

For Immediate Release

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Connor-Winfield Announces new FT9-TFC Time to Frequency Synchronizing module



Aurora, IL — Connor-Winfield's FT9-TFC Series module represents a fresh approach to precision timing offering two synchronized clock outputs when locked to an incoming 1PPS signal from a GNSS receiver, all in a small 9mm x 9mm form factor. This highly integrated module combines an NPLL system with an APLL system that converts an incoming 1PPS signal to up to two phase locked clock outputs aligned to the rising edge of a 1PPS 3.3V LVCMOS output generated internally. The module requires the support of an external 10MHz OCXO or 10MHz TCXO as the module's MCLK which provides the user great flexibility in determining the performance characteristics of the system. The module's internal registers are programmable by the user to adjust the bandwidth of the digital filter, based on the quality of the external MCLK used. The module will auto lock to an incoming 1PPS signal. When the 1PPS signal is not present, the module will automatically enter holdover until the 1PPS signal is regained. Holdover stability is determined by the external MCLK oscillator used. The module can accept information from a temperature sense enabled (TSE) OCXO or TCXO and generate compensating frequency offset adjustments to reduce the thermal instability in the TSE MCLK oscillator to reach sub-PPB stability performance over temperature in holdover mode. Initial parameters are preset at the factory, including output frequency, which is based on an onboard, low phase noise VCXO.

MCLK options include TCXO, standard OCXO, TSE OCXO, Double oven OCXO and rubidium atomic clocks (CSAC). Filter bandwidths can be set from 100mHz to less than 1mHz. Two 1PPS input reference sources can be accepted, giving the user the ability to switch between them.

Applications:

- 5G Base stations, Communications
- Network Synchronization, IEEE1588
- Software Define Radio

Features:

- 9.2 x 9.2mm SMD Package
- Output frequencies Available: 8kHz to 156.25 MHz
- +3.3 Vdc Operation
- Output Logic: LVCMOS
- RoHS Compliant / Lead Free

Price: \$30.00 1K quantity

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