



10 MHZ DISTRIBUTION AMPLIFIER

With internal 0.28 ppm VCXO

SPECIFICATIONS

- 10 Output ports total: 5x LVCOS digital square-wave + 5x Sine-wave Isolated and individually band-pass filtered
 - 50 Ohm ports
 - External input (female SMA connector) for a reference signal applied at -18...+10 dBm.
 - Internal 0.28 ppm TCXO factory trimmed to 10 MHz.
 - Disable output manual switch
 - Disable output ports sync input (3.3V HIGH to disable)
 - Dimensions: 100x100x50 mm
 - DC Power: 5-15V – 200 mA max
 - Output power: +7 dBm (+/- 1dB)
 - Sinewave output ports harmonics attenuation: >60 dB for the 2nd harmonic (20 MHz) and > 73 dB for the 3rd harmonic (30 MHz)

Webpage:
<https://www.sv1afn.com/en/gnss-gps/10-mhz-distribution-amplifier.html>

SV1AFN.COM

16 Ag. Georgiou
 Anavyssos 19013
 Greece
 VAT no. EL 042237030
 Chamber Reg. No 171467
 Hellenic Business Registry reg. number:
 060488603000
 DUNS number: 524163138

DESCRIPTION

This amplifier has one input port and ten output ports. It is used to share a 10 MHz reference signal with up to 10 other instruments in a lab or inside a system, to synchronize their timing or frequency reference.

In addition, it has an internal 0.28 ppm 10 MHz VCXO that can be used if an external input signal is not available. The internal oscillator can be selected with a switch on the rear panel. An internal trimmer can correct its frequency if ever needed or aged.

5 of the 10 output ports provide digital LVCOS 3.3V square wave signals and 5 provide sinewave, individually band-pass filtered and isolated to prevent ground-loops.

USAGE

The distributor is based on the IDT 5PB1110PGG LVCOS clock buffer chip which works up to 200 MHz and offers very low additive jitter of less than 50 fs and very low pin-to-pin skew of 50 ps.

Some instruments, such as frequency counters or arbitrary function generators, may prefer a square wave signal, while spectrum analyzers or receivers may prefer a sinewave signal. Check their datasheets to be sure.

