

# KVH®



GLOBAL  
OCEAN  
SECURITY  
TECHNOLOGIES

# GOST®



# GOST WATCH HD

KVH® INDUSTRIES  
**MINI-VSAT**  
BROADBAND  
WORLD'S No. 1 MARITIME VSAT SERVICE

Global Remote Surveillance and Monitoring  
Designed Exclusively for the Marine Market

# TRACPHONE® V3 IP V7 IP V11 Packages

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# GOST WATCH HD



## GOST Surveillance System

With the GOST Watch HD System remote monitoring of all activities onboard the vessel can be done from anywhere in the world over the Internet. Watch live video of the vessel as it leaves the harbor or view activities on the bridge or in the engine room via the GOST Watch HD iPhone and Android apps. Cameras can be set to record clips to the website based on motion detection and sent via email to a computer or mobile phone.

The GOST Watch HD's IVR (Internet Video Recorder) is similar to a traditional DVR with the added advantage of being accessible either locally or remotely via the Internet. The 1 Terabyte IVR features looped recording of up to 6 cameras for up to 3 months\* (24/7/90\*). It also features simultaneous viewing, either locally or remotely over the Internet, of full motion live or recorded video from up to 6 cameras. Archived clips can be downloaded to a computer and burned onto DVDs.

\*The IVR utilizes an advanced MPEG4 compression whereby the more activity you have in front of the camera being recorded, the more storage space it utilizes. When landscapes in view of the camera have little activity, the IVR may have storage capacity for more than 3 months respectively. In very high activity applications, such as cameras looking out at a busy marina with constant shimmering water in view, the recording time may be diminished.

The GWHD A/D Gateways install in minutes and can be connected to any standard analogue camera with a BNC connector. GOST Watch HD can be used as a stand alone surveillance system or as part of the GOST Insight HD System. A variety of cameras are available for purchase from GOST or the system can be an easy add on to existing cameras on board. It is also possible to completely control FLIR cameras running their Nexus protocol via the GOST Watch HD website.

## NEW GOST WATCH HD Apps





## KVH TracPhone® V-series

### Staying in Touch, While Out on the Water

Fast and reliable Internet access and crystal-clear voice calls are essential for vessels that travel outside of cellular coverage areas. KVH's TracPhone V-series antenna systems, designed to work exclusively with KVH's mini-VSAT Broadband<sup>SM</sup> network, provide only the best - delivering broadband at sea the way it was meant to be. The world's No. 1 maritime VSAT network, mini-VSAT Broadband was designed from the ground up to be a next-generation network, utilizing spread spectrum technology to ensure fast data speeds and global coverage, all delivered via a sleek and extremely compact onboard terminal. The groundbreaking technology also ensures affordable airtime rates, as there is efficient use of precious bandwidth.

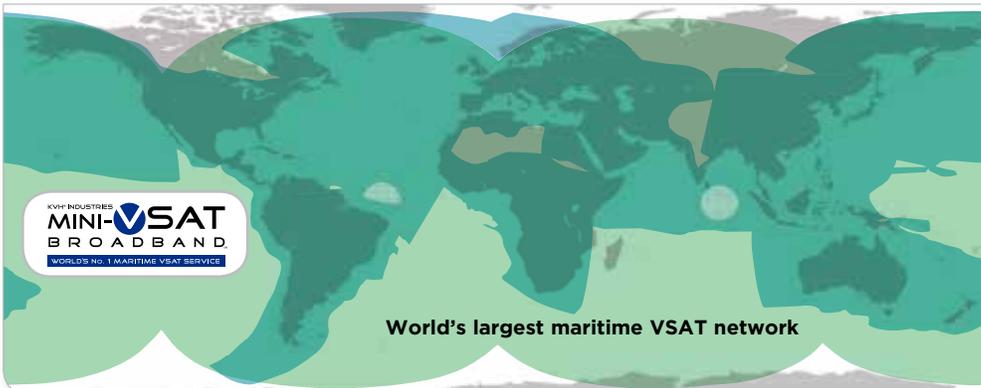
### Easy Onboard Connectivity with TracPhone Systems

The ultra-compact TracPhone V3IP, the rugged TracPhone V7IP, and the truly global TracPhone V11 offer a satellite communications solution for every vessel, no matter where it may cruise or no matter what its data needs. Onboard terminals that range from only 39 cm (15.5 inch), to 66 cm (26 inch), to 1.2 m (49 inch) diameter are easy to install, and ensure always-on broadband data connections, global coverage, crystal-clear voice calls, and affordable airtime rates.

With KVH's satellite communications solution, there's the added benefit of a fully integrated system from one company: KVH manufactures the TracPhone antenna hardware, operates the satellite network, provides affordable airtime service, and operates a 24/7/365 global support center. For customers, it doesn't get any easier than that! It's no wonder mini-VSAT Broadband is the market share leader in maritime VSAT.



## mini-VSAT Broadband<sup>SM</sup> Coverage Map



- Ku-band Coverage Only
- C-band Coverage Only
- Ku-band Coverage with C-band Overlay Coverage

*The TracPhone V3IP is a 2-axis, stabilized antenna that does not provide coverage when directly at the equator, as shown in the hatched areas. This map depicts KVH's expectations for mini-VSAT Broadband's coverage; actual coverage and availability may vary. Data rates may also vary in different regions. Go to [www.kvh.com/minivsatmap](http://www.kvh.com/minivsatmap) to view our coverage map and for complete details. KVH provides no guarantees of satellite coverage or availability.*

# GOST WATCH HD V3 IP



## GOST Watch HD TracPhone V3IP Packages

### GOST Watch HD TracPhone V3IP Package GWHD-V3-IP

High Definition Surveillance with high speed Internet connection through the KVH TracPhone V3IP

The new GOST Watch HD TracPhone V3IP Package includes everything needed to remotely monitor all activities onboard the vessel from anywhere in the world via computer or smart phone over the Internet. Watch live video of the vessel as it leaves the harbor or view activities on the bridge or in the engine room via the GOST Watch HD website or iPhone and Android apps. Cameras can be set to record clips to the website based on motion detection and sent via email to the designated recipients. Camera motion detection can be armed and disarmed by using the included push button. The system can accommodate up to 6 cameras per login. The KVH TracPhone V3IP has a pre-configured intelligent “best use” network management switch that will automatically prioritize cellular data via the GOST G3G-GSM-CDMA module when inside range and will automatically switch the data feed to the KVH VSAT pipe when the boat is outside cellular coverage.



1 each KVH TracPhone V3IP  
with ICM



1 each GNT-1.0-Push

1 each GWHD A/D Gateway



1 each G3G-GSM-CDMA

### GOST Watch HD TracPhone V3IP Xtreme Package GWHD-V3-IP-Xtreme

High Definition Surveillance with high speed Internet connection through the KVH TracPhone V3IP with a GOST Xtreme Stainless Steel Camera

The new GOST Watch HD TracPhone V3IP Xtreme Package includes everything needed to remotely monitor all activities onboard the vessel via computer or smart phone over the Internet, with the addition of a GOST Xtreme Mini Dome Stainless Steel Camera. Watch live video of the vessel as it leaves the harbor or view activities on the bridge or in the engine room via the GOST Watch HD iPhone and Android apps. Cameras can be set to record clips to the website based on motion detection and sent via email to the designated recipients. Camera motion detection can be armed and disarmed by using the included push button. The system can accommodate up to 6 cameras per login.



1 each GOST-Xtreme-Mini-Dome-SS



## GOST Watch HD V3IP IVR Packages

### GOST Watch HD TracPhone V3IP IVR Package GWHD-V3-IP-IVR-1TB

High Definition Surveillance with high speed Internet connection through the KVH TracPhone V3-IP with a 1TB IVR

The new GOST Watch HD TracPhone V3IP IVR Package includes all the great features of the GOST Watch HD TracPhone V3IP Package and adds the GOST Watch HD IVR 1TB. The GWHD-IVR-1TB features looped recording of up to 6 cameras for up to 3 months\* (24/7/90\*) It also features simultaneous viewing, either locally or remotely over the Internet, of full motion live or recorded video from up to 6 cameras. Archived clips can be downloaded to a computer and burned onto DVDs. Camera motion detection can be armed and disarmed by using the included push button. The system can accommodate up to 6 cameras per login.



1 each KVH TracPhone V3IP with ICM



1 each GNT-1.0-Push



1 each GWHD A/D Gateway



1 each G3G-GSM-CDMA



1 each GWHD-IVR-1TB

\*Actual recording time may vary depending on what is in view of the cameras being recorded.

