

# nanoLTE™

## 4G Remote Cellular Networks



- RIVA Network's **nanoLTE™** systems are standards-based, feature-rich, 4G small cell solutions. Each independent cell site is managed locally by a powerful LTE software platform which provides all of the same features available in commercial networks.
- The **nanoLTE™** advantage locates all of the network operations, controls and features at each cell site by using a compact, low energy, Single Board Computer (SBC).
- Each site's Evolved Packet Core (EPC) implementation combines the powerful LTE network elements in a compact design.
- With **nanoLTE™** commercial mobile operators can extend their coverage to remote areas without the need to build out expensive fiber backhaul links, towers and power plants.
- **nanoLTE™** networks are available in both indoor and outdoor packaging.
- Organizations can now establish secure, private cell phone networks anywhere on earth, at a reasonable cost.
- Improve productivity and enhance worker safety with the convenience of smartphones, tablets and mobile phone technology.
- The **nanoLTE™** proprietary operating system runs autonomously and provides coverage independent of traditional public infrastructure.



*nanoLTE outdoor and indoor radio nodes*

### **nanoLTE™ systems support:**

**Multiple Simultaneous HDTV streams**

**Mobile Carrier Expansion**

**Remote and Rural Sites**

**Aircraft and Ships**

**Oil Rigs and Mines**

**Disaster Recovery, COG and COOP**

# nanoLTE™

## High Speed 4G Cellular Networks



RIVA's Network and Security Operations Center (NSOC)

- For remote sites “off the grid”, a local **nanoLTE™** node provides broadband data access and cached media content without having to backhaul all signaling and user data to a centralized commercial NOC.
  - Each **nanoLTE™** site runs autonomously even if the backhaul connection has failed.
  - **nanoLTE™** is optimized to run at the network edge with one or more LTE radios (eNodeB) deployed in a remote area, on campus, aircrafts, ships, or for a variety of other applications such as public safety, defense and disaster recovery.
  - For Government or public safety, **nanoLTE™** allows autonomous high bandwidth and long range IP communications.
  - **nanoLTE™** supports both voice and IP data; easily backhauled over any IP connection.
- **nanoLTE™**, combined with a satellite backhaul, can be configured as a private end-to-end network or as a roaming extension.
  - Global Roaming: **nanoLTE™** systems enable inbound and outbound calls from any public network, using your mobile phone number.
  - **nanoLTE™** cell sites are optimized to perform all of the signaling locally, reducing backhaul bandwidth. Large data files are stored at the edge, without the need to open satellite links.
  - **nanoLTE™** sites can include legacy SMS text messaging, GPRS, EDGE and 3G radios – all managed on the same software platform.



RIVA Earth Station Antenna Farm