



---

**X-BAND LOW PHASE NOISE SYNTHESIZER**

- **LOW PHASE NOISE**
- **EASY PROGRAMMING**
- **FINE STEP**
- **COMPACT DESIGN**

This synthesizer is intended for use in professional applications as programmable local oscillator, where clean output signal, compact size, easy handling and modest price are important factors. Main applications are in satellite and telecommunications systems, instrumentation.

**Electrical characteristics:**

Frequency Range	9.5 - 11.5 GHz
Frequency Accuracy	better than +/-0.5ppm@ full temperature range
Tuning Range	2 GHz
Step Size	10 kHz
Switching Speed	30 msec typ. (50 msec max.)
Output Power	+ 15 dBm (+/-3dB)
VSWR	1.5 : 1
Load Impedance	50 ohm
Spurious	-60 dBc typ. (-55 dBc max.)
Harmonics	< -30 dBc typ. (-20 dBc max.)
SSB Phase Noise	< -90 dBc/Hz @ 10 kHz < -110 dBc/Hz @ 100 kHz
Phase Lock Alarm	3V CMOS "Hi" locked, 3V CMOS "Low" out of lock
Frequency Control	Serial BCD (3V CMOS) with Clock, Data, Latch
Reference Frequency (internal and external)	10MHz (automatic change over)
External Reference Level Range	-3dBm to +6dBm
Connectors	SMA-F for RF Output and Ext.Ref., D-SUB9 male for DC & Control
Operating Temperature Range	-40 to +70°C
DC Supply	+15V DC +/- 1V@ 600 mA typ.
Outline Dimension	140 x 130 x 30 mm (without connectors)
Weight	cca. 900g

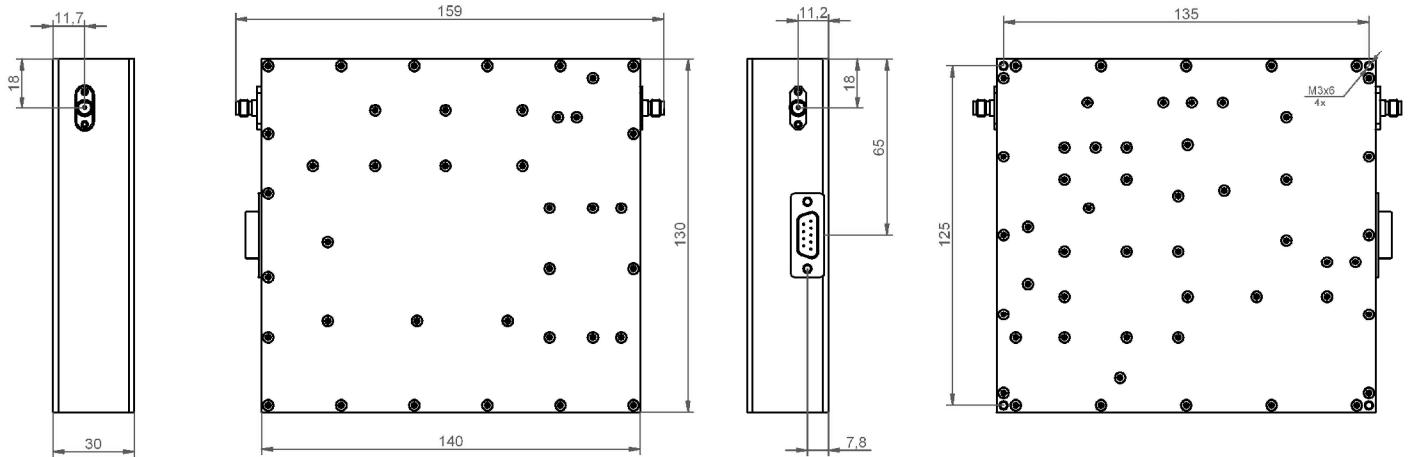
Specifications are subject to change without notice.



**BSVX20**

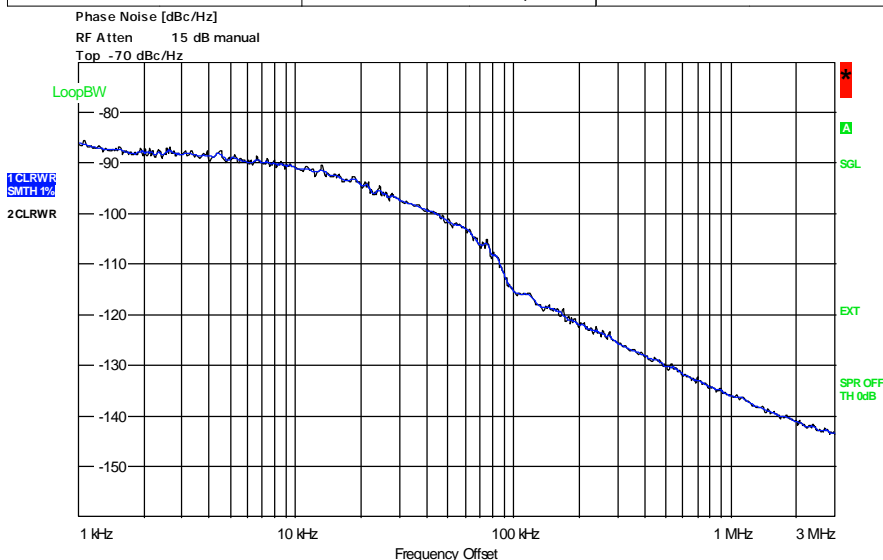
**X-BAND LOW PHASE NOISE SYNTHESIZER**

**Outline dimensions (mm):**



**Typical phase noise@ 11500MHz**

R&S FSUP Signal Source Analyzer				LOCKED
	Settings	Residual Noise [T1 w/o spurs]	Spot Noise [T1 w/o spurs]	
Signal Frequency:	11.500002 GHz	Int PHN (1.0 k .. 3.0 M)	-46.2 dBc	1.000 kHz -86.15 dBc/Hz
Signal Level:	10.16 dBm	Residual PM	0.395 °	10.000 kHz -90.96 dBc/Hz
PLL Mode	Harmonic 1	Residual FM	442.735 Hz	100.000 kHz -115.58 dBc/Hz
Internal Ref Tuned	Internal Phase Det	RMS Jitter	0.0953 ps	1.000 MHz -136.03 dBc/Hz



Measurement Complete  
Date: 29.MAY.2012 16:22:20