### GOST Watch HD TracPhone V3IP IVR Xtreme Package GWHD-V3-IP-IVR-1TB-Xtreme

High Definition Surveillance with high speed Internet connection through the KVH TracPhone V3IP with a 1TB IVR and a GOST Xtreme Stainless Steel camera

The new GOST Watch HD TracPhone V3IP IVR Xtreme Package includes all the great features of the GOST Watch HD TracPhone V3IP Xtreme Package and adds the GOST Watch HD IVR 1TB. The GWHD-IVR-1TB features looped recording of up to 6 cameras for up to 3 months\* (24/7/90\*). It also features simultaneous viewing, either locally or remotely over the Internet, of full motion live or recorded video from up to 6 cameras. Archived clips can be downloaded to a computer and burned onto DVDs.



1 each GOST-Xtreme-Mini-Dome-SS

\*Actual recording time may vary depending on what is in view of the cameras being recorded.



## GOST Watch HD V7IP Packages

### GOST Watch HD TracPhone V7IP Package GWHD-V7-IP

High Definition Surveillance with high speed Internet connection through the KVH TracPhone V7IP

The new GOST Watch HD TracPhone V7IP Package includes everything needed to remotely monitor all activities onboard the vessel from anywhere in the world via computer or smart phone over the Internet. Watch live video of the vessel as it leaves the harbor or view activities on the bridge or in the engine room via the GOST Watch HD website or iPhone and Android apps. Cameras can be set to record clips to the website based on motion detection and sent via email to the designated recipients. Camera motion detection can be armed and disarmed by using the included push button. The system can accommodate up to 6 cameras per login. The KVH TracPhone V7IP has a pre-configured intelligent “best use” network management switch that will automatically prioritize cellular data via the GOST G3G-GSM-CDMA module when inside range and will automatically switch the data feed to the KVH VSAT pipe when the boat is outside cellular coverage.



1 each KVH TracPhone V7IP  
with Modem &  
Commbox™ ACU



1 each GNT-1.0-Push



1 each GWHD A/D Gateway



1 each G3G-GSM-CDMA

### GOST Watch HD TracPhone V7IP Xtreme Package GWHD-V7-IP-Xtreme

High Definition Surveillance with high speed Internet connection through the KVH TracPhone V7IP with a GOST Xtreme Stainless Steel camera

The new GOST Watch HD TracPhone V7IP Xtreme Package includes everything needed to remotely monitor all activities onboard the vessel via computer or smart phone over the Internet, with the addition of a GOST Xtreme Mini Dome Stainless Steel Camera. Watch live video of the vessel as it leaves the harbor or view activities on the bridge or in the engine room via the GOST Watch HD iPhone and Android apps. Cameras can be set to record clips to the website based on motion detection and sent via email to the designated recipients. Camera motion detection can be armed and disarmed by using the included push button. The system can accommodate up to 6 cameras per login.



1 each GOST-Xtreme-Mini-Dome-SS



## GOST Watch HD TracPhone V7IP IVR Packages

### GOST Watch HD TracPhone V7IP IVR Package GWHD-V7-IP-IVR-1TB

High Definition Surveillance with high speed Internet connection through the KVH TracPhone V7IP with a 1TB IVR

The new GOST Watch HD TracPhone V7IP IVR Package includes all the great features of the GOST Watch HD V7IP Package and adds the GOST Watch HD IVR 1TB. The GWHD-IVR-1TB features looped recording of up to 6 cameras for up to 3 months\* (24/7/90\*) It also features simultaneous viewing, either locally or remotely over the Internet, of full motion live or recorded video from up to 6 cameras. Archived clips can be downloaded to a computer and burned onto DVDs. Camera motion detection can be armed and disarmed by using the included push button. The system can accommodate up to 6 cameras per login.



1 each KVH TracPhone V7IP with Modem & Commbox™ ACU



1 each GNT-1.0-Push



1 each GWHD A/D Gateway



1 each G3G-GSM-CDMA



1 each GWHD-IVR-1TB

\*Actual recording time may vary depending on what is in view of the cameras being recorded.

### GOST Watch HD TracPhone V7IP IVR Xtreme Package GWHD-V7-IP-IVR-1TB-Xtreme

High Definition Surveillance with high speed Internet connection through the KVH TracPhone V7IP with a 1TB IVR and a GOST Xtreme Stainless Steel camera

The new GOST Watch HD TracPhone V7IP IVR Xtreme Package includes all the great features of the GOST Watch HD TracPhone V7IP Xtreme Package and adds the GOST Watch HD IVR 1TB. The GWHD-IVR-1TB features looped recording of up to 6 cameras for up to 3 months\* (24/7/90\*). It also features simultaneous viewing, either locally or remotely over the Internet, of full motion live or recorded video from up to 6 cameras. Archived clips can be downloaded to a computer and burned onto DVDs.



1 each GOST-Xtreme-Mini-Dome-SS

\*Actual recording time may vary depending on what is in view of the cameras being recorded.



## GOST Watch HD V11 Packages

### GOST Watch HD TracPhone V11 Package GWHD-V11

High Definition Surveillance with high speed Internet connection through the KVH TracPhone V11

The new GOST Watch HD TracPhone V11 Package includes everything needed to remotely monitor all activities onboard the vessel from anywhere in the world via computer or smart phone over the Internet. Watch live video of the vessel as it leaves the harbor or view activities on the bridge or in the engine room via the GOST Watch HD website or iPhone and Android apps. Cameras can be set to record clips to the website based on motion detection and sent via email to the designated recipients. Camera motion detection can be armed and disarmed by using the included push button. The system can accommodate up to 6 cameras per login. The KVH TracPhone V11 has a pre-configured intelligent “best use” network management switch that will automatically prioritize cellular data via the GOST G3G-GSM-CDMA module when inside range and will automatically switch the data feed to the KVH VSAT pipe when the boat is outside cellular coverage.



1 each KVH TracPhone V11 with Modem & Commbox™ ACU



1 each GNT-1.0-Push



1 each GWHD A/D Gateway



1 each G3G-GSM-CDMA

### GOST Watch HD TracPhone V11 Xtreme Package GWHD-V11-Xtreme

High Definition Surveillance with high speed Internet connection through the KVH TracPhone V11 with a GOST Xtreme Stainless Steel camera

The new GOST Watch HD TracPhone V11 Xtreme Package includes everything needed to remotely monitor all activities onboard the vessel via computer or smart phone over the Internet, with the addition of a GOST Xtreme Mini Dome Stainless Steel Camera. Watch live video of the vessel as it leaves the harbor or view activities on the bridge or in the engine room via the GOST Watch HD iPhone and Android apps. Cameras can be set to record clips to the website based on motion detection and sent via email to the designated recipients. Camera motion detection can be armed and disarmed by using the included push button. The system can accommodate up to 6 cameras per login.



1 each GOST-Xtreme-Mini-Dome-SS



## GOST Watch HD TracPhone V11 IVR Packages

### GOST Watch HD TracPhone V11 IVR Package GWHD-V11-IVR-1TB

High Definition Surveillance with high speed Internet connection through the KVH TracPhone V11 with a 1TB IVR

The new GOST Watch HD TracPhone V11 IVR Package includes all the great features of the GOST Watch HD V11 Package and adds the GOST Watch HD IVR 1TB. The GWHD-IVR-1TB features looped recording of up to 6 cameras for up to 3 months\* (24/7/90\*) It also features simultaneous viewing, either locally or remotely over the Internet, of full motion live or recorded video from up to 6 cameras. Archived clips can be downloaded to a computer and burned onto DVDs. Camera motion detection can be armed and disarmed by using the included push button. The system can accommodate up to 6 cameras per login.



1 each KVH TracPhone V11 with Modem & Commbot™ ACU



1 each GNT-1.0-Push



1 each GWHD A/D Gateway



1 each G3G-GSM-CDMA



1 each GWHD-IVR-1TB

\*Actual recording time may vary depending on what is in view of the cameras being recorded.

### GOST Watch HD TracPhone V11 IVR Xtreme Package GWHD-V11-IVR-1TB-Xtreme

High Definition Surveillance with high speed Internet connection through the KVH TracPhone V11 with a 1TB IVR and a GOST Xtreme Stainless Steel camera

The new GOST Watch HD TracPhone V11 IVR Xtreme Package includes all the great features of the GOST Watch HD TracPhone V11 Xtreme Package and adds the GOST Watch HD IVR 1TB. The GWHD-IVR-1TB features looped recording of up to 6 cameras for up to 3 months\* (24/7/90\*). It also features simultaneous viewing, either locally or remotely over the Internet, of full motion live or recorded video from up to 6 cameras. Archived clips can be downloaded to a computer and burned onto DVDs.



