Our Company
THE M2M Company

ORBCOMM delivers the M2M industry’s most comprehensive service offering by providing global satellite and cellular services, leading-edge devices and robust web applications.
A History of Leadership and Innovation


- Fully Deployed Network (27 OG1 satellites)
- New Ownership
- AIS Coast Guard Contract
- Public Offering
- 250,000 subscribers
- OG2 Contract Signed
- AIS Commercial Service
- 500,000 subscribers
- AIS VesselSat 1
- 750,000 subscribers and 100,000 AIS vessels
- StarTrak Acquisition
- PAR LMS Acquisition & AIS VesselSat 2
- $45M Term Loan with AIG
- GlobalTrak & MobileNet Acquisitions
- 100,000 subscribers
- GlobalTrak
- Aug 2009
- Mar 2007
- Aug 2005
- May 2004
- Dec 1999
- New Ownership
- Fully Deployed Network (27 OG1 satellites)
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- 100,000 subscribers
Profitable and Growing

- 777,000 end user devices on the network
- Over 6.2 Million messages processed per day
- Authorized in 120+ Countries & Territories
- 42% market share in satellite M2M*
- 15% 5 Year Subscriber CAGR (2008-13)

*Source: Beecham Research December 2012
Our Global Reach

- Corporate Headquarters
  Rochelle Park, NJ
- Network Control Center
  Dulles, VA
- Gateway Earth Station
- ORBCOMM Office
  - Washington
  - New York
  - Arizona
  - Georgia
  - Brazil
  - Argentina
  - Curaçao
  - Spain
  - Germany
  - Italy
  - Morocco
  - Norway
  - Kazakhstan
  - Japan
  - Korea
  - Taiwan
  - Indonesia
  - Malaysia
  - South Africa
  - Australia
Why ORBCOMM?

• **THE M2M company** – 14 years of leadership, innovation and expertise in M2M

• Financially secure and growing

• Long-standing customer relationships with industry leaders

• Global company – Anywhere and everywhere

• Team of experts – 160 people 100% focused on M2M

• The most cost-effective satellite provider

• $200M investment in OG2 satellites, devices, solutions, platforms, and services
Our Customers
The Markets We Serve

Transportation • Heavy Equipment • Maritime

Industrial/Remote Assets • Government
Industry Leaders’ Choice for M2M

Registered marks are the property of their respective owners.
Our Networks
More Than Just a Network

Connectivity
- Global satellite service
- Global cellular service
- Dual-mode service
- Service management tools
- Satellite AIS

End-to-End Solutions
- Cold chain and Supply chain telematics

Services
- XML gateway
- SMPP gateway
- Standard email
- VPN service
- Global APNs
- Engineering support

Devices
- GT 1000
- GT 1100
- GT 1200
- GT 2000
- RT 6000+
- OEM Solutions
More Than Just a Network

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Global Connectivity

- 26 OG1 LEO satellites and 15 ground stations providing global two-way data service
- 18 next generation OG2 satellites launching from fall of 2013 to first half of 2014
- Cellular wireless and dual-mode services
- Global Automatic Identification System (AIS) services that track vessels at sea through two dedicated AIS satellites
Market Leader in Satellite M2M

- More than 42% market share in satellite M2M*
- Constellation of Low-Earth Orbit satellites provides contiguous global coverage
- Two-way 100% full M2M message acknowledgement
- Single global technology standard
- Uniquely optimized for M2M
  - Not subject to network obsolescence
  - Single source solution: Multiple networks, one agreement
  - Robust device, no consumer-grade parts
  - Global hardware standard for certification

*Source: Beecham Research December 2012
First OG2 Launch This Year

$200M Next Generation OG2 Program

2008 2009 2011 2012 2013 2014

- SNC Contract Signed
- CDR of OG2 Prototype Completed
- SpaceX Contract Signed
- OG2 Prototype Payload Delivered
- VesselSat 1 (AIS)
- OG2 Mission 1 (1 prototype satellite)
- OG2 Mission 2 (8 satellites)
- VesselSat 2 (AIS)
- OG2 Mission 3 (9 satellites)
OG2 Key Milestones

- 8 OG2 satellites targeted for Mission 1 in production at SNC’s Satellite Operations Center in Louisville, CO
- Ongoing environmental and design testing
- Preparing for shipment to launch site at Cape Canaveral, FL for fall 2013 launch
OG2 Improvements

