

10 MHz Low Phase Noise Multiple Output Reference Source

MAIN FEATURES

- High stability internal 10 MHz OCXO
- ❖ 8 outputs with very high isolation
- 2 1PPS outputs
- 1 external 10 MHz input for external synch
- Very low phase noise
- Very low spurious level
- ❖ Housed in 1U 19" rack
- Can be synchronized to external reference

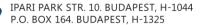


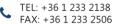
DESCRIPTION

The BSLI10 is a high performance indoor reference source for professional applications. It contains a high stability OCXO that can be operated in internal mode or can be synchronized to an external 10 MHz when an even higher frequency stability is required. The external reference signal is detected automatically. The output of the OCXO is distributed to 8 sinewave outputs. The output amplifiers ensure very high isolation between the outputs, thus the connected load on one port cannot disturb the operation of another load. The BSLI10 contains a front panel with LCD and control keys, and a power supply. It is housed in a 1U 19" rack.

SPECIFICATIONS

RF PARAMETERS		
Operating frequency	Fixed 10 MHz	
Number of outputs	8 x 10 MHz and 2 x 1 PPS	
10 MHz output signal waveform	Sine	
10 MHz output signal level	≥ +10 dBm in full operating temp. range (+13 dBm typ.)	
10 MHz output VSWR	≤ 1,4:1	
10 MHz output connector type	SMA-female	
Harmonics	< -60 dBc	
Spurious	< -100 dBc	
Isolation between outputs	≥ 80 dB @ 10 MHz	
Internal reference initial accuracy	≤ ±0.01 ppm at +25 °C	
Internal reference stability	≤ ±0.005 ppm over temperature	
Aging	≤ ± 0.05 ppm / year	
Allan variance	≤ 5*10 ⁻¹² per 1 sec.	
SSB phase noise	≤ -95 dBc / Hz @ 1 Hz	
	≤ -125 dBc / Hz @ 10 Hz	
	≤ -145 dBc / Hz @ 100 Hz	
	≤ -150 dBc / Hz @ 1 kHz	
	≤ -155 dBc / Hz @ 10 kHz	









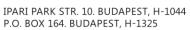
10 MHz Low Phase Noise Multiple Output Reference Source

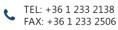
PPS output signal waveform 1PPS output signal level 5 V TTL (when terminated with 1 kΩ) 1PPS output yignal level 5 V TTL (when terminated with 1 kΩ) 1PPS output pulse width 100ms 50 Ω (output is designed for ≥ 1 kΩ load, but it is capable to drive 50 Ω load with reduced signal level) 1PPS output connector type BNC-female 10 MHz external reference 10 MHz external reference input impedance 10 MHz external reference input work 10 MHz external reference input level range: -5 to +15 dBm 50 Ω 10 MHz external reference input work 10 MHz external reference input connector 10 MHz external reference input work 10 MHz external reference input connector 10 MHz external reference input work 10 MHz external reference input connector 10 MHz external reference input work 10 MHz external reference input connector 10 MHz external reference input connector 20 VA Frequency 47 - 63 Hz 20 VA Frequency 47 - 63 Hz 20 VA Fress value 10 VA (4 A, Slow blow) MECHANICAL CHARACTERISTICS Dimensions 10 19" rack cabinet (360 mm depth) Weight 28 kg Front and rear panel finish Powder painted (RAL7035) SMA-female, rear panel 1PPS output connector BNC-female rear panel BNC-female, rear panel BNC-female, rear panel BNC-female, rear panel BNC-female, rear panel DNHz output connector BNC-female, rear panel BNC-female, rear panel DNHz output connector BNC-female, rear panel DNHz output connector BNC-female, rear panel BNC-female, rear panel DNHz output connector BNC-female, rear panel DNHz output connector BNC-female, rear panel DNHz output connector DNHz output connector BNC-female, rear panel DNHz output connector DNHz output connector BNC-female, rear panel DNC-female, rear panel	RF CHARACTERISTICS		
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Storage temperature range -30 °C +70 °C	ENVIRONMENT		
Storage temperature range -30 °C +70 °C	Operating temperature range	0 °C +50 °C	
Humidity up to 95 % (non-condensing)	Storage temperature range	-30 °C +70 °C	
	Humidity	up to 95 % (non-condensing)	

Specifications are subject to change without notice.

Better stability or phase noise specification is available upon request.







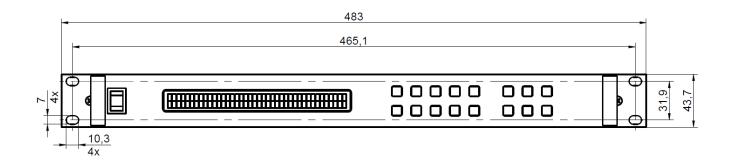


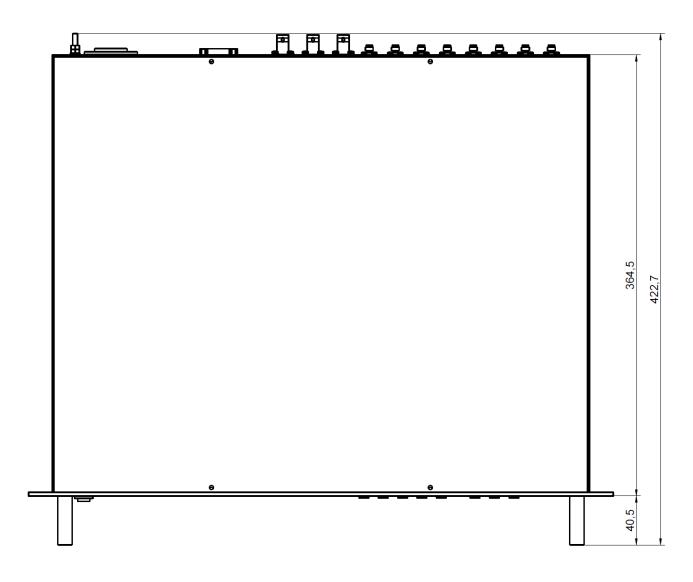


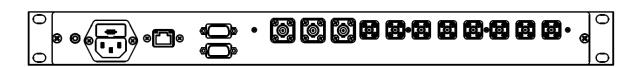
BSLI10

10 MHz Low Phase Noise Multiple Output Reference Source

OUTLINE DRAWING (mm)









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ORDERING INFORMATION

MODEL NUMBER	DESCRIPTION
BSLI10K11330	BSLI10 10 MHz Low Phase Noise Multiple Output Reference Source

DOCUMENT REVISION

DOCUMENT NAME	REVISION	DATE
BSLI10-LM-K11330	V02	2023/07/12