1 each GOST-Xtreme-Mini-Dome-SS

\*Actual recording time may vary depending on what is in view of the cameras being recorded.

# GOST WATCH HD



## GOST WATCH HD-IVR

### **GOST Watch HD 1TB IVR (Internet Video Recorders)**

Record up to 90 days of continuous video playback and control online, installed with plug-and-play ease.

The GOST Watch HD IVR 1TB Internet Video Recorder (GWHD IVR 1TB), will continuously record and store up to 90\* days of video from up to six cameras, for easy retrieval and viewing on the GOST Watch HD website. These highly advanced IVRs support high-resolution video from any GOST or 3rd party cameras connected to the GOST Watch HD Analog to Digital Gateways (GWHD-A/D-Gateway).



Video is stored at the highest resolution produced by those units: VGA RES (704 X 480) at up to 30 FPS using custom MPEG4 Compression. Up to four cameras' video can be continuously recorded at the fastest frame rate of 20 FPS (frames per second). If the maximum of 6 cameras are used, the frame rate will be only slightly reduced dynamically. (Maximum storage capacity may be increased in cases where there is little activity in front of the camera as the IVR uses custom MPEG4 compression technology).

A great feature of the GOST Watch HD IVRs is that they are connected to the same local network as the cameras while collecting the video, so they work without using the data from on board cellular or satellite based Internet connections. While the GWHD IVRs provide local storage for added protection, the video can be remotely accessed, viewed or downloaded through the password-protected GOST Watch HD website which offers user-friendly navigation aids, quick-review/locate/calendar-lookup tools, time-/date stamped video and an easy-to-use file-export utility. It is possible to login to the IVR on board through the website, and stay connected through the IP address if the Internet connection is lost.

\*Actual recording time may vary depending on what is in view of the cameras being recorded.

### **Specifications:**

#### **Recording**

Video Channels: Up to 6 cameras or 120 frames/sec max at 720x480  
Capacity: Up to 90\* days with the GWHD 1TB with max of 6 cameras 24/7 (Variable frame rate ~20fps).  
Recording Mode: Continuous  
File Format: MPEG-4  
Internet: Recording is maintained even if Internet connection is not available. If the local network is available the system will continue to store video.  
Playback: Playback and other functions available via GOST Watch HD website.  
Playback Mode: PLAY, PAUSE, FWD, REW, STOP  
Video Search: Search by date, time, alarm events  
Video Clip Export: Recorded files can be downloaded to the client's PC from the website and burned to DVD's.

#### **Live View**

Video Compression: MPEG-4  
Resolution: Same as the configured resolution of the cameras  
Frame Rate: Up to 30 fps x camera  
Protocols: TCP/IP, SMTP, HTTP, DHCP, NTP, RTSP/RTP  
IP Configuration: DHCP Client, Static IP.  
Plug and Play: Yes

#### **Software**

Operating System: Embedded Linux  
Client Support: Any Browser and Operating system via GOST Watch HD website  
Security: Username and Password SSL Authentication

#### **Hardware:**

CPU: Marvell 88F5182, 500MHz  
Flash: 16 MB  
SDRAM: 64 MB  
HDD Interface: Support two 3.5" STAT-II drives (Ships with pre-installed 1TB HD) for the IVR 1TB  
LAN: Marvell 88E1118, GIGA PHYRGMII, 10/100/1000 BaseT, Auto-MDIX  
LED indicators: Ready/Status, Ethernet, Disk Act, Disk Full, Disk 1, Disk 2, USB 1, USB 2  
Connector: Ethernet RJ-45, 2xUSB, DC Power, Reset, Power Switch  
Power Adapter: 12V/5A, 100-240 VAC  
Certification: CE/FCC  
Dimension: 7.5" (W) x 7.1" (H) x 3.75" (L) (190mm x 180mm x 95mm)

\*Actual recording time may vary depending on what is in view of the cameras being recorded.

# GOST WATCH HD



## GOST Watch HD A/D Gateway

The GOST Watch HD Analog to Digital Single Channel Video Gateway (GWHD-A/D-Gateway) converts any analog camera into an IP camera. If the vessel already has existing analog cameras on board, one can easily tap into them and simply pass the analog signal through, not interfering with the cameras original purpose.

- Adaptive technology networking for easiest, most reliable installation: Just plug the CAT5 cable into the network switch on board and the camera will automatically adapt to the network regardless of service and modem type. The video camera will auto configure through the network to the GOST Watch HD server & website.
- High-Res. video images of 704 x 480 lines of resolution max. using advanced MPEG4 data compression
- Fast 30FPS video viewing\* on the GOST Watch HD website, accessible on virtually any computer, Smart Phone or other web-enabled device in the world.
- Seamless integration into GOST Phantom or other 3rd party systems with an input trigger to prompt the transmission of video clips to the GOST Watch HD server & website. Users can send clips out as email and/or text message to their contacts when it's activated.
- Advanced pixel-based motion detection capability
- Video output for optional local viewing on vessels chart plotter, TV or other monitor on board, or for local distribution on all of the above, using a video modulator.
- Dynamic IP support through the GOST Watch HD server & website.
- Scalable video storage space on GOST Watch HD server & website, (50MB per device i.e. camera or IVR) for motion detection or alarm activation events in clients password-protected account.

### Specifications:

- 1 Video Input, NTSC/ PAL auto detect
- 1 Video Output
- Video Compression: MPEG-4/ M-JPEG Dual Stream simultaneously
- Resolution: 4CIF, CIF, QCIF
- Max: 704 x 480 (NTSC) / 704 x 576 (PAL)
- Default: 352 x 240 (NTSC) / 352 x 288 (PAL)
- Min: 176 x 120 (NTSC) / 176 x 144 (PAL)
- Frame Rate\*: Up to 30 frame per second in all resolution, Internet service dependent
- Video Trigger Input
- Motion Detection: 4 Detection Areas with individual sensitivity controls
- LAN: DM9102D, 10/100BaseT, Auto-MIDX
- LED Indicators: Ready, Active, Network
- Connectors: Ethernet RJ-45, Power, Reset, Composite Video In, Composite Video out
- External Power Adapter: 12V/1A, 100-240 VAC, Switching
- Certification: CE/ FCC
- Dimensions: 90mm (W) x 30mm (H) x 140mm (L)
- Operation Environment
- Temperature: 0-40 °C
- Humidity: 20-80% RH



- Includes LED indicators for Network, Active and Power
- Also BNC connections for Video In and optional Video out which enables, for example on-vessel viewing of the camera's video locally.



- GOST WATCH HD TRIGGER INPUT OPTIONS:

The GOST Watch HD system can be configured for a variety of video motion recording options. These options are configured by your Marine Electronics Dealer according to your requests. The GOST Watch HD can be set to record video clips 24/7 of every motion event that happens onboard your boat, record video motion events only when the GOST Phantom or GOST Phantom Insight HD is armed, or when there is an alarm event from the GOST Phantom or Phantom Insight HD.

- ETHERNET (left) Connection to CAT5 cable from broadband modem or network to RJ-45 terminal.
- POWER (right) Plug in 12VDC transformer, supplied.

\* Up to 30 frame per second in all resolution, Internet service dependent

ALWAYS WATCHING NEVER SEEN™



## Water Resistant Analog Cameras

### Xtreme Mini Dome Stainless Steel Camera GOST-Xtreme-Mini-Dome-SS

The GOST Xtreme Mini Dome is a super low light tiny dome camera machined from a solid block of high grade 316L Stainless Steel hand polished to a mirror finish. The GOST Xtreme Mini Dome can be surface or flush mounted and comes standard with a 3.6mm lens which provides a 90° degree view.

The Xtreme Mini Dome has been designed for extremely harsh environments for both internal and external use. The Xtreme Mini Dome has passed several controlled experiments by independent bodies to test its strength and has always exceeded expectation. The stainless steel housing is backed by a 15-year warranty with a 3 year warranty on the internal camera which is proof positive that this little camera can stand up to whatever you throw at it, even in the very harshest marine environment. Ideal for Yachts, Commercial Vessels, Oil Rigs or any other Marine, Coastal or other area where extreme conditions exist.



