



TracNet™ H90

Powerful, 1 m Hybrid VSAT, Cellular, & Wi-Fi Connectivity Designed to Deliver Critical Communications

Rely on fast, field-proven communications 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 32% 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 while its low latency and speeds as fast as 20/3 Mbps (down/up) are ideal for streaming video, biometric data, and encrypted messaging protocols such as CENTRIXS.

- ① 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
- ② Highly tuned carbon fiber dish paired with KVH's exclusive RingFire™ technology ensures superior reception
- ③ 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
- ④ 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
- ⑤ 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.

TracNet H90 Hybrid Connectivity System

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 l 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 1000BASE-T 2 USB 3.0 Ports |
| Voice Interfaces | 2 RJ11 ports for VoIP services |
| System Options | |
| KVH Link | Available for commercial applications. See kvh.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 x 2 MIMO |
| LTE (4G) | Standards | DL Cat 20; UL Cat 18 LTE-FDD, LTE-TDD & LTE-LAA |
| | MIMO | DL: Up to 4 x 4 MIMO |
| UMTS (3G) | WCDMA | |
| 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 Communications 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 Warranty ⁴ | 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 | |

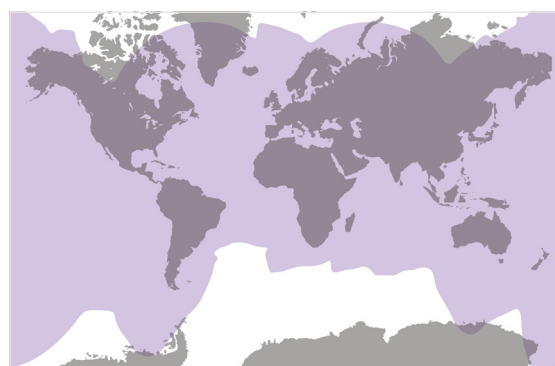
Meets **CE** requirements. Exceeds Inmarsat operational, survival, and shock specifications.

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.

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

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