

Parsec Shrinks Its New LTE Antenna for IoT Applications

Parsec Technologies, an antenna and semiconductor company, is using CTIA Super Mobility Week to kick off a new line of LTE antennas.

First in the new product line is Parsec's PTA-700 LTE cellular antenna, a penta-band surface mount (SMT) antenna, specifically designed for the IoT and M2M space. Parsec says the PTA-700 LTE only has a 1.5 inch x 2 inch ground plane requirement and needs no external matching components needed.

The PTA-700 LTE covers all worldwide cellular bands from 699 MHz to 894 MHz and 1710 MHz to 2170 MHz and works with GSM bands including wide-band LTE, cellular, CDMA, and UMTS.

Besides providing multi-band connectivity without a large

ground plane, the PTA-700 LTE features antenna edge mounts connected directly to a host PCB for "low-loss, low-cost connection to the cellular transceiver," according to Parsec.

"Designers are looking for high efficiency LTE antennas that remain highly efficient in the customer's package without the need for a large ground plane" Parsec Technologies Founder and CEO Michael Neenan said in a statement. "Connectivity to multiple networks is what is driving new products today. Parsec is pleased to announce our new LTE antenna which delivers cutting edge design innovation and expert RF analysis to ensure reliable connectivity every time."

Parsec will be exhibiting at CTIA Super Mobility Week Sept. 9-11 at booth 5039 in the M2M Zone. ●

GWS Keeps Tabs on Network Performance at SMW

At some point throughout this year's CTIA show you might run across a pair of guys wearing Global Wireless Solutions' (GWS) monogrammed shirts toting two hiking backpacks. The largest and most experienced independent provider of network benchmarking data, the GWS team has just finished their first day measuring the mobile network performance of the entire convention center and will continue throughout the rest of the week.

It's all done with the Rohde & Schwarz's SwissQual Freerider platform that lets GWS' mobile network testing specialists gather data on 12 devices simultaneously using Samsung Galaxy S5 devices (using 2 backpack platforms). This year, GWS tested mobile-to-mobile VoLTE and HD voice and LTE data for the four major carriers AT&T, Verizon, Sprint and T-Mobile.

Today the team tested a largely unloaded network ahead of the influx of wireless experts expected to show up throughout the week. Tomorrow, the test specialists will return to the convention center to test the facility, common spaces and meeting rooms again as the strain on each network inevitably increases. Additionally, they will be testing the VoWiFi phones, including the hotly-debated Google Fi with a Motorola Nexus 6, T-Mobile and Sprint on the Samsung GS6, Cablevision Freewheel and Republic Wireless on Motorola Moto G and Moto E respectively and Scratch Wireless on Coolpad Arise.

Tuesday's testing showed that all voice calls were successful on AT&T and Verizon networks using VoLTE. T-Mobile's VoLTE network blocked 2 calls between the Samsung booth and the food bistro on the floor. Sprint's CDMA blocked 2 calls due to poor coverage in the



M2M Zone. GWS performed audio MOS testing using wideband codec reference files (to test HD voice). T-Mobile and Verizon delivered the best voice quality, while AT&T and Sprint delivered fewer HD quality voice samples.

Data tests showed that T-Mobile's LTE network delivered a blazing download throughput of 35 Mbps, coupled with an average upload throughput of 20 Mbps. T-Mobile has deployed a 20-MHz bandwidth LTE channel on AWS 2100-MHz band. AT&T's LTE network delivered 18 Mbps download and 7 Mbps upload. AT&T has deployed LTE-CA using two 10-MHz bandwidth LTE channels. Verizon delivered more balanced results with both downlink and uplink at 13 Mbps using a single 10-MHz LTE channel. This is the first CTIA where Sprint delivered LTE to the show, and they have debuted with 10 Mbps downlink and 7 Mbps upload. Verizon had the fastest latency at 57 msec with AT&T and T-Mobile trailing at 85 msec. ●