



# Satellite Solutions for Commercial Marine

BROADBAND DATA

COMMUNICATIONS

TELEVISION





# Connections...they're c

Broadband connections provide real-time route planning and chart updates to save time and fuel. They bring engine data to onshore engineers for more efficient maintenance. They are critical to the success of your business and the safety of your crew and vessels. Affordable, reliable connections keep your employees and crew in touch with family and friends and linked to the world around them. Secure real-time connections create an extensive network of valuable data to ensure your onboard and onshore operations run smoothly, safely, and efficiently. Connections – even at sea, you need them to thrive and prosper.

## That's why maritime operators are turning to KVH Industries, the leader in innovative mobile broadband solutions

We build these critical connections with new technology and innovative satellite products that are smaller, faster, and more reliable than older solutions. With rugged, fully stabilized antennas integrated into reliable, end-to-end solutions, KVH is linking vessels worldwide to broadband Internet, telecommunications, and digital satellite television services.



Courtesy of U.S. Coast Guard

U.S. Coast Guard crews rely on KVH TracVision and TracPhone systems to stay connected and informed.

## Choosing KVH connects you with:

- Outstanding performance and reliability founded on the 150,000 mobile satellite antennas designed, manufactured, and fielded by KVH
- Easy-to-install products tested to military standards and reflecting more than 20 years of proven support for maritime and military customers worldwide
- Powerful services like the new mini-VSAT Broadband, Inmarsat FleetBroadband, and high-powered regional satellite TV services found around the globe
- Cost benefits and operational advantages that improve business operations, crew morale and crew retention
- A global network of authorized partners, distributors, and technical dealers focused on customer satisfaction



Courtesy of Rigidon Marine Corp.

KVH satellite antenna systems are designed to survive offshore conditions and reliably support both critical business operations and crew communications.

## KVH Industries – connecting you, your vessels, and your crews to powerful services, proven technology, and the world around you

# critical to your business.

KVH offers a Comprehensive Commercial Communications Program that connects your crew, your vessels and your business with a total onboard solution for satellite communications and television:

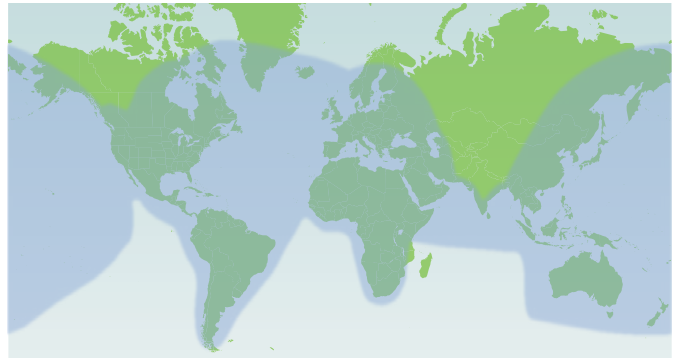
TracPhone® V-series	TracPhone® FB-series	TracVision® M-series
 <p><b>mini-VSAT Broadband</b> Cost-effective, groundbreaking Ku-band broadband connections and VoIP telephone service for business-critical operations and crew support.</p>	 <p><b>Inmarsat FleetBroadband</b> Compact communications, high-speed Internet, voice, and fax that are ideal for global operations.</p>	 <p><b>Digital Television Services</b> World's most widely fielded maritime satellite TV systems offering access to live TV programming via regional services worldwide.</p>

- ▶ Airtime service packages with fixed-price and flexible pay-as-you-go plans
- ▶ Bundled hardware solutions with affordable leasing options
- ▶ Reliable, high-quality service for the life of your product
- ▶ Global after-sales and technical support via KVH's exclusive Certified Support Network



## A new generation of maritime VSAT for cost-effective broadband Internet connections & VoIP communications

The world's first fully integrated maritime VSAT solution, TracPhone V7 and the mini-VSAT Broadband service offer a powerful broadband system invaluable for crew morale and enhanced shipboard operations. This fully integrated hardware and service solution combines rugged, compact, fully stabilized antenna technology from KVH; cutting edge military spread spectrum technology from ViaSat; and a powerful Ku-band satellite network. Together, they are easy to install, easy to activate, easy to use, and easy to rely on when you need heavy-duty Internet access at sea.