#### Technical Specification & Features:

- 1/3" Sony Super HAD Color 3D-DNR
- High Resolution 600TV Lines Color, 700TV Lines B/W
- 3.6 mm Fixed Lens
- Mirror Dome Standard, with clear dome option
- Day & Night Capability with High Sensitivity
- 0.00019Lux in full color
- Sens-up ( x 256)
- Machined from Solid Block of 316L Stainless Steel w/Mirror finish
- IP67 Rated Certification
- Power DC 12V, 90mA
- Ultimate 3 Axis Gimbal
- Complete as flush & surface mount
- On screen display (OSD) Controls to adjust camera settings & even reverse the image to make it a back up camera for use when docking the vessel with visibility of the aft deck.





## Water Resistant Analog Cameras

### Mini Analog Camera

#### GOST-MINI-BALL

The miniature GOST Mini-Ball camera is our standard analog camera included with all our GOST Insight HD & GOST Watch HD Packages. This camera is our most discreet yet powerful security solution. Measuring only 2.4 inches in diameter (61mm), this rugged mini camera will not detract from the décor or ambience of the vessel. It has a great attractive white color housing to seamlessly blend in with the interior & exterior of the vessel.



The marinated GOST Mini-Ball camera is tamper proof and water-resistant for interior or exterior mounting. The camera incorporates 540 TV lines in color for high resolution and a 3.6mm fixed lens for outstanding picture quality. A Day/ Night function automatically senses light changes and switches the camera mode from color in bright light to monochrome at night or in low light conditions, using state-of-the-art LED technology. Despite its tiny size, the GOST Mini-Ball camera delivers exceptional security and surveillance monitoring.

The GOST Mini Ball Camera is now available in reverse image (mirror image) to be used as a back up camera when aft view is not visible from helm, and in wide angle with a 2.8mm lens. These cameras are available in both video standards: NTSC (for most of the Americas) & PAL (for rest of the world).

#### Part Numbers Normal View:

**GOST Mini Ball**

**GOST Mini Ball W**

#### Part Numbers Reverse Image:

**GOST Mini Ball RI**

**GOST Mini Ball W RI**



### Vari-Focal Analog Camera

#### GOST-VF-BALL

The GOST Vari-Focal Ball camera has the same great attractive white color housing as the GOST Mini-Ball and provides even better resolution at night. With 36 infrared LED's a day/night function, using state-of-the-art LED technology automatically senses light changes and switches the camera mode from bright light to monochrome at night or in low light conditions. This high resolution camera uses 700 TVL and a 2.8 -10 mm lens allowing the user to set the zoom where it is most appropriate and easily adjusts when necessary. This advanced camera includes a OSD Menu cable to adjust camera settings & switch camera to reverse image during install right on the monitor it is connected to. This camera is available in both NTSC & PAL. Measuring only 5.5 inch D (119mm) X 3.97 inch H (82.5mm) inches in diameter, this rugged, tamper proof, water resistant camera will not detract from the décor and ambience of the vessel.



## Indoor Analog Cameras

### Recessed Mount Low-Light Mini Dome Cameras:

#### GOST Wood Mini Dome

The GOST Wood Mini Dome is designed for interior use and manufactured from high-grade aluminum with a wood finish to blend in to the background inside of today's vessels. The GOST Wood Mini Dome comes with a three year warranty on both the camera and the housing. GOST Mini Dome cameras come standard with a 3.6mm lens which provides a 90 degree view.



#### GOST Black Mini Dome

The GOST Black Mini Dome is designed for interior use and manufactured from high-grade aluminum with a black finish. The GOST Black Mini Dome comes with a three year warranty on both the camera and the housing. GOST Mini Dome cameras come standard with a 3.6mm lens which provides a 90 degree view.



#### GOST Silver Mini Dome

The GOST Silver Mini Dome is designed for interior use and manufactured from high-grade aluminum with a silver finish. The GOST Silver Mini Dome comes with a three year warranty on both the camera and the housing. GOST Mini Dome cameras come standard with a 3.6mm lens which provides a 90 degree view.



#### Technical Specification & Features:

- 1/3" Sony Super HAD Color 3D-DNR
- High resolution 600TV lines color, 700TV lines B/W
- Day & Night capability with high sensitivity
- 0.00019Lux in full color
- Sens-up (x 256)
- 3.6 mm fixed lens
- Mirror dome standard on Xtreme, with a clear dome option
- Smoked Dome standard on the Wood, with a clear dome option
- Power DC 12V, 90mA
- Ultimate 3 axis gimbal
- On Screen Display (OSD) controls to adjust camera settings & reverse the image to make it a back up camera for use when docking the vessel with visibility of the aft deck.

### Recessed Mount LED Mini Dome Cameras:

#### GOST Mini Dome LED

The GOST Mini Dome Camera measuring just 3.14" X 1.10" (80 X 28mm) is a High Performance, High Resolution, Day/ Night Camera which performs very well even in total darkness with powerful illumination to provide visibility to objects up to 20 feet away. This also enables the camera to provide the best color images for both normal and low light conditions and comes in a sleek, attractive design. The GOST Mini Dome camera has Sony Super HAD II CCD with 540 TVL and a 3.6mm fixed iris lens.





## TracPhone V-series - a solution for every need

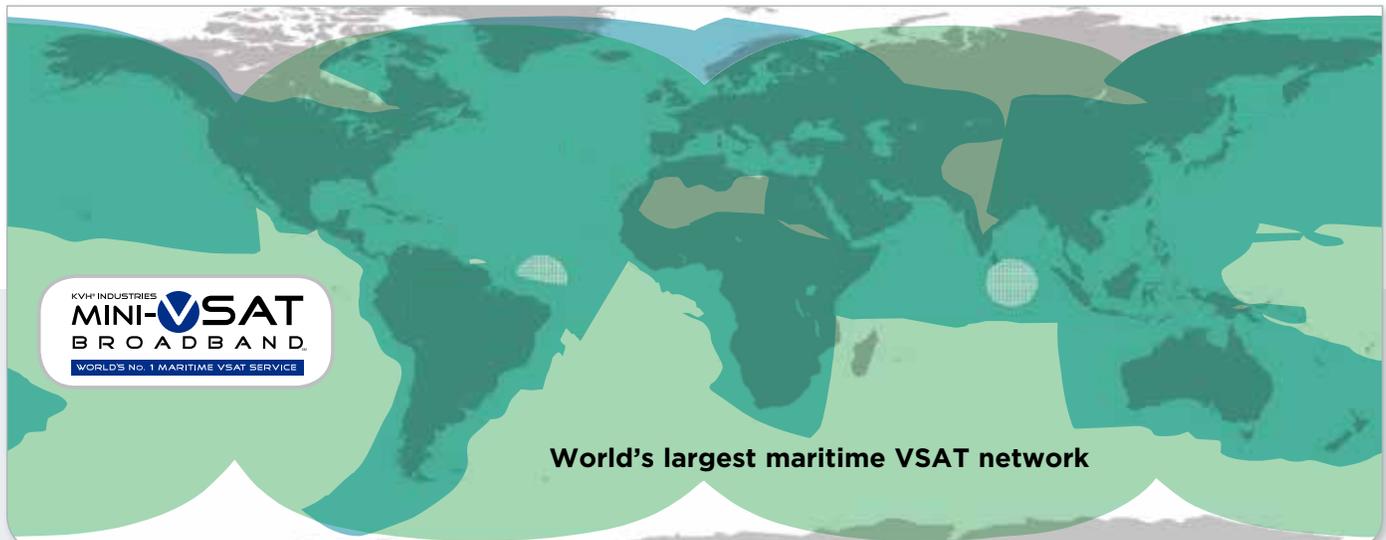


	TracPhone V3IP	TracPhone V7IP	TracPhone V11
<b>Antenna Dish Diameter</b>	36.8 cm (14.5")	60 cm (24")	1.1 m (42.5")
<b>Antenna Unit - Diameter x Height</b>	39.4 cm x 44.7 cm (15.5" x 17.6")	66.3 cm x 79.2 cm (26.1" x 31.2")	1.2 m x 1.4 m (48.8" x 57.3")
<b>Antenna Unit Weight</b> <i>(Dish + Radome)</i>	11.3 kg (25 lbs)	26.1 kg (57 lbs)	109 kg (240 lbs)
<b>Antenna Type</b>	Ku-band	Ku-band	Dual-mode C/Ku-band
<b>Elevation/Azimuth Range</b>	7.5° to 75° / 720° rotation	-24° to +119° / 720° rotation	-24° to 119° / 720° rotation
<b>Maximum Download Speed<sup>1</sup></b>	2 Mbps	2 Mbps	4 Mbps
<b>Maximum Upload Speed<sup>1</sup></b>	128 Kbps	1 Mbps	1 Mbps
<b>Coverage</b>	Seamless worldwide regions	Seamless worldwide regions	Global except Arctic Regions
<b>Airtime Rate Plans</b>	Metered plans starting at \$0.99/MB	Metered plans starting at \$0.99/MB and fixed and unrestricted speed-based plans	Metered plans starting at \$0.99/MB and fixed and unrestricted speed-based plans

<sup>1</sup>Published data speeds are maximum speeds and may vary in different regions and under different conditions.

