

## PLL-Synthesizer

**K 103**

The PLL-synthesizer K 103 is a fully frequency synthesis generator. The output frequency of this device is derived from a phase locked loop system. The PLL-synthesizer K 103 is programmable over a very broad frequency range. The fine frequency raster of the generator allows to drive an acousto-optic tunable filter very precisely at its best operation frequency.

The output signals of different synthesizers K 103 are combined by a CB 4:1 K 102 and amplified by the low distortion amplifier K 101 to an adequate level to drive an AOTF.



## Technical Data

Operating frequency	standard: 60 - 180 MHz optional: 40 - 90 MHz 100 - 210 MHz
Frequency resolution	standard: 25 kHz optional: 1 kHz, 10 kHz, 50 kHz
Analogue video input voltage	0 ... +10 volt into 600 Ω
RF output power	$\alpha$ . -1 ... +8 dBm @ 50 Ω, analogue video input voltage is set to 10 volt $\beta$ -43 ... -33 dBm @ 50 Ω, analogue video input voltage is set to 0 volt
Output impedance	50 Ω nominal
Interrupt input (blanking input)	<ul style="list-style-type: none"> <li>• preset operating frequency: TTL high ↑1↑ or open input</li> <li>• preset frequency shift: TTL low ↓0↓ or shorted input</li> </ul>

Address switch	8 stages (selection 0 to 7)
Supply voltage	$U_S = 24\text{ V} \pm 0.5\text{ V}$
Supply current	$I_S = 180\text{ mA} \pm 20\text{ mA}$
Operating temperature range	0 ... 55 °C

## Quality Standards

EMC-standards	VDE 0871 - B FCC Rules Part 15 - B
Burn-in test	passive 2 h active ½ h

## Connectors and Mechanics