Planned mini-VSAT Broadband Coverage\*

# TracPhone & mini-VSAT

Whether you need a new solution for a new vessel, a retrofit upgrade, or a powerful complement to an existing enterprise VSAT or Inmarsat system, TracPhone V7 creates an extensive onboard network that supports crew calling and Internet access as well as operational applications such as systems monitoring, condition-based maintenance, and predictive analysis. *TracPhone V7 and mini-VSAT Broadband...what broadband at sea was meant to be!*

## A groundbreaking and powerful new tool for maritime communications

- IP-based connections with data rates as fast as 512 Kbps (ship-to-shore) and 2 Mbps (shore-to-ship)
- Simple installation – no need for a crane or integration with ship's gyro or navigation system
- Enhanced Voice over IP (VoIP) phone service optimized for use with satellite services as well as options for onboard cell phone use while offshore
- Full integration with onboard Ethernet and WiFi networks, VPNs, and more
- Flexible billing options including both fixed-price and minimal commitment pay-as-you-go plans for complete budget management and outstanding flexibility
- Superior worldwide technical support thanks to an integrated Remote Service and Support Module and a global network of authorized partners, distributors, and dealers

### Integrated Antenna, Control Unit & Modem

85% smaller by volume and 75% lighter than 1-meter VSAT antennas, the rugged TracPhone V7 antenna is tested under vibration and temperature extremes that exceed commercial industry standards and is combined with a military-grade spread spectrum modem to ensure outstanding performance.



\*Coverage map depicts KVH's expectations for mini-VSAT Broadband's future coverage; actual coverage and availability of service may vary. KVH provides no guarantees of satellite coverage or availability. For current coverage map and coverage details, click on "TracPhone" at [www.kvh.com/footprints](http://www.kvh.com/footprints).



# Broadband Service

*Broadband connections for heavy data use and crystal-clear VoIP*



*"The reliability of the mini-VSAT  
Broadband service continues  
to astound us..."*

— *Damion Abder,  
Energy Services Systems Engineer,  
Capital Signal*





# TracPhone & Inmarsat

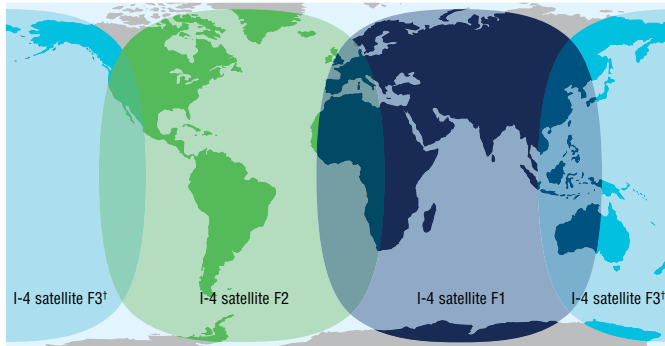
*A powerful global connection for e-mail, voice, fax, and data needs*



*“Commercial operators expect a lot from their satellite communications systems – reliability, durability, and performance. That’s why so many of our customers rely on KVH’s TracPhone systems – because you can depend on them.”*

– *Chris St. Romain, President,  
Sea-Trac Offshore*

Compact, commercial-grade solution for enhanced performance, global coverage, and critical communications



Inmarsat FleetBroadband Coverage Map\*

Up-to-date navigational data, crew morale, the expectations of modern business – they all demand powerful, real-time communications wherever you operate. KVH now offers just that, in a smaller, lighter, more affordable package than ever before. The fully stabilized TracPhone FB250 and FB500 satellite communications systems and the new Inmarsat FleetBroadband service equip your vessel with secure, reliable global communications from two of the most trusted names in maritime communications – KVH Industries and Inmarsat.

# FleetBroadband Service

## The flexibility you need for superior communications worldwide

- Super-reliable service for voice, fax, and high-speed data via Inmarsat's new I-4 satellite network
- Seamless global coverage via three high-powered L-band satellites, ensuring reception in all sea and weather conditions†
- Fully automatic operation and dynamic antenna stabilization, even in the roughest seas
- Data connections as fast as 432 Kbps for e-mail, Internet and connections to company networks
- Dedicated voice connections available even as you are enjoying high-speed data access
- Streaming IP for guaranteed data rates up to 256 Kbps on demand
- SMS for easy, inexpensive text messaging (up to 160 characters)



Inmarsat FleetBroadband provides constant, simultaneous access to voice and high-speed data services so you can send and receive e-mail with large attachments, run complex data applications, access corporate networks, and enjoy crystal-clear calls more affordably than ever before using an Inmarsat service. Whatever your vessel size or application, rely on KVH's family of TracPhone FB-series antenna systems to equip your ships with a next-generation, global communications center.

### Rugged antennas integrated with a below-decks unit (BDU) and handset

Each antenna includes a choice of two dome sizes, plus a common BDU and versatile IP telephone handset for easy system setup and use.



\* The map depicts Inmarsat's expectations of coverage, but does not represent a guarantee of service. The availability of service at the edge of coverage areas fluctuates depending on various conditions. KVH provides no guarantees of satellite coverage or availability. For current coverage map and coverage details, click on "TracPhone" at [www.kvh.com/footprints](http://www.kvh.com/footprints).  
† Inmarsat expects I-4 satellite F3 coverage by end of 2008.

