GOVERNMENT SOLUTIONS

WWW.CALAMP.COM

PRESENTER: Director, Enterprise Sales, Government Solutions, Raymond R. Pache, (678) 534-2011
CALAMP OVERVIEW

PROVEN LEADER PROVIDING BUSINESS-CRITICAL WIRELESS PRODUCTS AND SOLUTIONS TO A BROAD ARRAY OF TARGETED INDUSTRIES

• Founded 1981, publicly traded (NASDAQ: CAMP) since 1983
• $230M annual revenue (TTM)
• Global presence with offices & people in North America, Europe, Asia/Pacific & Latin America
• Established solutions for business critical, public & private wireless communications applications
• Extensive portfolio of intelligent communications devices, robust and scalable cloud service platforms, and targeted software applications & solutions

PROVEN LEADERSHIP

• 30M+ units shipped since inception
• 3.5M+ devices under cloud-based device management
• 100K+ units/month | ~ 1.5M annual run rate
• 400k+ application/data subscribers on CalAmp systems
DESIGNING, DEVELOPING, AND MANUFACTURING A BROAD RANGE OF DEVICES THAT ENABLE VARIOUS MRM AND M2M APPLICATIONS

BEST OF BREED
- Broad, multi-tiered portfolio for key high-volume & growth segments
- Tremendous scale to worldwide markets
- Highly differentiated & configurable devices
- Intelligent, embedded applications
- Powerful device management & control
- Strong relationships with global tier 1 MNOs; broad certifications

NUMEROUS APPLICATIONS
- Fleet management
- Asset & container tracking
- Navigation & dispatch
- Usage-based insurance
- Driver behavior
- Mobile workforce management
- Vehicle area network
- Remote monitoring
- Vehicle utilization

Track & Trace Device  Trailer Trackers  Fleet Trackers  Asset Trackers  On-Board Diagnostics Devices  Rugged Routers
Market solutions optimize operations by collecting, monitoring, and efficiently reporting business-critical data and desired intelligence from high-value remote assets.

<table>
<thead>
<tr>
<th>TRANSPORTATION</th>
<th>ENERGY</th>
<th>GOVERNMENT</th>
<th>AUTOMOTIVE</th>
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</thead>
<tbody>
<tr>
<td>Fleet management for heavy equipment &amp; rail</td>
<td>SCADA &amp; telemetry systems</td>
<td>Local/state Mission-critical secure communications</td>
<td>Secure access to leased &amp; financed vehicles for loan protection</td>
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<tr>
<td>Telemetry, telematics, location &amp; diagnostics, and equipment tracking &amp; management</td>
<td>GPS fleet tracking for complete remote visibility of fleets</td>
<td>Minimum response time w/ real-time situational awareness</td>
<td>Affordable remote management and protection</td>
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<td>Smart grid infrastructure, metering and tank monitoring</td>
<td>Access to databases and patient information</td>
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**MOBILE RESOURCE MANAGEMENT**

Access the **broadest portfolio of devices** and **advanced device management tools** leveraged by global MRM and fleet application solution providers.
BROAD HARDWARE PORTFOLIO

• MULTI-TIERED PORTFOLIO
• HIGHLY DIFFERENTIATED & CONFIGURABLE DEVICES
• POWERFUL MANAGEMENT & CONTROL
• CUSTOM SKUS

- TRACK & TRACE DEVICE
- TRAILER TRACKERS
- FLEET TRACKERS
- ASSET TRACKERS
- ON-BOARD DIAGNOSTICS DEVICES
- RUGGED ROUTERS
THE CALAMP FLEET TRACKING SOLUTION

PROVIDING TOOLS TO ENABLE SECURE, SCALABLE AND RELIABLE END-TO-END WIRELESS COMMUNICATIONS FOR MIXED MOBILE FLEETS

ASSET TRACKING
- Non Motorized Asset
- Motorized Asset
- Light/Medium/Heavy duty Vehicles

FLEET MANAGEMENT
- Police Vehicles Fire Apparatus
FUSION
One Platform. Countless Applications.
• **FirstNet Ready**
  - 2+ years active with the PSCR Lab Boulder, CO. Successful field trials B14 LTE networks (BTOP)
  - Work with and support major primes – Ericsson, Nokia, NGC, ALU, GDC4S, Harris RF Comm, OCEUS, Mutualink, TCS, others
  - Accommodate – Bands 4,12,13,14,17 and RF modules as business case allows
  - One of few FCC approved Band 14 Modules
  - Field Upgradeable from a VZW or AT&T only SKU
  - Deployed in Adams County, NJ pending decision, Harris County TX testing,

• **WiFi Vehicle Area Network**
  - 802.11 b/g/n WiFi 3x3 MIMO (Client/AP/Concurrent)

• **Integrated Fleet Management / AVL Telematics / Diagnostics**

• **Rugged: MIL-STD 810G**

• **Device Management**
  - Over-the-Air (OTA) Configuration/Updates
FUSION HIGHLIGHTS

HIGH-PERFORMANCE EDGE ROUTER

- Concurrent Multi-Band / Multi-WAN or LAN with high precision GPS (50 channel / AVL adaptive)
- Wi-Fi 802.11 b/g/n 3x3 MIMO 300 mbps + concurrent AP/Client Mode (2.4 GHz or 5.8 GHz)

SUPERIOR CONFIGURATION FUNCTIONALITY

- IP persistence / configurable ping, RSSI, RX timeout disconnect probes
- WAN prioritization / traffic routing / port forwarding / IP filtering / static routes
- I/O Ready: 2 digital inputs / 2 analog inputs + 2 outputs
- Land Mobile Radio (LMR) / satellite Ethernet configurable

