

The exhibit will be used at Fujitsu's facility field environment for testing alternate power sourcing and GX4000 performance. The testing will be performed at the Fujitsu Richardson, Texas campus location.

The Fujitsu GX4000 E-Band radio system is a complete All-In-One radio operating in the E-band frequency and feature Fujitsu's Impulse Radio technology. The capacity is multi-Gigabit throughput using the frequency spectrum of 71-76 and 81-86 GHz, FDD, range with channel size of 4,500 MHz and this test configuration has a 2.45 Gbps through-put. This system requires Line-of-Sight environment for radio transmission path. It supports multiple model types – Gigabit-Ethernet (GE) model and Common Public Radio Interface (CPRI) model. It's maximum TX output power is +10dBm (ATPC, MTPC) and will support spans up to 3km. The GX4000 can be used for building multi-Gigabit wireless networks to deliver various types of content-rich services over a 3G/4G mobile network or fixed broadband network. The GX4000 wireless transport solution is ideal for networks heavily damaged by disasters to provide quick restoration of traffic. Features include the following.

- Wireless innovation based Impulse Radio technology
- 71-76/81-86 GHz (4,500 MHz bandwidth)
- FDD (Frequency Division Duplex)
- 1+0 point-to-point radio
- Lightweight, small size zero footprint ODU design (<4.0 liter and <4.7kg)
- High power amplifier using GaAs Field Effect Transistor (GaAs FET)
- Low power consumption (<30 W/1+0)
- Low latency
- Transmit Power Control (ATPC/MTPC)
- Reed Solomon error correction
- 1-foot or 2-foot parabolic antenna

The testing and verification of these features for Fujitsu's GX4000 is the purpose of this experimental lab environment. (Sample lab environment set-up is below. Distance between GX4000 devices is <1km)