## mini-VSAT Broadband<sup>SM</sup> Coverage Map

Fourteen Ku-band transponders with an overlay of C-band coverage have created the world's most robust VSAT network.



■ Ku-band Coverage Only (TracPhone V3IP,\* V7IP, V11) ■ C-band Coverage Only (TracPhone V11) ■ Ku-band Coverage with C-band Overlay Coverage

\* The TracPhone V3IP is a 2-axis, stabilized antenna that does not provide coverage when directly at the equator, as shown in the hatched areas above. This map depicts KVH's expectations for mini-VSAT Broadband's coverage; actual coverage and availability may vary. Data rates may also vary in different regions. Go to [www.kvh.com/minivsatmap](http://www.kvh.com/minivsatmap) to view our coverage map and for complete details. KVH provides no guarantees of satellite coverage or availability.

# GOST NAV-TRACKER



## GOST GPS Satellite Tracking



### GOST NAV-TRACKER

GOST's award winning NAV-TRACKER utilizes the Inmarsat Satellite Constellation, the same satellites used by the US defense Department with 99.99% reliability mandated by the IMO, 2 way communication and True Global Coverage everywhere except the extreme poles. Locate the exact position of your vessel at any moment and track its every move 24/7, anywhere in the world from a computer or Smart Phone with internet access. When armed, the Nav-Tracker creates a protective 500 meter geo-fence (radius) around the vessel. If the vessel moves outside the geo-fence without being disarmed, the system immediately sends geo-fence breach emails and/or text messages to 10 predetermined recipients, every 15 minutes (programmable from 2 min to 30 min) with the vessel's latitude, longitude, speed & heading. GOST was awarded a medal by the US Coast Guard for their assistance in the recovery of various high profile vessels using this tracking system, some in less than 1 hour after being stolen!



The 5th generation GOST Nav-Tracker website is an advanced web-based application that allows users to monitor GOST's wide range of Inmarsat Satellite based GPS Tracking, Security & Monitoring systems from anywhere in the world. The new site continues to offer the distinctive capability of 2 way communication with the Nav-Tracker unit. This feature is extremely important in the event the boat is stolen and needs to be tracked. Users can arm/disarm the unit, increase reporting intervals, poll the unit and even drive a relay to turn on/off ANY A/C or D/C function on the vessel with the click of a mouse. The user friendly website incorporates both Google and Bing mapping applications with the ability to change from Road to Satellite to Hybrid view. Users can create several types of website based geo-fences by drawing right on the mapping software to send alerts when the vessel travels outside a defined route or when it enters or exits a predefined geo-fence.

### Traditional System based Geo-Fence

When the systems is armed either locally on board the vessel or from the configure page on the website the GOST NAV-TRACKER takes a reading of it's current location and sets a geo-fence (radius) around the vessel to the specifications set by the owner (500 meters to 8 km). If the vessel moves outside the geo-fence the GOST NAV-TRACKER will instantly send up to 10 emails or text messages notifying recipients of the geo-fence breach and provide the vessel's exact latitude, longitude, speed and heading. It will continue to send these reports every 2 to 30 minutes (can be set on new website and changed when in breach), until the vessel returns to its original geo-fence area or is disarmed (locally or on the website).



# GOST NAV-TRACKER



## GOST GPS Satellite Tracking



### Website based Geo-Fencing

We have also added the ability for users to create several different types of website based geo-fences and actually draw them right onto the embedded mapping software.

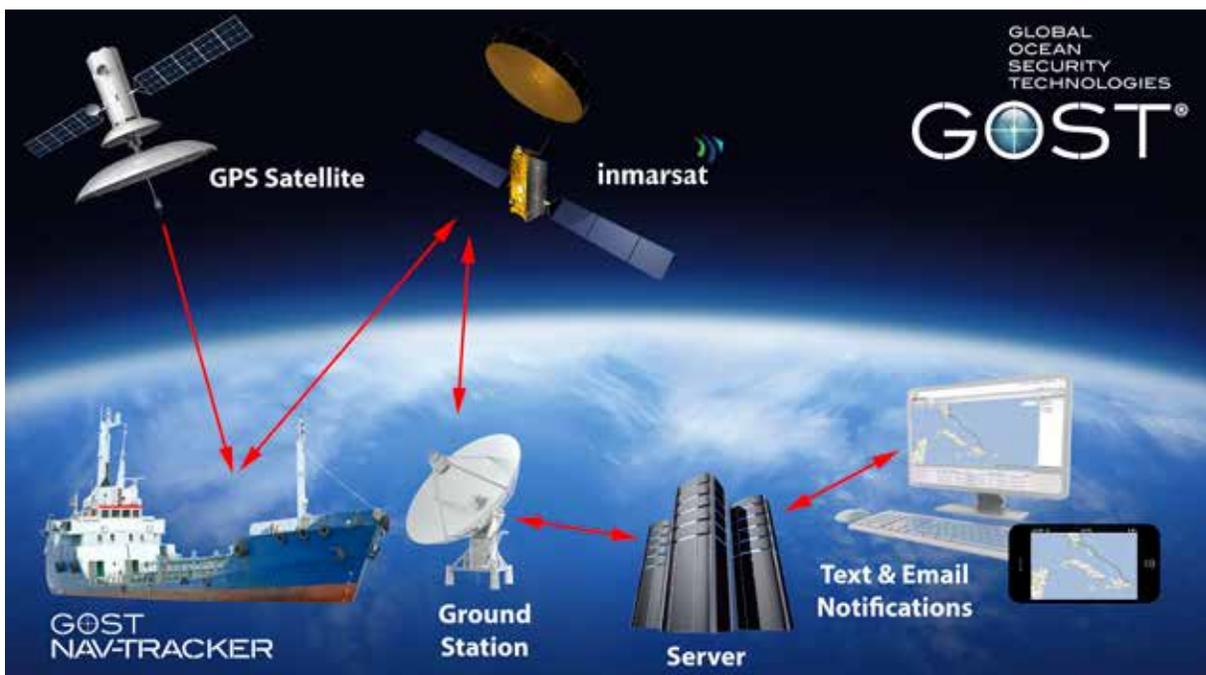
GOST Nav-Tracker website users can choose from several web based geo-fence options, including alerts generated when a vessel travels outside a defined route or when a vessel enters or exits a predefined geo-fence. The difference between the website based geo-fencing as opposed to the system based geo-fencing is that the system on board the vessel does not know about the geo-fences set up on the website. When the system on board sends its normal reports the website cross references those reports against the web based geo-fences and will alert users if there is a breach. In situations where a breach of the web based geo-fences needs to be known as soon as possible, the reporting interval of the NAV-TRACKER can be increased to accommodate.

The new website will even allow users to view a history of the last 90 days of the vessel's positions and to overlay a trace (breadcrumb trail) of their vessel, or fleet of vessels, with their exact current location and precisely where they have been.

### Covert Installation

To help ensure a covert installation, GOST NAV-TRACKER can transmit through a half inch of solid fiberglass. This allows the GOST NAV-TRACKER to be hidden onboard the vessel which is very important so thieves are not alerted to its presence.

Some insurance companies now require GPS tracking devices, like the GOST Nav-Tracker, to be installed on high performance boats and boats with high-horsepower outboards. Many insurance companies now offer discounts off annual premiums for vessels with GOST security, monitoring, tracking or surveillance systems on board.



ALWAYS WATCHING NEVER SEEN™

# GOST NAV-TRACKER



## GOST GPS Satellite Tracking

### GOST NAV-TRACKER Systems Available

**GOST NAV-TRACKER 1.0:** This is the most basic version in the Nav-Tracker family of tracking systems and is designed for customers who are primarily interested in tracking. This unit has an optional panic button to alert designated message recipients that there is a problem and an optional arm/disarm button to control the geo-fence on board. This unit meets insurance requirements for tracking.

**GOST NAV-TRACKER 3.0 VMS:** The GOST Nav-Tracker 3.0 VMS was developed to offer a marine grade, water resistant, security, monitoring and tracking system that provides global arm/disarm & relay control over satellite from anywhere in the world with the reassurance of a battery back-up. It is designed to track and monitor fishing fleets that require a ruggedized, water-resistant, vessel monitoring and tracking system. Easy-to-install sensors can be monitored and the system can be controlled remotely, no matter where the vessel is located globally, with the exception of the most extreme poles.