## The world's most popular, powerful, and user-friendly satellite television systems

There's only one way to enjoy home theatre-quality digital television wherever you operate – satellite TV; and for the captain who insists on quality and reliability, there's only one way to get it – a KVH TracVision, the world's leading mobile satellite TV antenna system. KVH offers a full range of commercial-grade TracVision antennas for virtually any vessel. Tested to military standards and installed on tens of thousands of vessels worldwide, TracVision provides years of trouble-free performance. KVH's award-winning line of TracVision antennas bring the best reception and variety of programming to you and your crew!



# TracVision & Global Sat

TracVision antennas use KVH's proprietary RingFire™ technology, a remarkable breakthrough in antenna design. Fusing precisely shaped, tuned parabolic dish antennas with custom designed, dual-mode feedtubes and uniquely modified LNBs, RingFire technology provides unmatched illumination of the reflector resulting in signal strengths that are comparable to competitors' larger antennas. This means that with the TracVision M-series you'll enjoy wider geographic coverage and better reception, even in extreme weather.

### Commercial-grade satellite TV antennas

The TracVision family of rugged satellite TV systems offers antenna sizes and capabilities to support the needs and operating areas of vessels worldwide.



### Keep your crew entertained and in touch with TracVision satellite TV systems

- Exclusive RingFire technology for superior offshore coverage and reception of leading digital satellite TV services worldwide
- Support for multiple TVs and receivers, so everyone onboard can enjoy the TV programs they want
- Gyro-stabilized designs for unsurpassed tracking and superior offshore performance in even the most demanding conditions
- HDTV-ready systems in every antenna class so you can watch the best programming TV has to offer (*where compatible HD services are available*)
- Positive satellite identification using integrated Digital Video Broadcast (DVB®) technology
- Completely automatic satellite switching with the remote control – a KVH exclusive!
- Proven, rugged, and reliable design for trouble-free operation in the commercial marine environment

# Satellite Television Services

*Onboard entertainment for every type and size of vessel*

*"Good crew morale is invaluable to our operations. We feel that by having satellite TV entertainment onboard our vessels, we are helping to improve the welfare of our crews. This is why we selected TracVision."*

*— Shipping Operator,  
**DFDS Tor Line***





# World-class Service

*Ensuring superior performance for the life of your investment*



*"The most important part of dealing with KVH is client services. When you call, you reach a person who takes interest in your case and follows through to the resolution of your problem... KVH seems to be in a class of its own in immediate client response."*

*– Michael Hand, Operations Manager,  
**Wright Maritime Group***

## Equip commercial fleets affordably with convenient leasing programs designed with your needs in mind

KVH and its commercial partners offer a variety of leasing programs that help commercial marine customers avoid a significant capital investment when upgrading vessels with TracVision and TracPhone satellite systems. Designed to provide predictable monthly expenses for budgeting, our leasing programs offer competitive rates and are bundled with extended warranty plans to ensure years of reliable performance from your KVH systems. Whether providing services for your crew or upgrading data connections to enhance the efficiency of your vessels' operation, KVH leasing programs make it easy and affordable to bring the latest satellite technology onboard.

## Outstanding service and support from commercial partners and authorized dealers worldwide

KVH's award-winning commitment to quality is seen in the company's reliable products as well as an array of options that provide global product support to every customer. An ISO 9001:2000-certified organization, KVH meets the highest international standards for quality and support. KVH's Certified Support Network (CSN) offers all TracVision and TracPhone customers outstanding technical support, including an online support system and a responsive, international KVH support team. With a global network of trained sales and technical partners worldwide, KVH's CSN ensures the quick and efficient world-class service customers have come to expect from KVH.

# , Support & Leasing

A global network of commercial partners and authorized technical dealers



*KVH authorized dealers, distributors, and commercial partners may be found worldwide ensuring that you will receive the support you need when you need it. Visit [www.kvh.com/wheretogetservice](http://www.kvh.com/wheretogetservice) for more details.*



## KVH – Leader in Mobile Satellite Solutions

KVH is the world's leading provider of mobile satellite communications and television antenna systems and has been serving the marine industry since 1982. With in-motion tracking systems and rugged designs ideal for virtually any vessel type and size, KVH's fully stabilized antennas offer unmatched performance during all sea and weather conditions.

To support a commitment to quality and reliability that is unmatched, KVH antenna systems undergo the most stringent quality checks in the industry, including accelerated life cycle testing, military specification environmental tests, shock and vibration testing to Inmarsat specifications, and in-depth functional evaluations prior to delivery.

The results speak for themselves. With more than 150,000 mobile satellite antennas fielded worldwide, KVH has supplied more maritime satellite telecommunications and TV systems for mobile applications than any other manufacturer. We are a 23-time recipient of the National Marine Electronics Association's Industry Award. Tens of thousands of commercial and leisure mariners, along with the U.S. Navy and Coast Guard and allied naval vessels around the globe, rely on KVH's rugged satellite systems for their connections to shore, their offices, their families, and the world around them. When you choose KVH, you choose the best!



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