Press Release

October 31, 2023

Tel. EMITE: + 34 968 100 181
EMITE Contact: Javier Paredes, CSO
sales@emite-ing.com

Fuente Álamo de Murcia - Spain

EMITE OTA test systems selected by the SKA Observatory (SKAO)

Following a competitive tender process, EMITE OTA test systems, together with Australian partner company Maser, has been awarded a €1M contract by the SKA Observatory (SKAO) to manufacture and supply a reverberation chamber for the SKA project in Australia.

The SKAO is a global observatory that is building and operating cutting-edge radio telescopes that will transform our understanding of the Universe, and deliver benefits to society through global collaboration and innovation. The SKA observatory has a global footprint and consists of the SKAO Global Headquarters in the UK, the SKAO's two telescopes at radio quiet sites in South Africa and Australia, and associated facilities to support the operations of the telescopes.

The SKA telescopes will be extremely sensitive instruments, that need to operate in protected, radio quiet areas to detect the exquisitely faint radio signals from space. The SKA-Low telescope, currently being built on Wajarri Country in outback Western Australia, will detect radio waves in the 50MHz to 350MHz range – a similar frequency to AM and FM radio signals and TV frequencies. All electrical equipment must be tested to verify that it does not 'leak' radio waves that would impede the detection of these signals from space, and must be shielded in specially designed cases if it has the potential to interfere.

EMITE has been contracted to manufacture and supply parts for a reverberation chamber for the SKA-Low telescope. This chamber will be used to undertake the emissions compliance testing of SKA-Low telescope systems and associated hardware. Any technology used on the SKA-Low telescope site has to meet the most stringent radio interference standards ever achieved. The reverberation chamber will be used to characterise the emissions from unshielded technologies and devices, and provide the detailed information needed to determine shielding requirements.

EMITE is partnering with local Australian company Maser, who will assemble and deploy the chamber at the SKAO's Engineering Operations Centre in Geraldton, Australia.

"*After our first co-operation with the European Space Agency (ESA), the project for SKAO is particularly interesting for us. We are honoured to have our test systems being used for the extraordinarily challenging mission of SKAO. The SKA telescopes require unparalleled radio quiet and technologies used in proximity to the antennas must meet the strictest radio interference requirements. EMITE's involvement in this project is really exciting and an enormous challenge,"* said Javier Paredes, CSO of EMITE.

About EMITE

EMITE Ingeniería, S.L. is a high-tech company, spin-out from the Technical University of Cartagena (Spain). EMITE designs, develops, manufactures and commercializes OTA Test Systems for performance, compliance and pre-compliance testing of any 2G to 5G standards and pre-standards worldwide, including 5G, LTE-A and Wi-Fi (up to 6E). Headquartered at the Fuente Álamo High Tech Park in the Region of Murcia (Spain) and with distributors in 25 countries, test house show rooms in America, Asia and Europe, and both national and international awards, EMITE OTA Test Systems are being used worldwide by carriers, OEMs, test labs, regulatory authorities and many others around the wireless ecosystem. With a customer-driven roadmap and a vision of changing the way technology gets through our life, EMITE OTA Test Systems are more than just chambers, bringing OTA testing into a new era of capabilities and easiness. EMITE MIMO OTA Test Systems were selected by 3GPP and CTIA as candidate methodology for the study and work items through standardization of LTE MIMO OTA test methods.

About the SKAO

The SKAO is a next-generation radio astronomy-driven Big Data facility that will revolutionise our understanding of the Universe and the laws of fundamental physics. Enabled by cutting-edge technology, it promises to have a major impact on society, in science and beyond. The SKAO is an intergovernmental organisation with 16 member states and participating countries – Australia, Canada, China, France, Germany, India, Japan, Italy, the Netherlands, Portugal, South Africa, South Korea, Spain, Sweden, Switzerland, and the United Kingdom. Around 100 organizations across about 20 countries participated in the design and development of the SKA project. The SKA-Low telescope is the low frequency radio telescope being built in Australia at Inyarrimanha Ilgari Bundara, the CSIRO Murchison Radio-astronomy Observatory, on the traditional lands of the Wajarri Yamaji.

About Maser:

With 40 years of industry experience, Maser Australia is a trusted provider of advanced technology solutions, sourced from our network of leading international suppliers across the telecommunications, enterprise, industrial and defence sectors. Our business is comprised of 5 key service streams including RF Solutions, Network iQ, Service Assurance, Cable and Defence. Servicing our wide-ranging customer base including key mobile operators, major ISP's, state and federal government departments, emergency services, utilities, major industries. With a dedicated team of sales, service and operational people, our staff are passionate and committed to delivering market leading products and services that exceed customer expectations. Maser provides our customers with extensive market and product expertise, quality, reliability, diversity, specialised services and advance technologies, allowing us to provide our end customers with the best solution to meet their requirements, no matter how challenging.

For more information, register with EMITE at http://www.emite-ing.com/ing/register.php or visit www.emite-ing.com

EMITE Ingeniería SL. Parcela 2.3R. Parque Tecnológico de Fuente Álamo. E-30320 Fuente Álamo de Murcia. ESPAÑA - SPAIN
T + 34 968 100 181 F + 34 968 100 381 *E* sales@emite-ing.com