**GOST NT-Evolution 2.0:** Designed specifically for the harsh marine environment, the GOST NT-Evolution 2.0 is water resistant, offers global remote accessibility & includes a battery back-up. This system utilizes the 5th generation GOST Nav-Tracker website and the ultra-reliable Inmarsat Satellite Constellation for all communication & control. The GOST NT-Evolution 2.0 can accommodate up to 64 wireless marine security & monitoring sensors and 5 wireless relays to remotely control any AC or DC function onboard. This version of the NAV-TRACKER meets insurance requirements for tracking and additional insurance premium discounts may be available for security & monitoring aspects of the system.

### GOST EZ-TRACKER Systems Available

The GOST EZ-Tracker series of standalone tracking and monitoring systems are perfect for tracking and monitoring fixed and mobile assets. This self-sustained system does not need to be connected to external power for long periods of time. The GOST EZ-Tracker comes with either a non-rechargeable, long-life lithium ion battery, or with a rechargeable battery, and has the option for external sensors to be connected to it.



COVERAGE AREA

# GOST NAV-TRACKER



## GOST GPS Satellite Tracking



### GOST NAV-TRACKER 1.0

This is the most basic version in the Nav-Tracker family of tracking systems and is designed for customers who are primarily interested in tracking. This unit also has an optional water resistant latching push button that can be used as either a panic button or an arm/disarm button, see below for more info. This unit meets insurance requirements for tracking and was originally created at the request of the insurance companies as a low cost GPS tracking system for their customers. Many insurance companies offer discounts for customers who install ANY GOST NAV-TRACKER system on their vessel. The GOST NAV-TRACKER 1.0 uses the same technology and 5th Generation Website as other GOST NAV-TRACKER versions.



GNT-1.0-30 includes the antenna and 30ft cable

GNT-1.0-60 includes the antenna and 60ft cable

### GOST Water Resistant Latching Push Button

#### GNT-1.0-Push-Button

The GNT-1.0-Push-Button is an IP67 Rated water resistant latching push button (push on – push off). The push button can be used both as a covert geo-fence arm/disarm button and/or a panic button. When used as an arm/disarm button it will control the geo-fence on board the vessel. When used as a panic button, the GOST Nav-Tracker will send 'in alarm' messages with the vessels name, latitude, longitude, speed & heading, and will continue to do so at whatever interval is selected on the website (2 to 30 min) until the user presses it again, at which time it will send the same information with the message 'alarm cleared'. The messages will be sent to the website and to any designated message recipients as an email or text message. This feature is very useful on jet skis or other small watercraft when users run out of fuel, get lost, get into trouble or cannot get the jet ski started after a spill.



## Technical Specifications

**Physical Dimensions:** 112 mm x 45.75 mm (not including cables)

**Weight:** 350g (excluding cables)

**Environmental Temperature:** -40°C to +70°C

**Humidity:** ≤95% @ +40°C,

**Vibration & Shock:** Meets Inmarsat-D & EN60945 Requirements

**Ingress protection rating:** IP66

**Power Supply Voltage:** 9.6V to 32V 'smoothed' DC

**Elevation Angle Range:** 0° to 90°

**Accuracy:** (SA Off)

**GPS Channels:** 50

**Time to first fix:** Cold start >29s; Hot start <1s (GPS off <2hrs)

**Power consumption:** (typical @12V)

Sleep 0.75mW

Receive (incl. GPS) 1W

Slotted receive 50mW (effective continuous power)

Transmit 6W

**Maximum update rate:** 1s

#### Frequency Range:

Transmit 1626.5 MHz to 1660.5 MHz

Receive 1525.0 MHz to 1559.0 MHz

GPS 1575.42 ± 1.0 MHz

**Message Latencies:** Poll/Response 1 minute

Time to first transmission 45 seconds

Forward message delivery 45 seconds

Return message delivery 20 seconds

**Transmitter:** EIRP 0-9dBW

Tx burst duration 2s or 8s (auto select)

Message length standard burst up to 84 bits

Double burst up to 170 bits

**Receiver:** G/T ≥ -25dB/K at EL = 30°

User data rate ~36 bits per second

Message length Up to 800 bits

**Certification:**

Inmarsat Type Approved, FCC Compliant

EN60945 CE

# GOST NAV-TRACKER 3.0 VMS



## Globally Capable Vessel Monitoring, & Satellite Tracking System

- Designed specifically for the harsh marine environment, the GOST Nav-Tracker 3.0 VMS is water-resistant, offers global remote accessibility & includes a lead acid battery back-up. The system will also send a monitoring report when power is cut or lost and switches to the back-up battery.
- View, track, and monitor any number of vessels within your fleet via the GOST Nav-Tracker website. Visible and audible alarms will alert you when an alarm on a vessel has been triggered. Different users can also be set up to have different access levels.

The GOST Nav-Tracker 3.0 VMS was developed to offer a marine grade, water resistant, security, monitoring and tracking system that provides global arm/disarm & relay control over satellite from anywhere in the world with the reassurance of a lead acid battery back-up. It is designed to track and monitor fishing fleets that require a ruggedized, water-resistant, vessel monitoring and tracking system. Easy-to-install sensors can be monitored and the system can be controlled remotely, no matter where the vessel is located globally, with the exception of the most extreme poles.

The GOST Nav-Tracker 3.0 control unit provides a full battery backup to the award-winning GOST Nav-Tracker Inmarsat satellite-based tracking antenna in the event power to the unit is cut off. The unit also features tamper proof screws and an internal contact sensor to send out an alarm in event the unit is tampered with.

An extensive range of hardwired sensors can protect & monitor your vessel and the system can be set to activate external sirens and strobes when the system goes into alarm. Designed to "Prevent the Event" potential thieves will often abandon the vessel immediately on alarm prior to stealing electronics, equipment or the vessel itself.

The GOST Nav-Tracker 3.0 uses the 5th generation GOST Nav-Tracker website and the ultra-reliable Inmarsat Satellite Constellation for all communication & control.



The GOST Nav-Tracker 3.0 System includes the GOST Nav-Tracker 3.0 control unit with tamper-proof lead acid backup battery, the GOST Nav-Tracker antenna, a 10-meter antenna cable, a 2-meter power cable and covert antenna mounting bracket.

### VOLTAGE REQUIREMENTS

- Input Voltage: 10-32VDC
- Short Circuit protection: Thermally Fused
- Average Current Draw @ 12VDC when battery backup is charged = 120mA
- Average Current Draw @ 12VDC when battery backup is charging = 800mA
- Time to Charge lead acid battery backup:  
Approximately 5 hours

# GOST NT-EVOLUTION 2.0



## Globally Capable Wireless Marine Security, Monitoring & Satellite Tracking System



### GOST NT-EVOLUTION 2.0

- Designed specifically for the harsh marine environment the GOST NT-Evolution 2.0 is water resistant, offers global remote accessibility & includes a battery back-up
- Uses the 5th generation GOST Nav-Tracker website and the ultra-reliable Inmarsat Satellite Constellation for all communication & control
- Up to 64 wireless marine security & monitoring sensors and 5 wireless relays to remotely control any AC or DC function onboard

The GOST NT-Evolution 2.0 was developed to offer a marine grade, water resistant, wireless security, monitoring and tracking system that provides global arm/disarm & relay control over satellite from anywhere in the world with the reassurance of a battery back-up. It is designed to defend marine vessels and any other assets that require a ruggedized, water resistant security, monitoring & tracking system. Easy to install, wireless sensors can be monitored and the system can be controlled remotely, no matter where the vessel is located globally, with the exception of the most extreme poles.

A modified GOST Phantom control unit is at the core of the system providing the logic for all the wireless sensors, outputs, and key fobs, while supplying a full battery backup to the award winning GOST Nav-Tracker Inmarsat satellite based tracking antenna in the event power to the unit is cut off.

An extensive range of up to 64 wireless sensors can protect & monitor your vessel while 5 wireless relays allow you to control any AC or DC function on board or activate other devices such as external sirens, strobes, or even pulse deck or cockpit lights when the system goes into alarm. Designed to "Prevent the Event" potential thieves will often abandon the vessel immediately on alarm prior to stealing electronics, equipment or the vessel itself.



The GOST NT Evolution 2.0 uses the 5th generation GOST Nav-Tracker website and the ultra-reliable Inmarsat Satellite Constellation for all communication & control. There is also an optional built-in quad band GPRS/GSM Module for enhanced simultaneous voice and text message reporting and control when in GSM cellular range. A SIM card would need to be added for this function, and it is not required for operation of the system.

