

- GPS stability and accuracy
- Compact sizes

Applications

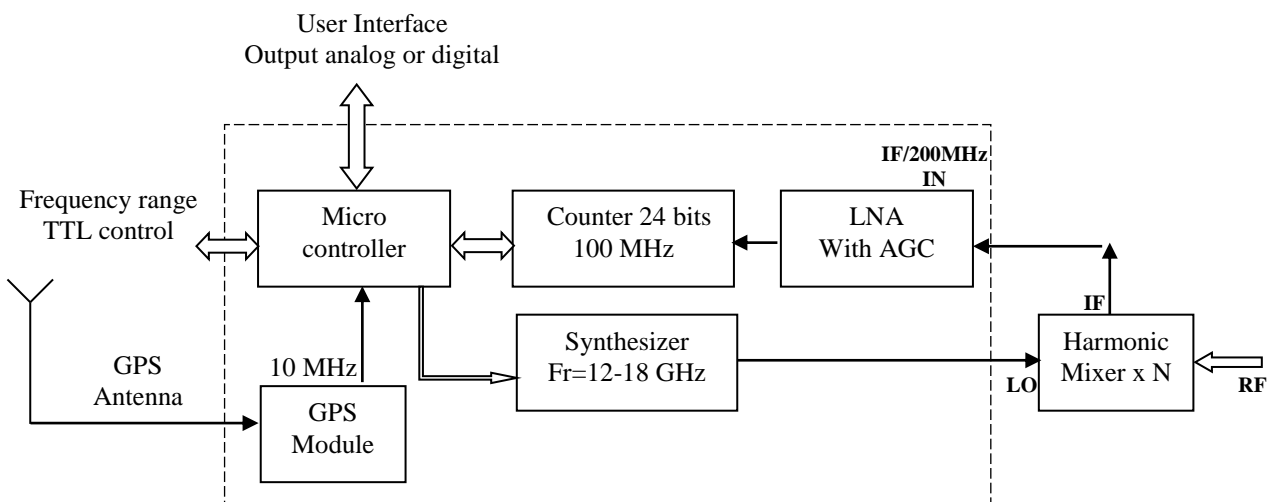
- High precision frequency measurement
- World standard frequency references



Description

Elva-1 specially designed GPS synchronized mm-wave frequency meter GPSFC-xx series. This solution allows to provide independent frequency measurement in different laboratories with absolute accuracy.

Block-diagram of the frequency meter.



Specifications

Mm-wave frequency meter GPSFC-xx series can be designed for operation in 26-170GHz frequency range. Frequency window analyze for one frequency point of reference synthesizer 12-18 GHz is $(Fr \times N) \pm 0.1$ GHz. By switching the reference synthesizer user could cover all desired frequency band. User control and output interfaces could be adapted according to customer's specification.

As an example below specification for GPSFC-94/0.1 with analog output is presented:

Electrical Specifications.

- Input frequency range ‘M0’: 93.86 +/-0.102 GHz;
- Input frequency range ‘M1’: 93.94 +/-0.102 GHz;
- Input frequency range ‘M2’: 93.96 +/-0.102 GHz;
- Frequency Control: 2 bits;
- Control signal: TTL;
- Input power: -10...+3 dBm;
- Input w/g: WR-10, UG-387/U-M;
- Output: 0 - +10V (see measured data);
- Sensitivity (typ): 0,010524 GHz/V;
- Integration time: 1sec;
- Output connector: BNC;
- Input / output for HM: SMA(f) / BNC
- Supply: +9...+18 VDC @ 1.5A;
- Operation temperature: -25 ... +60°C

Mechanical Specifications

- Size 220x145x55 mm;
- Weight 2 kg.

Plot with dependence Output voltage vs Input frequency and switched range

