



TMD Technologies Limited

Swallowfield Way Hayes Middlesex UB3 1DQ UK
Tel 44 (0)20 8573 5555 Fax 44 (0)20 8569 1839

PRESS INFORMATION

15 February 2007

TMD's latest microwave instrumentation amplifiers meet the stringent demands of HIRF EMC testing for commercial aircraft

TMD Technologies Limited (TMD) has introduced six new high power, pulsed TWT (Travelling Wave Tube) instrumentation microwave amplifiers, which are optimised to meet the latest stringent demands of high intensity RF (HIRF) EMC testing. The amplifiers are also suitable for other applications, including scientific and laboratory research and the medical field.

Achieving the technical challenge of providing high pulsed power - even at L band - TMD's latest PTC6000 and PTC7000 series travelling wave tube amplifiers (TWTAs) between them cover the frequency range of 1-18 GHz with minimum power outputs of 3.5 kW pulsed, up to a maximum of 14 kW pulsed in some parts of the band. This satisfies the very latest aerospace EMC (Electro Magnetic Compatibility) testing requirements for commercial aircraft such as the Airbus 380 and Boeing 787. Due to the increasing use of carbon fibre in their structures, these latest aircraft are more susceptible to microwave radiation than the older type designs employing all metal structures, hence the necessity for the most advanced and stringent test procedures.

TMD has recently teamed up with the antenna experts Q-par Angus Ltd to provide amplifier/antenna solutions that exceed the latest HIRF specifications. Horn antennas specially developed by Q-par Angus focus the RF energy at short distances from the aperture, thus overcoming the near field limitations of traditional designs. Following the recent commissioning of a system for an EMC aircraft testing programme, using the new TMD amplifiers and horn antennas from Q-par Angus, Guy Howard, TMD's International Sales Manager, Commercial Microwave Amplifiers, commented: "We were delighted to obtain more than 3 kV/m at 1 metre with 3dB spot sizes of 150 mm or greater - all exceeding RTCA/DO160-D category K specification".

Having evolved from military designs, TMD's 19 inch rack mounting PTC6000 and 7000 TWTAs are inherently reliable, and are smaller, lighter and therefore more mobile than similar amplifiers on the market. The basically modular construction allows easier troubleshooting and maintenance, backed by full customer support. The amplifiers operate from 110-240 V AC, 50-400 Hz - satisfying the variable global conditions for prime power.

TMD

TMD is a British SME manufacturing company located in West London with a history of over 60 years in microwave technology. All operational functions are within the one location, streamlining the transition between development and production – also conveniently located near London Heathrow Airport;

The company designs and manufactures specialised transmitters for radar and electronic warfare applications, high voltage power supplies and microwave tubes. It also produces a range of commercial amplifiers for EMC testing, communications, radar & EW simulation and scientific applications.

TMD's list of customers for EMC testing applications includes:

Rockwell Collins, Lockheed Martin, Harris Corporation (USA) TUV Product Service, QinetiQ, Farnborough (UK), INTA (Spain), Airbus (France), MBDA (UK & France), ESA-Estec (Netherlands) NEC-Toshiba Space (Japan), EADS (France & Germany) SP (Sweden).

TMD has won two UK Queen's Awards for Enterprise – in 2004 for International Trade and in 2005 for Innovation.

Q-par Angus

Q-par Angus Ltd has been at the forefront of microwave design and manufacture for over 30 years. Initially founded to serve the interests of government and defence security establishments, the company now excels in the research, design, development and manufacture of a wide range of microwave components and antenna systems across the entire radio frequency spectrum.

The company has supplied products to over 1500 global customers, including Lockheed Martin, NASA, EADS-Astrium, MoD, UK Home Office, Boeing, QinetiQ, BAE Systems, UK and US Armed Forces and the BBC.

Q-par Angus Ltd portfolio of products include antenna positioners, high power EMC horns, all types of antennas - ultra wide band, reflectors, phased arrays - and many bespoke components. It regularly undertakes research-based activities including development studies, prototyping and technical concept studies. The company prides itself in producing novel solutions to any problem thanks to a diverse, highly qualified workforce.

Q-par Angus Ltd is approved to BS EN ISO 9001:2000 and is an accredited Investor in People.

For further information please contact:

Heather Skinner, TMD Technologies Limited. Tel: 44 (0)20 8581 5002

Fax: 020 8581 5012

Email: heather.skinner@tmd.co.uk

www.tmd.co.uk

or

Brian Bidgood, 12 Redfern Avenue, Hounslow, Middx TW4 5LY, Tel: 020 8755 2243

Email: brian.bidgood@tiscali.co.uk

Digital images available from Heather Skinner at TMD



TMD's instrumentation amplifiers have a worldwide reputation for design innovation.