

## PRESS RELEASE

### **CellMetric launches 4G LTE eNodeB Test Signal Generator**

#### **Modus 6 enables LTE User Equipment RF and Digital Baseband testing.**

15<sup>th</sup> January, 2009 – Cambridge based digital cellular and broadcast company CellMetric announces the launch of a Long Term Evolution (LTE) eNodeB 4G base station test signal generator.

CellMetric's Modus 6 LTE test solution is compliant with Release 8 of the Third Generation Partnership Project standard (3GPP) and supports both Time Domain Duplex (TDD) and Frequency Domain Duplex (FDD) modes. This follows the 11<sup>th</sup> December 2008 functional freeze of LTE as part of 3GPP Release 8.

CellMetric's Modus 6 LTE base station test signal generator consists of one or more Modus 6 air interface units providing the RF transmission and LTE Composer, a PC based application which generates the protocol and RF transmission scenarios to emulate eNodeB base station transmissions. The LTE Composer application has been developed in close collaboration with Qasara Ltd, ([www.qasara.com](http://www.qasara.com)) a specialist LTE technology development company. The combination of the two tools provide a highly flexible, comprehensive and cost effective solution for LTE User Equipment (UE) and handset baseband and RF development and testing.

CellMetric's LTE tester provides a highly sophisticated RF and protocol sequence generation environment in which LTE RF and baseband chipset companies and cellular handset developers can quickly test their solutions against a repeatable and deterministic test stimulus over the air.

This capability includes RF channel emulation allowing the signal generator to generate a RF signal as seen either at the output of the base station transmit antennas or at the input of the user equipment's receive antennas. Both transmit and receive Multiple-input Multiple-output (MIMO) antenna configurations can be emulated by using two synchronised Modus 6 air interfaces.

Modus 6 supports LTE RF channel bandwidths of 1.4, 3, 5 and 10 MHz in the band 824 MHz to 2155 MHz that is FDD bands I, II, III, IV, V, VI, VIII, IX and X and TDD bands a, b and c.

The user has complete control over the Physical Downlink Control Channel (PDCCH) with respect to Downlink Control Information (DCI) format types and search space locations. The following physical transport channels, synch signals and reference signal are supported:

- PCFICH Physical Control Format Indicator Channel

- PHICH Physical Hybrid Automatic Repeat Request Indicator Channel
- PDCCH Physical Downlink Control Channel
- PDSCH Physical Downlink Shared Channel
- PBCH Physical Broadcast Channel
- P-SCH Primary Synchronization Channel
- S-SCH Secondary Synchronization Channel
- CRS Cell Specific Reference Symbols

CellMetric's LTE base station test signal generator, comprising the LTE Composer Base Station Emulator software and Modus 6 air interface units, is available now from CellMetric.

CellMetric will be showcasing its LTE product at the Mobile World Congress in Barcelona, 16<sup>th</sup> – 19<sup>th</sup> February 2009.

### **About CellMetric ([www.cellmetric.co.uk](http://www.cellmetric.co.uk))**

CellMetric – (Cell - Cellular broadcast systems) (Metric – application of measurement algorithms to provide intelligence to RF systems)

Founded in 2005, CellMetric was formed with a goal to develop innovative, intelligent and cost effective solutions to meet the challenges of digital switchover and the cellular infrastructure market. Drawing on the expertise of a highly experienced team of systems, software, RF and VLSI engineers with extensive experience in mobile communications and digital TV, CellMetric is developing a range of modular solutions, including: repeater systems, micro base stations and the Modus I/Q RF signal sources for network emulation. Key to these systems is CellMetric's Software Defined Digital Radio architecture and "Application Specific I/Q™" modules which allow efficient customisation of this architecture using plug and play channel coders.

All CellMetric's products blend a mix of fast processors, FPGAs, and broadband RF digital radio to provide intelligent, self-measuring transmission systems.

CellMetric is currently working in the areas of:

- LTE
- DVB-T/T2
- DVB-S/S2
- DVB-H
- DAB
- DAB+
- T-DMB

CellMetric's patented architectures are highly modular, allowing the efficiencies of engineering reuse to be gained.

CellMetric was formed in 2005 by Graham Norgett, one of the founders of Symbionics Instruments, later Adherent Systems, which developed a significant market share in the DECT cordless handset and DVB MPEG digital video test systems market. Adherent, where Norgett was Marketing Director, was sold in 2001 to a major US based T&M multinational.

CellMetric is a privately held limited company.

Contacts:

Graham Norgett  
 +44 (0)1223 265 571  
 graham@cellmetric.co.uk