A higher level of functionality, performance and service

12 x Capacity, 3 x Power Vs. OG1

- Supports a much larger subscriber base

New Messaging Protocols

- Larger message sizes, variable data rates

Backwards Compatibility

- Benefits existing subscriber base

Higher Power, Higher Gain

- Continuity for OG1-based applications

- Smaller antennas

Enhanced AIS Receiver on board

- Better coverage in northern latitudes

- Better battery life, reduced ‘listening’ time

- Reduced power requirements

- Industry-leading space-based AIS detection
Always Connected Dual-Mode Service

ORBCOMM Satellites

ORBCOMM Cellular Service

Gateway Earth Station

Network Control Center

Customer Site

ORBCOMM Services
- SMPP & XML
- Web Portal
- Custom APN
- IP Translation
- IPsec

June 2013

Proprietary and Confidential
ORBCOMM Service Management

- Secure, scalable Web-based platform for satellite, cellular and dual-mode subscriber management
- Developed, managed and owned by ORBCOMM
- One-stop user interface for management of provisioning needs
- Incorporates existing ORBCOMM Web Services (OWS) features, including message trace, quality of service and reports for usage and provisioning
- Enables rapid integration to new and existing back-office solutions via API for automated capabilities
Customer Benefits

- Increase visibility over network of devices
- Reduce undetected errors in device management
- Better manage airtime-related expenses
- Provide tools for troubleshooting, analysis and issue resolution as first level of technical support
- Enhance device reliability and longevity
Efficiency and Flexibility

Web-based Subscription Management

Threshold Monitoring

Provisioning

ORBCOMM’s Subscriber Management Platform

Reporting

Support

Billing

Dashboard

Dual-Mode, Unified Communications

Global GSM, Regional CDMA

Single API, Multiple Cellular Networks

Single API, Multiple Cellular Networks
VesselSat 1 & 2 - AIS Satellites

- Provide equatorial and polar coverage orbits
- All OG2 satellites will be AIS-enabled
- Total constellation of 20 AIS-enabled satellites will provide near real-time coverage
ORBCOMM Expands AIS Coverage

ORBCOMM AIS Data
Terrestrial + Satellite

Daily Data - Unique Vessels Only
More Than Just a Network

Connectivity
- Global satellite service
- Global cellular service
- Dual-mode service
- Subscriber management tools
- Satellite AIS

End-to-End Solutions
- Cold chain and Supply chain telematics

Services
- XML gateway
- SMPP gateway
- Standard email
- VPN service
- Global APNs
- Engineering support

Devices
- GT 1000
- GT 1100
- GT 1200
- GT 2000
- RT 6000+
- OEM Solutions
StarTrak Information Technologies

• #1 provider of cold chain telematics solutions
• Leading market share in refrigerated rail and truckload markets
• 75,000+ assets tracked in the field

Reefers • Trailers • Containers • Railcars • Reefer Containers & Gensets
Telematics Solutions for the Fortune 500
#1 Reefer Telematics Solution

- Two-Way Reefer Management & Control
- The Industry’s Most Advanced Temperature Compliance Applications
  - Proven Temperature Assurances
  - Instant Out-of-Temperature Detection & Notification
  - Complete Temperature Monitoring Analytics
  - Automatic “Proof of Temperature” Compliance
  - Conforms to Food Safety Regulations
- High Return on Investment
  - Fuel and Equipment Savings
  - Tight Integration with Operational Transactions
Intelligent Reefer Management

- Door Open/Closed
- Independent Temperature Probes
- Virtual Trailer Mileage
- GPS Location & Automatic Facility Entry/Exit Notifications (Geofences)
- Two-way Reefer Micro Interface & Control
- Low Fuel Alerts, Refueling & Usage
- Tire Pressure Auto Inflation Monitoring
- Reefer Engine Hours & PM Notifications
- Automatic Mode, Temperature & On/Off Settings Based on Location
- Tractor Power On/Off, Tractor ID & Tractor Communications (select vendors)
ReeferTrak® Interface

Temperatures

Maps

Trailer Dispatch Status

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Acquisitions Expand End-to-End Solutions Portfolio

**Globaltrak**

- Information services company that utilizes satellite and cellular communications, sensors and software platforms to provide real-time situational awareness and intelligence to improve logistics and security processes.
- Provides access to new customer base including international and government customers and expands reach in Middle East, Asia and South America.

**MobileNet**

- Long-time ORBCOMM VAR and leader in providing complete telematics solutions for heavy equipment and rail industries.
- Enables ORBCOMM to address opportunities directly with OEMs, dealers and fleet owners.
More Than Just a Network

Connectivity
- Global satellite service
- Global cellular service
- Dual-mode service
- Service management tools
- Satellite AIS

End-to-End Solutions
- Cold chain and Supply chain telematics

Services
- XML gateway
- SMPP gateway
- Standard email
- VPN service
- Global APNs
- Engineering support

Devices
- GT 1000
- GT 1100
- GT 1200
- GT 2000
- RT 6000+
- OEM Solutions
ORBCOMM M2M Customer Services

