



# Fusion™

## Mission-Critical Multi-Network LTE Router

### ONE PLATFORM. MULTIPLE APPLICATIONS.

The CalAmp Fusion is designed for use by first responders, government, transportation and energy markets to enable secure, wireless data connectivity over LTE cellular networks as well as FirstNet Band 14. When 4G/3G high-speed connectivity is mission critical, Fusion accelerates real-time communications and enables vehicle tracking and location-based services, interoperability with Computer Aided Dispatch (CAD) software, camera surveillance and other crucial mobile and fixed solutions such as fleet management and analytics reporting, push-to-talk, AVL and more.

#### High Availability

Fusion offers the ultimate in connectivity and redundancy by routing traffic concurrently between carrier networks, without requiring an external router or switch. For additional connectivity options, WiFi is available and routes between wired and wireless networks, with the ability to connect to multiple devices through Fusion's three Ethernet ports. Fusion's WiFi capability acts as a hotspot to connect multiple, local devices to create a vehicle area network that is utilized by mobile first responders or mobile workers who require real-time access to business critical information.

#### High-Performance & Reliable

Fusion offers full-edge router capabilities and is able to simultaneously support data, voice and video applications. The 50-channel GPS precisely locates vehicles for AVL applications, key to decision making for dispatchers and fleet managers. Rest assured that sensitive, critical data is safe through the IPSec enabled VPN. Fusion is able to withstand a broad range of temperatures and humidity levels and is ruggedized to meet military specifications.

#### Centralized Management Platform

When combined with CalAmp's secure web-based platform, DeviceOutlook provides a robust solution to better manage, monitor and control devices remotely. The application non-intrusively monitors system diagnostics and updates firmware and configuration changes over-the-air to reduce costs and improves operational efficiencies.



### Experience The Advantage

- 4G/3G Multi-Network LTE Router
- Flexible for various M2M applications
- Persistent, reliable network connectivity
- FirstNet LTE/Band 14 and Carrier LTE networks
- Automatic switchover and concurrent coverage for seamless operation
- WiFi for hotspot capability in the field
- High-performance GPS for accurate vehicle location
- Compatible with CalAmp's DeviceOutlook for easy device management

# FUSION SPECIFICATIONS

## PRODUCT HIGHLIGHTS

- LTE multi-network router; single or dual radio
- Device Management: SNMP, embedded HTTP server for setup and help for 1 to 1 individual configuration
- Power: 4-pin locking, ignition sense and alarm inputs
- Compatible with CalAmp's DeviceOutlook for easy management

## CONNECTORS / INTERFACE

|               |   |
|---------------|---|
| Console/Setup | 3-wire serial connection in USB MiniB form factor   |
| Ethernet      | (3) 10/100 Mbps RJ-45, auto MDIX  |
| USB           | (2) Type A female   |
| Serial        | Supported via optional accessory  |
| I/O           | 2 digital inputs, 2 analog inputs<br>2 outputs (relay driven contact closures)                                |
| Antenna       | 3) SMA-RP (802.11 b/g or b/g/n WiFi)<br>(2) SMA (cellular) WWAN0<br>(2) SMA (cellular) WWAN1<br>(1) SMA (GPS) |

## MECHANICAL

|            |  |
|------------|--|
| Dimensions | 5.5 (L) x 6.0 (W) x 1.9 (H) in<br>14 (L) x 15.3 (W) x 4.8 (H) cm |
| Weight     | 2.5lb, 1.13 kg   |

## ENVIRONMENTAL

|                   |                                 |
|-------------------|---------------------------------|
| Temperature Range | -30° to +70°C<br>-22° to +140°F |
| Humidity          | 5% to 95% non-condensing        |

## LED

WWAN0, WWAN1, WiFi, GPS, POWER, ETH0, ETH1, ETH2, STATUS

## POWER

|  |  |
|--|--|
| 4-pin locking, ignition sense and alarm inputs |  |
| Input Voltage                                  | 10 to 30 VDC   |
| Power Consumption                              | RX: 5.8W Cell and GPS, 8.0W w/ WiFi<br>TX: 13.0W Cell and GPS, 16.9W w/ WiFi |

## STANDARDS & CERTIFICATIONS

- MIL-STD 810G
- FCC Part 15 Subpart B Class A
- IC ICES-003
- PTCRB approval
- Carrier Certification
- CE

## TECHNOLOGY

|                       |  |
|-----------------------|--|
| LTE Diversity Support | DL MIMO, UL SISO                                       |
| CDMA                  | EVDO RevA w/fallback to: CDMA<br>EVDO Rev0, CDMA 1xRTT |
| GSM                   | HSPA w/fallback to: UMTS, EDGE, GPRS                   |

## FREQUENCY BANDS

|                     |   |
|---------------------|---|
| LTE Band MHz(Band)  | 700(B13, B14, B17); 2100(B1);<br>1800(B3);2600(B7); 900(B8); 800(B20) |
| Dual-Band EVDO RevA | 800/1900 MHz  |
| Quad-Band UMTS/HSPA | 850/900/1900/2100 MHz   |
| Quad-Band EDGE/GPRS | 850/900/1800/1900 MHz   |

## SECURITY

IPsec VPN, RADIUS, HTTPS

## NETWORK PROTOCOLS

|                   |   |
|-------------------|---|
| Device Management | SNMP, embedded HTTP server for setup and help for 1 to 1 individual configuration |
|-------------------|---|

## WIFI

|             |   |
|-------------|---|
| IEEE 802.11 | 32 bit high power/performance WiFi  |
| Security    | WPA2-Enterprise, AES-CCM & TKIP<br>Encryption, 64/128/152 bit WEP         |
| Data Rates  | b/g/n 802.11b up to 11Mbps, 802.11 g up to 54 Mbps, 802.11n up to 90 Mbps |
| Modes       | Configurable as access point or client or both for concurrent operation   |

## APPLICATIONS

- Real-time communications
- Camera surveillance
- Vehicle Area Network
- Fleet management
- Push-to-talk

## About CalAmp

CalAmp (NASDAQ: CAMP) is a proven leader in providing wireless communications solutions to a broad array of vertical market applications and customers. CalAmp's extensive portfolio of intelligent communications devices, robust and scalable cloud service platform, and targeted software applications streamline otherwise complex machine-to-machine (M2M) deployments. These solutions enable customers to optimize their operations by collecting, monitoring and efficiently reporting business-critical data and desired intelligence from high-value remote assets. For more information, please visit [www.calamp.com](http://www.calamp.com).

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