



# AGILE FILTER PRODUCTS

Clear the clutter in  
**RF communications  
and signal processing,**  
with fast tuning, high performance  
bandpass and notch filters.



Dedicated to innovation, quality and absolute customer satisfaction

[www.polezero.com](http://www.polezero.com)



# AGILE FILTER PRODUCT LINES BANDPASS AND NOTCH

*Today's crowded communication bands with the increasing use of closely located receivers and transmitters create a cosite environment that demands an RF solution to filtering noise and in-band signal interference.*

## NANO-POLE® Series

The NANO-POLE® Series of miniaturized tunable filters was developed to address applications needing an extremely small, surface-mount package with low power consumption. Typical applications for IF, RF and microwave frequencies include interference rejection, noise suppression, and LO filtering.



## MINI-POLE®

Tunable filters optimized for size, RF power handling, low distortion, and exceptional selectivity. Available in thru-hole, SMT, and connectorized packaging.



## MINI-SMT™

New MINI-SMT™ tunable filters advances the popular MINI-POLE® Series by providing Surface Mount (SMT) capability along with the field proven RF power handling, low distortion and exceptional selectivity performance of our MINI-POLE® filters. MINI-SMT™ bandpass options are available from 700 MHz to 3 GHz.



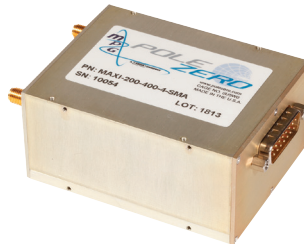
## MINI/3-ERF

The MINI/3-ERF provides enhanced selectivity by use of 3-pole filter architecture. Wide tunability is achieved by the use of multiple internal filters along with high-performance RF band select switches all contained in one small, surface-mount housing.



## MAXI-POLE®

Tunable filters providing improved passband performance (reduced insertion loss for a given bandwidth) in a slightly larger package. Available in two (2) pole and three (3) pole configurations.



## POWER-POLE®

Tunable filters providing improved RF performance with increased power handling capabilities and low insertion loss for a given bandwidth.



## MEGA-POLE®

This filter series provides excellent selectivity while maintaining very low insertion loss. This product line also has exceptional RF power handling capability with a high third-order intercept point. The MEGA-POLE® filter series can be used for transmitter applications to reduce power amplifier noise, harmonics and intermodulation products.



# FEATURED PRODUCTS

**New!**

## MICROWAVE TUNABLE FILTERS

New digital-tuned and analog voltage-tuned agile filters. NANO-POLE® and MINI-SMT™ product lines offer wide-tuning bandpass filters with precise digital control, extending to 3 GHz. Excellent RF performance in reflowable SMT packages. For extremely fast tuning requirements, under 100 nanoseconds, Pole/Zero is developing new voltage-tuned bandpass filters with center frequency ranges extending up to X-band (12 GHz) in a variety of packaging options.



**New!**

## NANO-ERF™

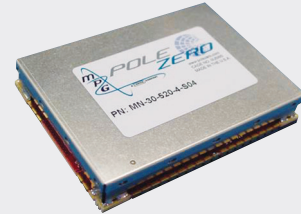
The NANO-ERF™ series of tunable filters was developed to address applications needing an extremely small surface mount package with low power consumption. Wide tuning range is accomplished with careful design to minimize size and power consumption.



**New!**

## MINI-ERF®

The MINI-ERF® is a low-cost, miniature, high-performance tunable bandpass filter. The MINI-ERF® uses PIN diodes to deliver high filter performance while fitting in a 1.75" x 2.40" x 0.387" package. Serial or parallel tuning interfaces are selectable. All MINI-ERF® filters are fully tuned and tested by Pole/Zero for convenience and ease of use.



**New!**

## ERF-5W™

Newly redesigned ERF-5W™ filters provide significant SWaP reduction while maintaining 5W average in-band power handling and covering the entire military tactical radio tuning range of 30-520 MHz. ERF-5W™ filters are available in both single and dual-channel configurations.



**New!**

## ICE1006

Pole/Zero fits its powerful cosite solutions into the palm of your hand. The ICE1006 provides 5-10 Watts of filtered Tx output power from 30-512 MHz for frequency hopping applications. The unit also features radio controlled tuning and Rx low noise amplification in a form factor under 8 ounces – perfect for UAVs or tactical ground systems.

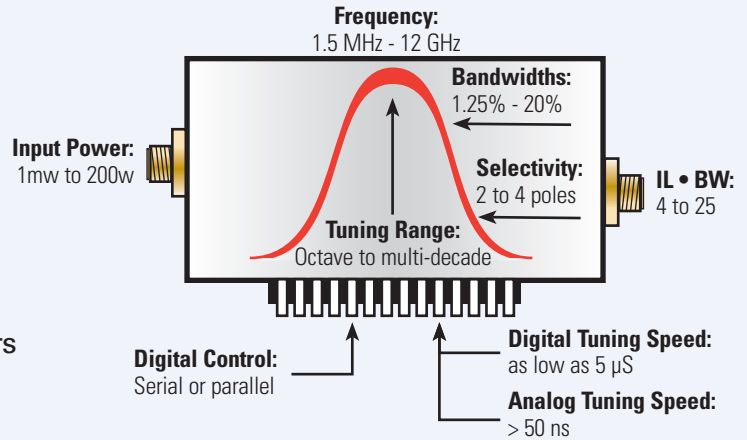




**Pole/Zero** is the premier provider of solutions for communication problems arising from RF interference. Our products include tunable filters, Integrated Cosite Equipment (ICE), low noise and cosite power amplifiers.

Our modular building blocks are ideal for various radio applications. Low-loss, narrow-band, solid-state, tunable hopping filters are available in bandpass and notch options from 1.5 MHz to 12 GHz with power handling up to 200 W peak. With the addition of our controllers and low noise amplifiers, they are ready for integration in your system.

### Overall Capabilities



## Cosite Communication Solutions

# CCS

Pole/Zero is recognized as the leader in high dynamic range RF communications solutions with over 25 years of experience.

- The industry standard for agile, tunable RF Filters
- New products and technology focus
- Wide selection of standard product families to optimize trade-offs of RF performance, interface, power, size and cost
- Engineered for high reliability and produced to the highest quality standards
- Highly technical sales and marketing team to support your custom applications

