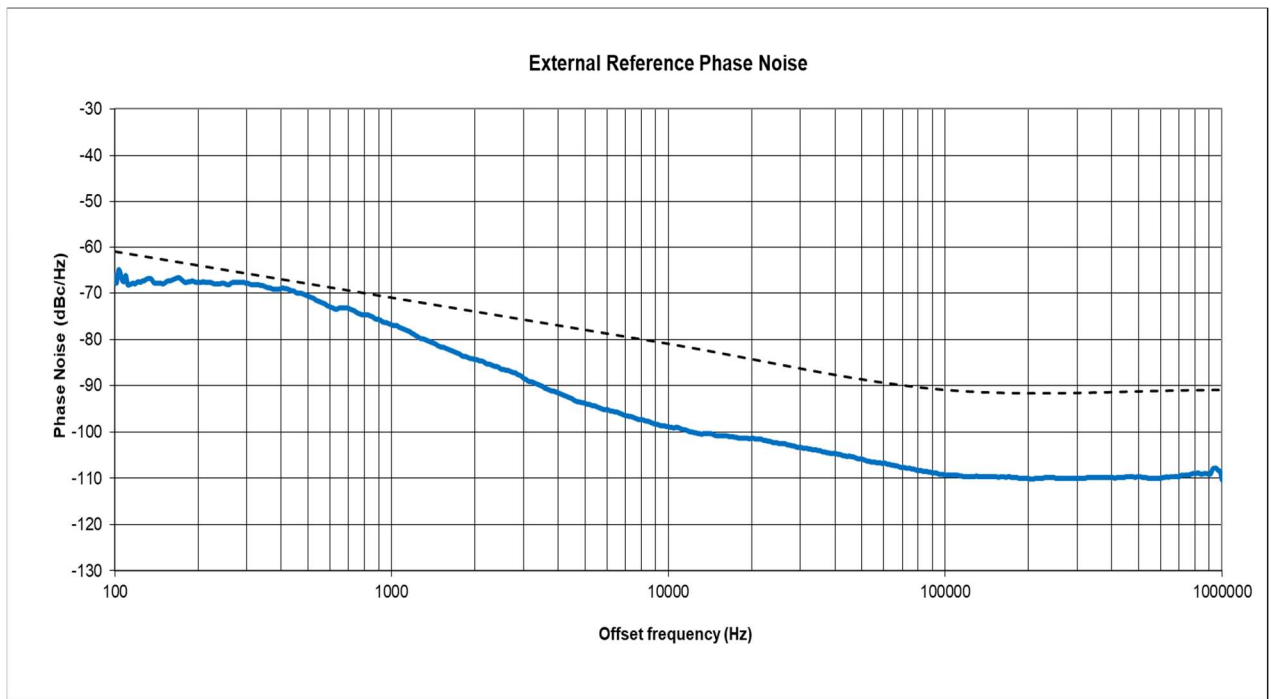
## MECHANICAL CHARACTERISTICS

PARAMETER	VALUE	UNITS
Dimensions (max)	190 x 90 x 50 (L x W x H)	mm
Weight (max)	1.6	kg
IF/RF connectors	SMA female	-
Control/Power connector	9 pin D plug (male)/ High current feedthrough	-
Cooling	Conduction cooled	-

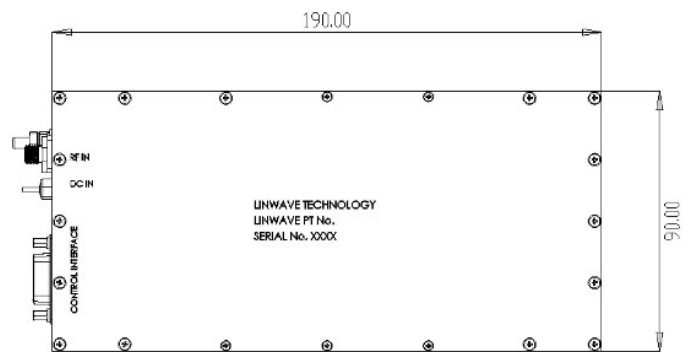
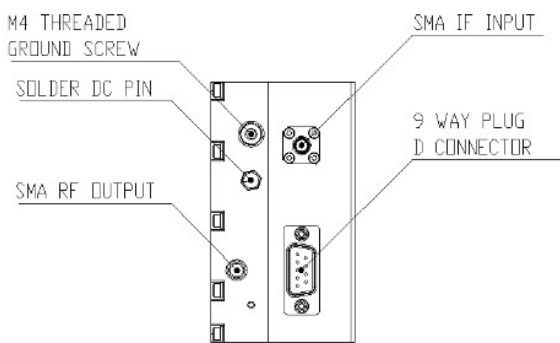
## PERFORMANCE DATA



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## MECHANICAL OUTLINE



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