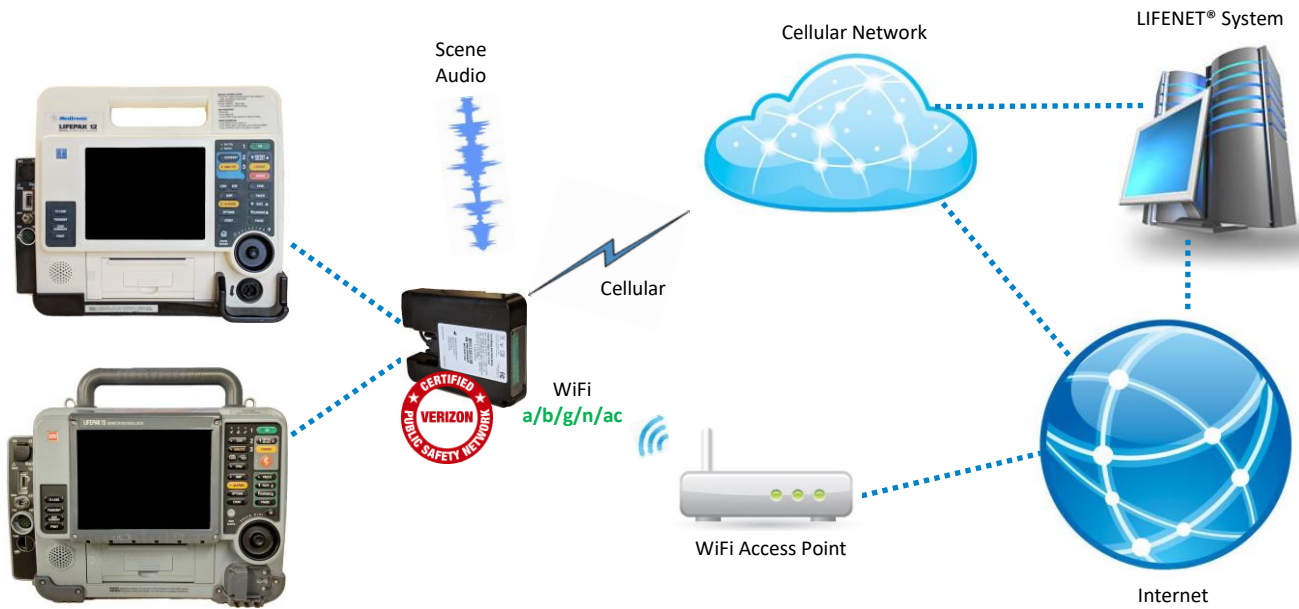


# TITAN III WIRELESS 4G CELLULAR GATEWAY for LIFENET®



The TITAN III Wireless 4G LTE Cellular Gateway (TITAN) is a portable wireless data communication modem for the LIFEPAK® 12 or LIFEPAK® 15 monitor/defibrillators. It provides secure patient data transmission to the LIFENET® system using a Cellular or WiFi connection to the Internet. It can be configured to provide recording of scene audio and simultaneous transmission of audio and patient data securely to the LIFENET system. The scene audio recording starts automatically within 5 seconds of the TITAN being turned ON. The TITAN fits conveniently and securely in its dedicated side pouch of the LIFEPAK® carrying case. Its operation is transparent to the user. It also, provides audible tones, to signal the success or failure of data reception by the LIFENET system.

The TITAN WiFi Client can be pre-configured to connect to the LIFENET system via a number of authorized WiFi access points or a cellular connection. The resulting connection is determined by many factors such as the configured connection priority scheme, authorized access points in range and available cellular coverage.

Each patient data transmission request from the attached LIFEPAK triggers establishment of an optimum data connection at the time, following the configured connection priority scheme. An audible indication is provided whenever audio data is being transferred to the LIFENET system. The TITAN can store up to 1080 minutes (12 incidents of 90 minutes each) of audio data for recorded incidents. Further recordings are made possible by overwriting the oldest incident in memory.