EXTRA ADVANCE SECURITY

- IPSEC (IKEv1 NAT/Traversal/IKEV2/IKEV2 Mobile) / HTTPS
- WPA2 Enterprise / AP-Client
- Radius authentication

UNMATCHED USER EXPERIENCE

- Quick setup / straightforward interface / powerful device management platform
- Externally accessible SIMS for trouble-free swap out
- Advanced Cellular routing and monitoring for robust handling of fallback with multiple complex LTE networks
- Verizon Private Networking certified

ONE PLATFORM. COUNTLESS APPLICATIONS.
## Fusion Roadmap – Features Spotlight

### Fusion Refresh

**Next Generation Dual Radio Router**

<table>
<thead>
<tr>
<th>Fusion Features</th>
<th>Updated Features</th>
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<tbody>
<tr>
<td>• 4G Dual Radio</td>
<td>• 4G LTE Cellular AWS band</td>
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<tr>
<td>• Mobile version (GPS &amp; WiFi)</td>
<td>– Improved bandwidth, supports request for Verizon XLTE network expansion</td>
</tr>
<tr>
<td>• Industrial grade metal enclosure</td>
<td>• 802.11 WiFi b/g/n/i/ac MIMO &amp; BT</td>
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<tr>
<td>• External antennas</td>
<td>– Improved speed to offer more performance</td>
</tr>
<tr>
<td>• Identical connectivity options (Ethernet/Serial)</td>
<td>• I/O Expansion, plus USB</td>
</tr>
<tr>
<td>• Matching software features: Routing/Security/IP Filters</td>
<td>– More connectivity options to expand integration possibilities, add serial</td>
</tr>
<tr>
<td>• Duplicate Certifications: UL, C1D2, CE</td>
<td>• Processor &amp; memory update</td>
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<td></td>
<td>– Higher performance architecture to support enhanced features</td>
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- Accelerometer
  - Additional monitoring in mobile applications
- Improved Industrial grade metal enclosure
  - IP65 rated
Multi-network router platform supporting two concurrent embedded LTE MIMO radio modules (B13/B14 or B17/B14 “concurrent”: 2x LTE networks, plus 1x dual-band “N” Wi-Fi). All LTE and Wi-Fi networks operate concurrently (simultaneously).

Band 13 Verizon/Band 17 AT&T certified now – Band 14 FirstNet PSBN field upgradeable later (already testing B14 at PSCR / future-proof CAPEX purchase)

Standards based FirstNet Band 14 PSBN PEM will be provided by Calamp to support operation on any FirstNet LTE B14 PSBN infrastructure (proven field experience on multiple manufacturer networks)

3x Ethernet and 2x USB ports supporting multiple peripheral device connectivity (laptop, IP-camera, e-Ticket, etc.)

Robust advanced routing features of WAN, LAN, and ETH ports (flexible/configurable expansion)

Robust high-performance dual-band 2.4/5.8 GHz Wi-Fi (Access Point or Client or simultaneous operation) radio 3x3 MIMO for “N” Wi-Fi (Mobile Hot Spot/client)

Autonomous WAAS GPS/AVL (AAVL) with time and position reporting, local and remote delivery. (GPS updates can be sent without a computer connected)
Compact sized router (flexible mounting in vehicles, motorcycles, aircraft, ATV’s)

Very cost effective for sophisticated multi-network LAN/WAN router applications

Significant computing power in a “PowerPC” based architecture. (processing “horsepower” for future applications and growth)

Rugged MIL-STD vehicular IT platform capable of supporting many unique upgrades and new features.

FUSION has MIMO capability for significant increased performance of the LTE module adapter interfaces

Ethernet/WAN connectivity to support interoperability with IP based narrowband RF data systems

FUSION is available in two configurations to support mobile and fixed applications
**DEVICE OUTLOOK**

- Track firmware version of all devices in the field
- Minimizing downtime by optimizing preventive and predictive maintenance tasks
- Improve employee productivity by minimizing the time they spend searching devices and going onsite to configure and manage.

**ACCOUNT MANAGEMENT**

- Controlling capital expenditure by allocating devices to Sub Accounts and associated Users
- Integrates with Enterprise Asset Management via Colt API
- DeviceOutlook Updates
  - Enterprise Edition released for Tier 1 customers. Provides Private Cloud version (as a virtual appliance) to meet corporate policies and IT requirements

**DASHBOARD & REPORTS**

- Proactively monitor state, condition, and utilization of devices to improve asset usage
- Improve audit and ensure compliance to regulatory requirements with automatically generated reports
- Automated Reporting: generate automated reports providing historical insight into device performance

**A SINGLE DEVICE MANAGEMENT PLATFORM**
CalAmp platform accelerates M2M solutions by providing seamless access to customer assets using the latest cloud API standards.

- Access asset data to enable mobile applications that expand value to existing enterprise systems or generate new offerings by connecting customers with product or service information.

- Transport asset/device data from the field from a broad selection of connected devices, using a broad selection of Carriers from around the world.

- Integrate machine data with existing backend systems, enterprise and cloud applications to connect sales, marketing, and accounting teams, field workers, and management with valuable machine information.
WIRELESS NETWORKS CONNECT

CORE APPLICATIONS

- CalAmp SaaS Apps
  - Fleet
  - Device
  - Gov

CALAMP CONNECT API

Data Management

- Installation
- Reporting
- Analytics & Processing
- Account Management
- Business Functions
- Long Term Storage
- Network Management
- Network Virtualization
- Storage & Forward
- Device Management
- Device Virtualization

Communications Layer

Integrated Network Management Interface

APPLICATION LAYER

CONNECT

DATA/SOLUTION MGMT

DATA MANAGEMENT & DELIVERY

NETWORK MGMT

DEVICES

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