- Web-based interfaces to enable reliable, secure and efficient M2M communications between mobile devices and back-office applications over ORBCOMM’s global networks
  - XML Gateway
  - SMPP Gateway
  - Standard Email
  - VPN Service
  - Global APNs
- 24x7x365 Network Control Center
- Support and training from a team of engineering and technical experts for application development, hardware certification and web services design
ORBCOMM XML Gateway

- **ONE** central location for two-way data delivery over multiple carriers to customer back-office applications over the Internet
  - Cellular
  - Satellite
  - Dual-mode
- Provides secured HTTP/XML between customer back-office applications and ORBCOMM’s global networks
- Can be used to support multiple customers
- Eliminates need to maintain SMTP server at customer’s site
### More Than Just a Network

#### Connectivity
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#### Devices
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Industry’s Most Comprehensive Offering

**GT 1100**  
Easy-to-install, self-powered asset tracking and monitoring solution with cellular communications & GPS

**RT 6000+**  
Industry-leading dual-mode two-way reefer monitoring & control device with GPS

**GT 1200**  
Self-powered cellular device with GPS that provides visibility into the status of dry intermodal containers

**GT 1000**  
Low-cost, cellular-enabled electronic bolt seal with GPS that installs in minutes for theft prevention and recovery

**GT 2000**  
Powerful dual-mode cargo security and monitoring device for location tracking and intrusion detection
Industry’s Most Comprehensive Offering

**OG2-M**
Robust, cost-effective satellite modem with GPS targeted for OEMs to integrate into wireless data solutions

**OG2-CS**
Chipset solution including intellectual property needed for OEMs to develop a customized communications solution

**OG2-DK**
Developer’s Kit including OG2-M, modem evaluation board, power supply, antenna, and PC interface software
OG2 Network Assisted Ephemerides

Reduces Power Consumption, Extends Battery Life

• Assisted GPS information broadcast over OG2
  – Allows ‘warm/hot’ fix times for GPS, < 10 seconds
• ORBCOMM constellation information broadcast over OG2
  – Allows accurate satellite rise time prediction for remote device
• Both services reduce the amount of ON time
  – Only ON when a satellite is overhead
  – Minimizes time for GPS fix
Hardware Partners

Quake 1000
- ORBCOMM satellite modem only
- Simple serial interface
- Cost-effective with very small footprint

Digi M10
- ORBCOMM satellite modem only
- Simple serial interface and compact module form factor
- Low transmit and receive power consumption

Quake 1200SG/1400
- ORBCOMM satellite modem plus application processor and GPS
- Low-cost, high-performance solution
- Two-way data communications

Quake 4000
- Customizable dual-mode ORBCOMM satellite and cellular modem with GPS
- Fully user programmable standalone solution

Morey MT30
- Rugged dual-mode TCU, including ORBCOMM satellite, GSM and GPS
- Monitor SAE J1939/ SAE J1708 data buses

Find the perfect combination of size and ruggedness for your specific application
ORBCOMM-Approved Whip Antennas

Dual-Mode and Tri-Mode

- ORBCOMM satellite/GPS
- ORBCOMM satellite/GPS/cellular
- Designed for telematics applications

Multi - 1/8 or 1/4 wave

- ORBCOMM satellite/GPS
- Rugged, interchangeable, flexible antenna elements
- Designed for mobile applications (transportation and heavy equipment)

1/2 or 1/4 wave

- ORBCOMM satellite (GPS add-on optional)
- Cost-effective for a wide range of applications
- Designed for transportation, marine and fixed site applications

5/8 wave or Helical

- ORBCOMM satellite
- High-performance
- Designed for fixed site and marine applications
ORBCOMM-Approved Low Profile Antennas

**Flat Panel**

- **Hirschmann Car Communication**
- ORBCOMM satellite (GPS add-on optional)
- The lowest profile option
- Designed for tractor trailer or other transportation applications

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**Thin Film**

- **Hirschmann Car Communication**
- ORBCOMM satellite (GPS and cellular add-ons optional)
- Can be integrated and easily concealed within any non-conductive structure
- Designed for transportation applications

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**LPR/MPR Bar**

- **Inevitable Technologies**
- ORBCOMM satellite (GPS add-on optional)
- Extremely rugged
- Designed for transportation, intermodal and marine applications

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**Custom Antennas**

- **Inevitable Technologies**
- Customized solutions for any application
- Designed to meet specific integration requirements including solar, special housing or unique installation
ORBCOMM OG2 Antennas

• Commissioned prototype development in 2012
  – Several vendors provided samples
  – Designed specifically for High Link Margin
    ▪ Will not work for current or High Data Rate services
• Will continue to work with vendors to decrease size and improve performance in 2013

4” x 9” x 1”
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Contact Us

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