

# Technical Overview



## KVH Watch® Terminal

### High-throughput Performance for Industrial IoT Monitoring & Remote Expert Interventions

The industry's first purpose-built IoT SATCOM terminal, KVH Watch utilizes KVH's advanced 3-axis, gyro-stabilized TracPhone® V7HTS offering connection speeds as fast as 10/3 Mbps (down/up) over KVH's global HTS network.

#### Service Highlights

- **Flow** for remote condition monitoring 24/7/365, providing dedicated connectivity for third-party IoT platforms
- **Remote Expert Interventions** for live video technical support between onshore experts and onboard engineers
- **Economical multi-tenant subscription model** leverages terminal's capacity to simultaneously monitor up to 30 onboard systems in real time
- **KVH Watch Manager** for vessel tracking, Intervention scheduling, and daily and monthly usage reporting





#### Hardware Features

- Dedicated **high-throughput terminal** on its own LAN, fully isolated from the vessel's existing IT and OT networks
- 2U-high belowdecks **Antenna Control Unit** with 1 TB of storage; manages Flow return link traffic and high-speed Intervention session traffic
- 8, 16, 24, or 48-port 1U-high **managed switch** for isolated access to each onboard system



## System Specifications

VSAT Service	
Network	KVH Global Ku-band HTS Network
Antenna Type	Ku-band
Service Coverage Area	Seamless Worldwide Regions
Max. Speed Download/Upload	10 Mbps/3 Mbps (Data speeds are maximum speeds and may vary in different regions and under different conditions)
Abovedecks Equipment – Antenna	
Antenna Dish Diameter	60 cm (24")
Antenna Dimensions/Weight	66.6 cm D x 79.2 cm H (26.1" D x 31.2" H)/26.1 kg (57.6 lbs)
Elevation/Azimuth Range	-24° to +119°/720° rotation
Temperature	Operating: -30°C to 55°C (-22°F to 131°F); Survival: -35°C to 70°C (-31°F to 158°F)
Humidity	IEC 60945; 40°C (104°F), 95% Humidity (non-condensing)
Rain	Precipitation rate of 1.7mL/min, w/wind speeds up to 100 knots
Heading Input	NMEA 0183 magnetic or true heading
Antenna Unit Power	DC; provided by ACU
ACU to Antenna Communications	14-Conductor Data Cable
L-band RF Cables	For 5-30 m (15-100 ft.) choose RG-11 For 31-60 m (101-200 ft.) choose LMR-400-75 For 61-100 m (201-325 ft.) choose LMR-600-75
KVH Customer Support	Enabled by KVH Watch IoT Proactive Monitoring
	
Belowdecks Equipment – Antenna Control Unit (ACU)	
Dimensions	42.6 cm L x 41.4 cm W x 2U H (16.8" x 16.3" x 2U); rack-mountable with optional mounting provisions
Weight	5.1 kg (11.25 lbs)
Temperature	Operating: -15°C to 55°C (5°F to 131°F); Survival: -15°C to 70°C (5°F to 158°F)
Input Power	100-240 VAC, 50-60 Hz auto switching, 250W max
	
Associated Equipment	
Managed Switch	8, 16, 24 or 48-port managed switch to support LAN segmentation. A dedicated Ethernet port is provided for each tenant. <a href="#">Switch details.</a>
Wi-Fi Access Points	Dedicated access points in control and machinery areas to support Remote Expert Interventions
Tablet or Smartphone	Vessel or personal device for Remote Expert Interventions
Complete System	
Certification	Complies with the essential requirements of Radio Equipment Directive 2014/53/EU, which includes the safety objectives set out in Low Voltage Directive 2014/35/EU and an adequate level of electromagnetic compatibility as set out in EMC Directive 2014/30/EU.
Installation & Support Services	KVH-managed implementation and hardware/service support – full coordination of all logistics, installation, and commissioning processes. Includes free shipping to, and standard installation in, KVH Watch-designated <a href="#">ports and locations</a> <sup>1</sup> . Zero maintenance costs throughout subscription period. Includes KVH OneCare™ Global Technical Assistance Package, KVH Watch IoT Proactive Monitoring, and KVH Watch Manager suite of tools.

Meets FCC and CE requirements. Exceeds Inmarsat operational, survival, and shock specifications.

<sup>1</sup>Standard Installation is for labor only. Installation services are subject to and governed under [KVH Professional Services Standard Terms and Conditions](#) and KVH Watch Standard Installation Terms and Conditions; contact KVH for details.



### KVH Watch Coverage Map

Coverage maps are representative and may change at any time. Data rates may also vary in different regions. KVH provides no guarantees of satellite coverage or availability. For complete details, go to [www.kvh.com/watchcoverage](http://www.kvh.com/watchcoverage).

 KVH Watch Terminal (TracPhone V7HTS) coverage area on KVH Global HTS Network

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[kvh.com/watch](http://kvh.com/watch)



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