MtronPTI Digitally Tunable Filters – Key to Software Defined Radio Evolution

Low loss digital tunables reduce cosite interference and extend radio range

Seattle, WA, June 4, 2013, International Microwave Symposium 2013 – MtronPTI, leader in harsh environment RF & microwave filters and custom frequency control products, today announced the TF010x series Low Loss Digitally Tunable Filters for software-defined and frequency-hopping radio applications. Mike Howard, Vice President of filter engineering, says, “Tunables support the next step in radio architecture – moving from fixed frequency to flexible, software-defined communications. The TF010x series fills the need with half the pass band loss of alternatives.”

Expanding, Mike says, “Software-defined multiband radios increase interconnectivity and reduce cost through wide bandwidth radio front ends and tunable filters. But increasing receiver sensitivity to extend range introduces interference problems from friendly radios nearby (cosite interference) and self-generated errors due to receiver overload from strong out-of-band signals. For defense applications, radios also need to support frequency hopping security protocols. The TF010x series blocks interfering sources, provides up to 250 digitally selected on-the-fly center frequencies and has in-band loss around 3 dB, half as much as alternative solutions, increasing radio range further.”

Diverse, physically broad defense theaters need trustworthy, wide range and accurate communications to share real-time situational data. Thus, despite significant budget cuts, economic limitations and potential technological challenges, Visiongain, independent business information provider for defense industries, believes the value of the global military communications market will continue to grow, reaching $17.46B in 2013 (Feb, 2013 report). Evolution in military radios comes from the continuing shift to software-defined, exploiting technologies developed in the JTRS program.

Blue–chip defense communication and radar companies are reaching out to MtronPTI to bring a history of RF engineering expertise and close client service on line to support their expanding tunable architecture needs. The TF010x series is only the beginning, with more coming in digital, varactor and switched tuning technologies.

Shipping today, MtronPTI’s TF010x series Low Loss Digitally Tunable Filters increase range by reducing cosite interference and support secure transmission through microsecond speed frequency hopping. Available initially in three models: the TF0103 covers 30 – 90 MHz SINCGARS band, the TF0105 spans 200 – 400 MHz Have Quick IIA band and the TF0108 targets 225 – 520 MHz VHF high and UHF bands.

About MtronPTI

MtronPTI is a leading designer and manufacturer of advanced highly engineered frequency control and filter products for instrumentation, defense, avionics, and Internet communication applications. Based in Orlando, Florida, with design, sales and manufacturing locations in North America, Asia and Europe, MtronPTI is a subsidiary of The LGL Group (NYSE MKT: LGL). For more information, visit http://www.mtronpti.com and http://www.lglgroup.com.

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