Real-time, reliable IP data connectivity can be the key enabler to saving lives, averting disaster, emergency warning communications and intelligent infrastructure monitoring. The ViaSat Machine-to-Machine Terminal 2104 delivers dependable, instant IP-based machine-to-machine (M2M) communications via satellite for advanced remote monitoring and control applications such as SCADA, disaster evacuation, and high-asset management including oil & gas pipelines, water & electricity, ATM and bill paying kiosks.

Powered by ViaSat C2SA Managed Service (CMS), this satcom terminal relies on remarkably efficient bandwidth allocation, low-latency IP networking, and low power consumption to make real-time remote monitoring and communications more affordable than ever - with lower service and equipment costs than traditional BGAN and Iridium systems. The ViaSat CMS offers reliable network connectivity, even in harsh weather conditions, and brings dependable performance to locations where cellular infrastructure doesn’t exist or is at risk of emergency network overload failure.

With an IP-based network architecture and multiple interfaces for Ethernet, USB, serial, and audio inputs, the ViaSat terminal easily integrates with your existing M2M system to support any real-time remote monitoring and control application.

For SCADA or intelligent infrastructure management, the system’s two-way networking capability enables both real-time monitoring and real-time control. Field devices can instantly be assessed and adjusted remotely; such as gas valves, smart grid sensors, water pumps, and reservoir level indicators. ViaSat M2M technology helps reduce operating costs by monitoring and controlling power flow, optimizing energy purchase with demand-side management, and avoiding peak flow conditions to minimize energy costs.

When swift communications means the difference between life and death in emergency situations, the terminal serves as a real-time broadcasting lifeline to alert the remote populations of impending disasters. In tsunami and hurricane warning applications, this system can broadcast evacuation instructions and life-saving alerts, reaching entire populations of remote towns, villages, and coastline instantly.
SPECIFICATIONS

TOPOLOGY
» Hub-Spoke with Instantaneous Message Reflection

THROUGHPUT
» Forward Link 122 kbps and higher
» Return Link 2.8 kbps and higher per transceiver

MESSAGE LATENCY
» Seconds

TRANSMISSION SECURITY
» Link Encryption AES-based bulk encryption of the user data plane and the network control data plane
» NIST Certification FIPS-140-2 Level 2

ENVIRONMENTAL & PHYSICAL
» Temperature Range
  » Operational -40° to +55° C
  » Storage -55° to +70° C
» Relative Humidity 100% Condensing
» Shock/Vibration IEC 60068/60721 compliant
» Dimensions (WxHxD)
  » Antenna Multiple types for fixed-site applications
  » Modem 8.5 x 6.6 x 1.7 in.
» Weight 3.6 lb
» IP-40 sealed enclosure Modem
» Antenna IP-66