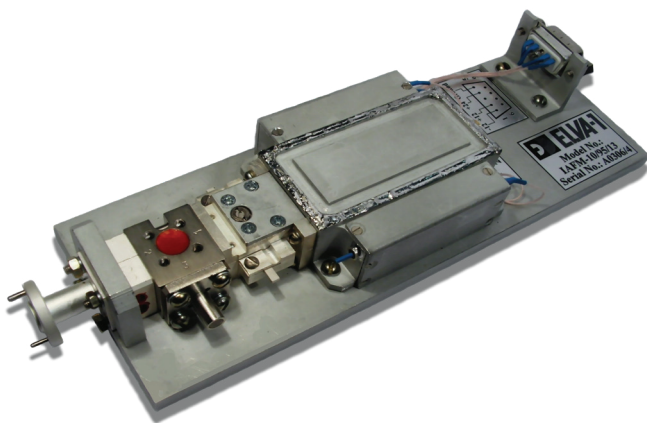


Pulse: (CW + AM + PM 0–90 deg., 0–180 deg. (phase modulation))

N	Specs Parameters	W-band	D-band
1	Central frequency	95 GHz	130 GHz
2	Central frequency stability	30 kHz / hour	40 kHz / hour
3	Operating frequency range	400 MHz (95 GHz +/- 0.2 GHz)	400 MHz (130 GHz +/- 0.2 GHz)
4	Spectrum width @ -3 dB level	< 1 kHz	1 kHz
5	Power of amplitude noise	-140 dBc / Hz @ 100 kHz offset	-140 dBc / Hz @ 100 kHz offset
6	Max power	Up to 250 mW	Up to 50 mW
7	Changing of pulse output power	60 dB	50 dB
8	Changing of output power of CW channel	120 dB	100 dB
9	Min duration of output pulses at amplitude modulation of output power	10 nsec (10 ⁻⁸ sec)	10 nsec (10 ⁻⁸ sec)
10	Min switching time by 2PSK modulation of output signal	5 nsec (5*10 ⁻⁹ sec)	5 nsec (5*10 ⁻⁹ sec)
11	Accuracy of 180 deg phase shift keeping for 2PSK	1 degree	1 degree
12	Microwave power suppression during a pause between pulses	100 dB	100 dB
13	Switching time up to max suppression level	< 10 nsec	10 nsec
14	Noise figure of receiver section	12 dB	14 dB
15	Max gain of receiver section	50 dB	50 dB
16	Receiver section bandwidth	200 MHz	200 MHz
17	Total phase drift	5 degrees / 15 min	5 degrees / 15 min

EPR spectrometer life time (projected): about 30 000 operating hours



MM-wave frequency multiplier and fast (< 5nsec) phase and amplitude modulators below are key parts of high stable low phase noise mm-wave source for EPR spectrometer

How to Order

Please apply with your request to ELVA-1 office: sales@elva-1.com