Real-time, reliable IP data connectivity can be the key enabler to saving lives, averting disaster, and growing profits for valuable asset tracking and management, emergency warning communications, and intelligent infrastructure monitoring. The ViaSat Machine-to-Machine Terminal 2110 delivers dependable, instant IP-based machine-to-machine communications via satellite for mobile platforms operating in remote environments, precise monitoring and control applications, standalone banking kiosks, and utilities management.

Powered by a ViaSat managed satellite service, this satcom terminal relies on remarkably efficient bandwidth allocation, low-latency IP networking, and low required satellite power to enable real-time mobile communications more affordably than ever. The ViaSat M2M terminal 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 failure due to overload or power outage.

With a standards-based IP-based network architecture and a common Ethernet interface, the ViaSat M2M terminal easily integrates with your existing M2M systems to support any real-time remote and mobile IP data application.

When used for mobile tracking and communications, the system’s two-way networking capability enables both real-time monitoring of position location information and data and voice communications. In fixed site applications, access to revenue-generating data is instant, and adjustment of field devices such as gas valves, smart grid sensors, water pumps, and reservoir level indicators can be performed remotely. ViaSat M2M technology enables reduction of operating costs by monitoring and controlling gas, water, or power flow, optimizing purchase with demand-side management, and avoiding peak flow conditions to minimize costs.
SPECIFICATIONS

NETWORK CONFIGURATION
- Topology: Hub-spoke with instantaneous PLI reflection
- Carrier Symbol Rates: Variable to operate on different MSS L-band satellites
- Throughput
  - Forward Link: 1.6 kbps to 220 kbps broadcast to all transceivers
  - Return Link: 1.2 kbps to 16.5 kbps per transceiver
- PLI Latency: Seconds
- GPS: 50-channel assisted receiver
  - Cold start acquisition < 27 seconds
  - Aided start acquisition < 4 seconds
  - Hot start acquisition ~1 second

TRANSMISSION SECURITY
- Link Encryption: AES 256-bit bulk encryption
- NIST Certification: FIPS 140-2 Level 2

ENVIRONMENTAL & PHYSICAL
- Operational Temperature: -40° to +71° C
- Relative Humidity: 100% condensing
- IP-66 sealed enclosure
- Shock/Vibration: IEC 60068/60721 compliant
- Dimensions (WxHxD): 222 mm x 222 mm x 127 mm
- Weight: 2800 g

ELECTRICAL
- Prime Power: 12 to 28 VDC

INTERFACES
- IEEE 802.3 10/100 Mbps Ethernet with support for messages with variable Message Transmission Unit (MTU) sizes of up to 1,500 bytes

PART NUMBER
- VMT-2100-10