



TracNet[™] H90

Powerful, 1 m Hybrid VSAT, Cellular, & Wi-Fi Connectivity

Enjoy a premium maritime communications experience with KVH's 1 m commercial-grade TracNet H90 hybrid connectivity system. Equipped with satellite, cellular, and Wi-Fi connectivity and intelligent, automatic switching, the TracNet H90 terminal also includes easy single-cable installation, a commercial-grade rotary joint for continuous azimuth rotation and tracking, and a design as much as 24% lighter than leading competing systems. Its three-axis pedestal design, stabilized skew, digital IMUs, and advanced motor controllers deliver high-performance tracking in all sea states.

- High-speed VSAT coverage as fast as 20/3 Mbps (down/up) via KVH's global, layered Ku-band HTS network, offering 294 million sq. km (113+ million sq. miles) of coverage
- Highly tuned carbon fiber dish paired with KVH's exclusive RingFire™ technology ensures superior reception
- Three-axis pedestal design with a fourth axis of automatic skew adjustment seeks the optimal satellite in KVH's HTS network and tracks satellites directly overhead at the equator and low on the horizon at polar latitudes
- Terrestrial Communications Module supporting integrated high-power cellular antennas with service in 150+ countries plus built-in high-gain Wi-Fi antennas for seamless switching to shore-based Wi-Fi networks
- Commercial-grade rotary joint and single cable design for easy installation and uninterrupted azimuth rotation and tracking



TracNet Hub+

The powerful 1U, AC-powered, rack-mountable TracNet Hub+ is packed with powerful features, including a versatile touchscreen user interface, intelligent hybrid network switching (satellite, cellular, Shore Wi-Fi), user-supplied SIM slot, built-in Wi-Fi router, ethernet ports, and two VoIP lines. In addition, it provides content storage and access for the commercial maritime KVH Link content service.

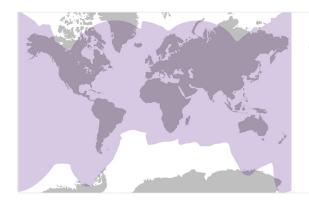


System Specifications

Service		
Network	KVH Ku-band global HTS network; regional cellular services in 150+ countries; available shore-based Wi-Fi networks	
Antenna Type	Ku-band	
Service Coverage Area	Seamless Worldwide Regions	
Maximum Speed Download/Upload ¹	20 Mbps/3 Mbps	
Abovedecks Equipment		
Antenna Dish Diameter	1.1 m (42.5")	
Antenna Unit Dimensions/ Weight	1.2 m D x 1.4 m h (48.8" D x 57.3" h)/ 86 kg (189 lbs)	
Elevation/Azimuth Range	-23° to 119°/commercial-grade rotary joint for unlimited azimuth rotation	
Temperature	Operating: -30°C to 55°C (-22°F to 131°F) Survival: -30°C to 70°C (-22°F to 158°F)	
Humidity	IEC 60945; 40°C (104°F), 95% Humidity (non-condensing)	
Rain	Precipitation rate of 1.7mm/min, w/wind speeds up to 100 knots	
Antenna Unit Power	DC, provided by the TracNet Hub+	
Antenna Cable	100' coax cable provided; supports cable runs up to 500'; see kvh.com/tracnetcables or contact KVH Technical Support for specifications	
Remote Support	Integrated cellular radio for access by KVH Technical Support (requires SIM activation)	
Belowdecks Equipment – TracNet Hub+		
Dimensions	48.3 cm I x 30.7 cm w x 4.5 cm h (19" x 12.1" x 1.75"); will fit in 1U slot; rack-mountable with optional mounting provisions ²	
Weight	3.7 kg (8.3 lbs)	
Temperature	Operating: -25°C to 55°C (5°F to 131°F); Survival: -15°C to 70°C (5°F to 158°F)	
Heading Input	NMEA 2000, NMEA 0183 magnetic or true heading	
Input Power	100-240 VAC, 50-60 Hz auto switching, 300W max	
Data Interfaces	4 Ethernet: IEEE 1000BASET-T 2 USB 3.0 Ports	
Voice Interfaces	2 RJ11 ports for VoIP services	
System Options		
KVH Link	Available for commercial applications. See kwh.com/link for details	
KVH OneCare [™] Support Program	Available; see kvh.com/onecare for details	
Iridium Certus® Optional Backup	Available; see "Optional Backup" on kvh.com/H90 for details	

Terrestrial Communications Module - Cellular Specifications			
Band Support			
Regions	Global, except China		
5G	Standards	3GPP Release 15 NSA/SA operation, Sub-6 GHz	
	MIMO	DL: Up to 4 x 4 MIMO UL: Up to 2 × 2 MIMO	
LTE (4G)	Standards	DL Cat 20; UL Cat 18 LTE-FDD, LTE-TDD & LTE-LAA	
	MIMO	DL: Up to 4 ×4 MIMO	
UMTS (3G)	WDCMA		
Data Rates (max) ³			
5G	5G NR SA Sub-6Ghz	DL 4.2 Gbps; UL 450 Mbps	
	5G NR NSA Sub-6Ghz	DL 5.0 Gbps; UL 600 Mbps	
LTE	LTE-A	DL 2.0 Gbps; UL 200 Mbps	
UMTS	WCDMA	DL 42 Mbps; UL 5.76 Mbps	
Terrestrial Commu	unications Module - '	Wi-Fi Specifications	
Wi-Fi Standards	IEEE 802.11ac/a/b/g/n		
Band Support	2.4 Ghz / 5 Ghz		
Data Rate (max) ³	802.11b: 11Mbps 802.11a/g: 54Mbps 802.11n: 300Mbps 802.11ac: 867Mbps		
MIMO	Up to 2 x 2 MIMO		
Security	WPA2, WPA3		
Complete System			
Certification	Complies with the essential requirements of Radio Equipment Directive 2014/53/EU, which includes the safety objectives set out in EN62368-1 and in EMC directive EN60945 NMEA 2000 Certified RoHS & REACH		
System Warranty⁴	Comprehensive 2-year parts, 2-year labor warranty supported by KVH's worldwide Certified Support Network (CSN); extended warranty up to 5 years available		
Part Number	01-0441-11		

- ¹ Published data speeds are maximum speeds and may vary in different regions and under different conditions.
- ² Optional Belowdecks Mounting Case (Part Number 72-0368) available for vessels without a rack.
- $^{\rm 3}$ Data rates theoretical only and actual value depends on network conditions. Data rates limited by 1 Gbps Ethernet LAN interface.
- ⁴ Unless subject to in-country regulations. Restrictions apply. Visit kvh.com/warranty for details.



KVH Global, Layered Ku-band HTS Network Coverage

TracNet 60 cm and 1 m System Coverage Map

Coverage maps are representative and may change at any time. Data rates may also vary in different regions. For complete details, choose "TracNet" at kvh.com/tracnetmaps and click on the KVH ONE coverage map. KVH provides no guarantees of satellite coverage or availability.

60 cm and 1 m

kvh.com



World Headquarters

KVH Industries, Inc. · Middletown, RI U.S.A. +1.401.847.3327 · info@kvh.com

EMEA Headquarters

KVH Industries A/S · Birkeroed, Denmark +45.45.160.180 · info@emea.kvh.com

Asia-Pacific Headquarters

KVH Industries Pte Ltd. · Singapore +65.6513.0290 · info@apac.kvh.com