



PRESS INFORMATION

Communications & Power Industries LLC – TMD Technologies Division

CPI TMD Technologies Division Introduces X-band SSPA Module for Radar Applications

The TMD Technologies Division of Communication & Power Industries (CPI) has added a new solid-state power amplifier (SSPA) to its wide range of innovative products for defence, electronic warfare (EW) and radar applications.

Compact and lightweight, the PTS10224 SSPA operates over the 8.5-9.6 GHz X-band frequency range with a typical high power of 400W (greater than 300W minimum) at up to 15 percent duty cycle.

Two Versions

Two models of the PTS10224 SSPA are available with slightly different performances. One operates from a 40V DC supply, and the other from a 50V DC supply. The latter version offers the best overall efficiency and output power – typically in excess of 400W.

At 40V operation, the power added efficiency (PAE) typically exceeds 20 percent.

GaN Technology and Small Footprint

The excellent power performance and compact and lightweight construction of the PTS10224 SSPA have been achieved by employing gallium nitride (GaN) high-power transistors. Furthermore, this design provides the benefit of a power-to-volume ratio that is one of the highest in the market.

The new PTS10224 SSPA weighs just 1.5 kg and has a small size of just 197 x 150 x 30 mm (excluding connectors). The operating temperature range extends from 0 degrees C to +60 degrees C. These features make the SSPA ideal for land, sea and airborne radar applications. The new SSPA is currently in production for several customers worldwide.

Flexibility of Design

CPI TMD Technologies Division's PTS10224 SSPA is flexible in layout and architecture, and both electrical and mechanical interfaces can be tailored to meet customers' specific requirements. The amplifier is normally supplied without a heat sink or any thermal management assembly, but CPI TMD Technologies Division can offer customized heat sinks to suit specific requirements. The product can be operated as a standalone SSPA, or as multiple power modules combined.

Interfacing 12C allows monitoring of internal currents, voltages, and temperatures.



The new PTS10224 compact SSPA from CPI TMD Technologies Division employs state-of--the art GaN technology.

ENDS

About Communications & Power Industries

Communications & Power Industries (CPI) is a global manufacturer of electronic components and subsystems focused primarily on communications and defence markets. With a heritage of technological excellence that spans decades, CPI develops, manufactures, and globally distributes innovative and reliable technology solutions used in the generation, amplification, transmission and reception of microwave signals for commercial and military applications. Learn more about CPI at www.cpii.com.

CPI TMD Technologies Division – leaders in scientific and technical microwave and RF innovation



CPI TMD's headquarters design and manufacturing facility in West London, UK.

With a heritage dating back to the 1940s, CPI TMD Technologies is a world-class designer and manufacturer of professional microwave and RF products. At the company headquarters in Hayes, West London it produces specialised transmitters, amplifiers, microwave power modules (MPMs), high voltage power supplies, microwave tubes and transponders for radar, EW and communications applications. A previous twice Queen's Award winner, it also produces a range of advanced instrumentation microwave amplifiers for EMC testing, scientific and medical applications.

CPI TMD Technologies is also making ongoing and substantial investment in the development of quantum-enabled technology under the UK National Quantum Technologies Programme (UK-NQTP).

CPI TMD Technologies has also expanded its investment in the Solid-State Power Amplifier MPM space through a partnership with Diamond Microwave LTD, and now has SSPA MPMs available with various output power options from UHF through Ku band.

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