The GOST NT-Evolution 2.0 includes the GOST Nav-Tracker Antenna with integrated GPS Receiver and two-way Inmarsat Satellite Modem, the GOST Nav-Tracker Evolution 2.0 Control Unit with internal modified GOST Phantom Control Unit with built-in quad band GPRS/GSM Module inside an IP-rated enclosure with internal battery backups for both the Phantom & Nav-Tracker Antenna, Two GMM-KF2 key fob remote controls, a 30' antenna cable, a 6' power cable and covert antenna mounting bracket.



## GOST Wireless Water Resistant Sensors

All of our wireless sensors are compatible with GOST Phantom, GOST Insight HD and GOST NT-Evolution systems. Based on the system's options, sensors can be set to send an alert if triggered via 3G GSM Communicator or through our Inmarsat Satellite based tracking system. They can even use an existing onboard satellite phone.

### Low Voltage Sensor 12 or 24 Volts DC GMM-IP67-LVS

The GMM-IP67-LVS wireless Low Voltage Sensor is designed to stand up to the harsh marine environment and is set to trigger an alarm when the voltage drops below 11.6v (on 12V Sensor) or 23.2v (on 24v sensor) for more than 2 minutes. This sensor will monitor any 12V or 24V battery bank. There is a dip switch on the circuit board that allows installers to switch the voltage monitored between 12 or 24 volts DC.



### High Water Sensor GMM-IP67-HWS

The GMM-IP67-HWS wireless High Water Sensor is designed to stand up to the harsh marine environment. It includes a mounting bracket for the float switch that should be installed in the bilge of the vessel slightly below the vessels factory installed high water sensor.



### Temperature Sensor GMM-IP67-TempSensor

The GMM-IP67-TempSensor wireless Temperature Sensor's enclosure is designed to stand up to the harsh marine environment and is set to trigger an alarm when the temperatures exceed or drops below a preset temperatures range. The coil sensor itself can be mounted virtually anywhere in the vessel where temperature threshold alarms are needed.



### Freezer Temperature Sensor GMM-IP67-Freezer

The GMM-IP67-Freezer wireless Freezer Temperature Sensor is designed to monitor the temperature inside the vessel's food, ice storage & bait freezers and will alert up to 8 people with a voice phone call and/or text message if the temperature rises to 39°F (+/- 5°F). The IP-rated, wireless, battery powered GOST Freezer Sensor is available as an add-on to any GOST Phantom, GOST Insight HD or GOST NT-Evolution System.



### Heat Temperature Sensor GMM-IP67-Heat

The GMM-IP67-Heat wireless Heat Temperature Sensor is designed to monitor the temperature inside the vessel's food, ice storage & bait freezers and will alert up to 8 people with a voice phone call and/or text message if the temperature reaches 160°F (+/- 5.4°F) and will reset when the temperature reaches 130°F (+/- 10°F). The IP-rated, wireless, battery powered GOST Heat Sensor is available as an add-on to any GOST Phantom, GOST Insight HD or GOST NT-Evolution System.



# GOST NT-EVOLUTION 2.0



## GOST Wireless Water Resistant Sensors

### Water Resistant Door/Hatch Sensor GMM-IP67-DC

Our Long Range Water Resistant wireless Door/Hatch sensor works with any of our available extension sensors. It is compatible with the GOST Phantom, GOST Insight HD or GOST NT-Evolution Systems. This wireless design also has a built in anti-tamper switch.



#### GMM-IP67-DC Features:

- Wireless range in a typical marine environment:  
35m (115ft) with GOST Phantom, GOST Insight HD or GOST NT-Evolution Systems that can be extended to 70m (230ft) with the Wireless Repeater
- Low battery and signal transmission LED

#### Extension sensors

\*\*\*One of the extension sensors to the right is required\*\*\*

### Deck Pressure Sensors GMM-IP67-DS

The GMM-IP67-DS wireless Deck Sensor is designed to protect the exterior or interior of the vessel. The sensors are epoxied to the underside of the vessel's deck where they cannot be seen by intruders. In addition, they will not detract from the vessel's decor. These sensors are effective on almost any boat structure including wood, fiberglass and even aluminum or steel decks. Environmentally sealed and utilizing 22-gauge marine grade wire leads, these sensors are ideal for those hard to protect areas of the vessel where there is access to the underside of the deck. They will not respond to vibration, shock, or airborne items. They sense only the unique flexing of the deck caused by a person walking. Sensitivity is fully adjustable from the processor. They can even be used to protect ladders up to the fly bridge or tuna tower. These sensors are sold as arrays. We offer a 2 & 4 sensor array.



#### For fiberglass and wood decks:

**GMM-IP67-DS2:** 2 sensor array

**GMM-IP67-DS4:** 4 sensor array

#### For aluminum or steel decks:

**GMM-IP67-DS2M:** 2 sensor array

**GMM-IP67-DS4M:** 4 sensor array

### Standard Wide Gap Extension Sensor GDC-EXT-WG

2" x .25" Miniature Surface Mount Switch Set Wide Gap up to 3 inch gap between sensor and magnet



### Super Heavy Duty Wide Gap Extension Sensor GDC-EXT-WGHD

4" x .5" Exterior Surface Mount Switch Set \*SUPER HEAVY DUTY\* up to 3-inch gap between sensor and magnet



### Infrared Beam Sensor GMM-IP67-IBS

The GMM-IP67-IBS wireless Infrared Beam Sensor is designed to protect the exterior of the vessel. There is an invisible infrared beam shot between the emitter and the detector (photoelectric eyes). Once the infrared beam is broken the sensor is activated and causes the system to go into alarm. These sensors are commonly installed in the gunwales to protect the cockpit areas. Other uses include open fly bridges to protect the electronics or any other exposed areas where a motion detector is not practical. These sensors have a built in fail safe amplifier and are resistant to sunlight and other interference.



#### These sensors are available in the following versions:

**GMM-IP67-IBS1:** 1 pair of photoelectric eyes

**GMM-IP67-IBS2:** 2 pairs of photoelectric eyes

**GMM-IP67-IBS1-Siren-Out:** 1 pair of eyes with siren output

**GMM-IP67-IBS2-Siren-Out:** 2 pairs of eyes with siren output

### Pull Sensor GMM-IP67-Pull-25

The GOST GMM-IP67-Pull wireless Pull Sensor has developed multiple uses over the years. It is used like a continuity line and when the line is broken the sensor is triggered. Notification is given if the boat is pulled away from the dock or a tender is pulled from the back of a vessel. It is also possible to install the sensors in several different ways. They can be installed with the female end on the dock or the mother ship, or they can have the male & female on the same vessel, which lends itself to more versatility.



# GOST NEXT-EVOLUTION 2.0



## GOST Wireless Water Resistant Keypad

### GOST Wireless Water Resistant Keypad GP-IP67-WKPD-LCD

#### 32-Zone Wireless Fixed LCD Keypad

Powered by 2 "AA" batteries, with built-in backup battery (GP-WKPD-ADP is optional)

Our 32-Zone Wireless LCD Keypad is compatible with GOST Phantom & GOST Phantom Insight HD. It features the added convenience of multiple locations to control the system without the need to hardwire another keypad. It will display 32-zones in 2 partitions on the LCD display, 3 panic alarm buttons, allows users to view each zone in live mode, and much more. Powered of 2 "AA" batteries, with built in back up battery and can also be powered with optional GP-WKPD-ADP power adapter.



## GOST Wireless Water Resistant Accessories

### Water Resistant Wireless Relay GMM-IP67-RLY-Z1

The GMM-IP67-RLY-Z1 is the Water Resistant version of the GMM-RLY-Z1 and is for use on the exterior of vessels or on vessels where everything has the potential to get wet, like on a center console.



#### GMM-RLY-Z1 2-Way Wireless Relay Features

- Arm, Stay and Ready status LEDs
- 1 programmable 5A relay output
- Universal transmitter input (N.O./N.C.)
- Backup Alarm Reporting option (activates GMM-RLY-Z1 output if communication between the Phantom console and the GMM-RLY-Z1 is lost)
- Wireless range in a typical marine environment: 35m (115ft) with GOST Phantom or GOST Insight that can be extended to 70m (230ft) with the Wireless Repeater
- Dimensions of non water resistant version: 12.5cm x 4.6cm x 2.5cm (4.9in x 1.8in x 1.0in)

### Commercial Wireless Repeater with Power Supply and Back-up Battery GP-COMMERCIAL-RP-120 VAC GP-COMMERCIAL-RP-240 VAC

GOST Phantom Commercial Maritime IP-Rated Wireless Repeater in Heavy Duty Fiberglass Enclosure with 120 or 240 VAC Power Supply & Battery Back up. Extends wireless range 250 feet in any direction within line of sight.