In EMS applications, the TITAN can connect wirelessly to a WiFi hotspot enabled Cellular Gateway installed in the ambulance to send data securely to the LIFENET system. This allows for enhanced connectivity to transfer data to the LIFENET system from inside the ambulance. When the TITAN is located away from the ambulance or any of its pre-configured access points, it can communicate with the LIFENET system by taking advantage of its cellular radio.

The TITAN uses advanced cellular technology which enables it to be configured in the field for operation on LTE cellular networks with fallback to UMTS/GSM where applicable. This simplifies logistics and inventory requirements as a single model of the TITAN is compatible with different cellular networks deployed. The TITAN offers unparalleled flexibility, feature set and connectivity to the attached LIFEPAK user.

The TITAN's small size and light weight makes it an ideal companion for the LIFEPAK in EMS/pre-hospital applications. TITAN's design and use of low power technology makes it perfectly suited for battery operated mobile host devices like the LIFEPAK monitor/defibrillator.

**Compatibility**

LIFEPAK® 12, LIFEPAK® 15, LIFENET® System

**External Interfaces**

Serial RS232, USB Device

**4G LTE Cellular**

Technology

LTE

UMTS/HSPA

GSM/GPRS/EDGE

Maximum Data Rate:

4G: LTE Cat. 3: DL/UL – 100/50 Mbps

3G: HSPA+: DL/UL – 42/5.7 Mbps

2G: EDGE: DL/UL – 237/237 kbps

2G: GPRS: DL/UL – 85.6/85.6 kbps

Antennas: <= 3dBi, Monopole, Omni directional

**Wireless LAN – 802.11**

Dual Band Compatibility

**2.4 GHz:** 802.11 b/g/n;

**5 GHz:** 802.11 a/n/ac

Support for Regulatory Domains

Security: WEP, WPA-PSK, WPA2-PSK,  
WPA-ENT or WPA2-ENT (Client mode)

Encryption: TKIP, AES (64/128 bit)

Antenna: <= 3dBi, Monopole, Omni directional

**Audio Recording**

Mic. Type: Omnidirectional

Mic. Sensitivity: -35 ± -4dB

Mic. S/N ratio: 62dB

Mic. Location: Inside the Enclosure

Freq. Response: 20 – 16,000 Hz

Audio Encoding: 8 bit µLAW PCM

Sample rates: 8, 11.025, 16 kps

Recording Length: 1080 minutes @ 11.025 kps

With a 4G LTE cellular connection a 90 minutes audio file will upload to LIFENET system in less than 30 seconds. With 3G connection it would take 3 minutes to send the audio file from the LIFEPAK device.

**LED Indicators**

Serial Interface (TD, RD, TR, CD), WiFi (WF)

Power (PWR), System Status (RUN), Cellular (CELL)

**Power Source**

DC 12V, +/- 10%

**Environmental**

Operating: 32°F ~ 122°F (0°C ~ +50°C)

Storage: -4°F ~ 158°F (-20°C ~ +70°C)

Relative Humidity: Up to 95% non-condensing

**Sound Buzzer**

Audible tones for operator feedback indicating success, failure of data transmission to the LIFENET® system

**Regulatory Compliance**

Countries

Canada, United States

System

FCC Part 15 Subpart B Class B

IC ICES-003 Class B

Wireless LAN

FCC Part 15 Subpart C, E

IC RSS-210, -GEN

Cellular

FCC Part 15, 22H, 24E

IC RSS-102,-132,-133,-GEN

**Cellular Industry**

PTCRB

**Cellular Operator**

AT&T, Verizon, Verizon Public Safety, Rogers, Bell, Telus

**Enclosure**

Fits snugly into a standard LIFEPAK® carrying case

Material: ABS Plastic, Black

Size: 5.35" (W) x 7.20" (L) x 1.42" (H)

136mm (W) x 183mm (L) x 36mm (H)

Contents: TITAN III, Antennas, cabling

Connections: Right-angle LIFEPAK® mating

System Connector cable

USB Type B device receptacle

**Configuration Software**

- On-board web based configuration accessed via Internet Explorer (IE 7 or higher) under Windows® platform.
- Configuration data can be exported / imported to allow the user to backup / restore the configuration data.
- Exported configuration data can be used for rapid configuration of multiple TITAN III Wireless Cellular Gateways.