Datasheet

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
	2 outputs (relay driven contact closures)
Antenna	3) SMA-RP (802.11 b/g or b/g/n WiFi)
	(2) SMA (cellular) WWAN0
	(2) SMA (cellular) WWAN1
	(1) SMA (GPS)

MECHANICAL

Dimensions	5.5 (L) x 6.0 (W) x 1.8 (H) in
	14 (L) x 15.25 (W) x 4.5 (H) cm
Weight	2.5lb, 1.13 kg

ENVIRONMENTAL

Temperature Range	-30° to +70°C
	-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
	TX: 13.0W Cell and GPS, 16.9W w/ WiFi

STANDARDS & CERTIFICATIONS

- MIL-STD 810F
- 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
	EVDO Rev0, CDMA 1xRTT
GSM	HSPA w/fallback to: UMTS, EDGE, GPRS

FREQUENCY BANDS

LTE Band MHz(Band)	700(B13, B14, B17); 2100(B1);
	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 Encryption, 64/128/152 bit WEP
Data Rates b/g/n	802.11b up to 11Mpbs, 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