# GOST EZ TRACKER



## GOST Self-Powered GPS Satellite Tracking

### GOST EZ-Tracker 1.0

The GOST EZ-Tracker 1.0 is 100% self sustaining and does not need to be connected to external power due to its long life lithium ion battery. It can send 2 reports a day for up to 5 years and is perfect for deployment where there is no external power source. The GOST EZ-Tracker 1.0 uses the same 5th generation GOST NAV-TRACKER website and it has the same new website based geo-fence functions, but it does not have the traditional system based geo-fence functions the GOST NAV-TRACKER family has.

The other difference between the GOST EZ-Tracker 1.0 System and the GOST Nav-Tracker Systems is that between position reports, the GOST EZ-Tracker 1.0 goes into sleep mode and can not be communicated with. It will wake up to send position reports at predefined intervals and will also wake up once a day to receive any messages sent to it over the previous 24 hours. A typical message sent to the unit would be to change its reporting interval.

The GOST EZ Tracker 1.0 terminal incorporates magnetic feet and fixed mounting points, providing flexibility for the user to monitor transitory or fixed assets.



### GOST EZ Tracker 2.0

The GOST EZ-Tracker 2.0 is the same size as the original version and uses the same hardware and 5th generation website but has the added features of a sensor input, an on/off key switch and a rechargeable battery. When the unit is set to report every 6 hours the battery will last for up to 6 months between charges.

The EZ-Tracker 2.0 has one external interface connector which is used to connect a sensor, panic button and to charge the unit. It also has a key switch that allows you to switch the terminal "On" and "Off." This helps preserve the life of the battery when the terminal is not in use.



When the sensor or panic button is activated the unit will generate an 'in alarm' message with the vessels name, latitude, longitude, speed & heading, and will continue to do so at whatever interval is selected on the website for the next 4 hours. After 4 hours the unit will revert back to standard tracking messages at the normal reporting interval.

### GOST EZ Tracker 3.0

Includes an EZ Tracker 2.0 and a Proximity Switch & Actuator



### GOST EZ Tracker 4.0

Includes an EZ Tracker 2.0 and a Panic Button



### Technical Specifications for all EZ-Tracker Units

**Physical Dimensions:** 247 mm x 178 mm x 48mm

**Weight:** 1.5kg

**Environmental Temperature:** -35°C to +55°C

**Humidity:** ≤95% @ +40°C, non-condensing  
Ingress Protection Rating: IP66

**Elevation Angle Range:** 0° to 90 °

**GPS Channels:** 50

**Time to first fix (typical):** Cold start <29s  
Hot start <1s (GPS off <2 hrs)

**Accuracy (SA Off):** Position (CEP, 2D) 2.5m (Typical)

**Dynamic capability:** Velocity 515m/s  
Max Acceleration ≤4g

**Maximum update rate:** 1s

**Single unit power supply:**

Input range 90-264V/47-63 HZ

Output range 9V-24V/2.1A-5A(50W max)

**Certification:** Inmarsat Type Approved,  
FCC Compliant, CE

# GOST ACOUSTICS



## GOST Acoustics and Strobes

### GOST Acoustic Sound Barrier GA Barrier

Installation of the GOST Acoustic Barrier cheats the intruder of the few minutes that could be used between alarm activation and arrival of security or police, protecting the secured areas for that crucial period of time and continuing for the duration of the event.

The GOST Acoustic Sound Barrier causes a person to immediately modify their behavior, typically observed as an autonomic protective impetus to place ones hands on their ears followed by body motion to immediately remove oneself from the intensity zone. When used as a behavior modifying Sound Barrier, the value of the patented frequency pattern is achieved. It can be applied to quell, repel or control aggressive, malicious and riot behaviors. This aspect has been applied for protecting Russian nuclear weapons, stores, offices, and distribution plants.

As a siren, GOST Acoustic Barrier is unmistakably loud with a unique intolerable attention getting frequency pattern that clearly stands out from background noise. GOST Acoustic Barriers are most effective when used in pairs or arrays of multiple units.



### GOST Wireless Water Resistant Sirens



#### Water Resistant Siren GA-Siren

GOST Acoustics Standard Dual Tone Water Resistant Siren, 30 Watt



#### Water Resistant Mini Siren GA-Mini-Siren

GOST Acoustics Mini Water Resistant Super Loud Multi Tone marine siren, 125db 20 Watt. The advantage of this siren is its small size. Measuring just 3in x 3in x 3in this mini siren can be installed under the gunwale or virtually anywhere else on the vessel.



#### Water Resistant Siren / Strobe GMM-SRN-STR

This is our new weatherproof, wireless 100dB siren with a built-in super bright strobe. The strobe lens is available in 4 colors (red, blue, amber, and clear). It can be powered using three D batteries, or with an AC or DC power supply. This wireless strobe siren is compatible with our GOST Phantom, GOST Insight HD & GOST NT-Evolution Systems.

### GOST Water Resistant Strobes



#### Water Resistant Strobe GA-Strobe-White/GA-Strobe-Red

GOST Strobe Lights: Ultra small, self-contained, semi-hemispheric LED light, for surface mount or internal mount within composite head lamps, cornering lamps and tail light assemblies. 25 scan-lock flash patterns, includes synchronize feature for alternating and synchronous flashing of multiple lamps. New lens technology enhances light distribution for optimum dispersion and intensity of the warning signal at critical angles. Available in white or red.

# GOST CLOAK



## GOST Cloak

### Instant Protection

Most property loss occurs in the initial minutes of a break-in, before police or security teams have had a chance to respond. The GOST Cloak system is designed to provide protection in the critical time gap between the alarm's activation and the response team's arrival at the scene.

In a matter of seconds, the GOST Cloak fills the protected area with an impenetrable cloud of smoke that prevents the loss of property, confuses the thief, and forces the intruder out of the premises until the response team arrives.

The fog is created by vaporizing a specially formulated triethylene glycol solution. Glycol is classified as a foodstuff and is found in many day-to-day substances such as toothpaste and deodorants. The vapor produced is a dense, white fog which reduces visibility to less than 30 cm, practically 0 visibility, but which, under normal usage, is harmless to anything found on a vessel.

### Safe and easy to use

The GOST Cloak has been designed to integrate easily into any of our security system, CCTV or access control system. Built-in bracket and plug-in connections make for easy installation. The procedure for setting an alarm fitted with a GOST Cloak is exactly the same as for an alarm system without a GOST Cloak. GOST Cloaks are fully automatic. They are switched on and off (activated and deactivated) via the alarm panel and are triggered by the alarm being activated.

### Reliability

The GOST Cloak System is continuously monitored to ensure that all critical circuits are functioning properly. Maintenance requirements and fault messages are communicated to on-site personnel via the electronic security system.

### Quality

Designed and built under a stringent ISO 9001 Quality Assurance System, every GOST Cloak goes through a series of comprehensive quality assurance checks. In addition to in-house tests, the GOST Cloak system has been evaluated extensively around the world, making it the most tested security fog product on the market.

All GOST Cloak products fully comply with the British Standards on Smoke Security Devices BS7939. The GOST Cloak is backed by a warranty on the machines and a fully comprehensive \$15 Million Dollar worldwide insurance policy, which includes end user public liability coverage.

### Patented heat exchange

The core of the unique GOST Cloak is its patented and revolutionary heat exchanger system, which transfers heat directly to the fluid. Historically the heat exchanger has been the heaviest component in the fog generator, but with the new design the weight has been reduced by 12 kg compared to former product generations.

### Fog density sensor included

The patented reactivation system automatically ensures an ideal fog density in the room until the alarm is re-set. The optical sensor constantly measures the fog density and re-activates the GOST Cloak if the fog density is reduced. As long as the fog density is sufficient the GOST Cloak will not re-activate. This saves fluid and prevents over condensation.

### PC tool for advanced set-up

The right amount of fog can easily be adjusted directly on the fog generator or via the newly developed PC program. The program is supplied with the product and can be used on every Windows based PC. The PC is easy to connect to the GOST Cloak fog generator via the standard USB cable. The PC tool gives access to a wide range of advanced settings, which enable the user to fully adjust the machine for optimal performance.



# GOST<sup>®</sup>

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## Partnering to Provide Global Peace of Mind



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