

A great solution for economical, global SATCOM



Key Features and Attributes

- TracPhone V3IP world's smallest maritime VSAT system
- Integrated CommBox™ Modem (ICM) breakthrough belowdecks unit for TracPhone V3IP
- TracPhone V3IP data speeds up to 2 Mbps down, 128 Kbps up using mini-VSAT Broadband[™] service – No. 1 in maritime VSAT
- Iridium Pilot compact, fully global system with pole-to-pole coverage
- Iridium Pilot data speeds up to 134 Kbps down and up using Iridium OpenPort[®] broadband service

System Bundle includes <u>both</u> TracPhone V3IP and Iridium Pilot antenna systems preconfigured with least cost routing

Two Lease/Airtime* Options:

1) 1 GB data/month – \$1,495/month \$1.49/MB overage \$0.49/min. phone calls worldwide

2) 250 MB data/month – \$995/month \$1.99/MB overage \$0.49/min. phone calls worldwide

* 36-month lease and airtime contract. Data is for both services combined. Hardware bundle also available for purchase; see Purchase Options on back for details.

Ultra-compact, fast, reliable TracPhone V3IP paired with Iridium Pilot for pole-to-pole global service

At 39 cm (15.5") in diameter, TracPhone V3IP is the world's smallest maritime VSAT antenna. Advanced ArcLight[®] spread spectrum technology enables the V3IP's extremely compact design, while still providing outstanding coverage and speed with reliable Internet, voice, and e-mail communications. TracPhone V3IP is designed exclusively for the mini-VSAT Broadband service – ranked No.1 in maritime VSAT. Now, with KVH's new System Bundle, TracPhone V3IP is paired with an Iridium Pilot for pole-to-pole coverage.

New Integrated CommBox Modem (ICM) – the key to seamless integration

Designed for the broadband era and its requirements for onboard networking, the TracPhone V3IP features KVH's Integrated CommBox Modem (ICM) – an all-in-one streamlined belowdecks unit combining an IP-enabled antenna control unit, CommBox Network Manager, an ArcLight spread spectrum modem, Voice over IP (VoIP), Ethernet switch, and Wi-Fi capabilities. At just 2U, the ICM ensures fast and easy installations and the most reliable performance.

Preconfiguration ensures easy and seamless switching

With the TracPhone V3IP/Iridium Pilot System Bundle, the ICM is preconfigured by KVH to ensure seamless integration, so your vessel will have satellite Internet, e-mail, and phone access wherever you go. TracPhone V3IP and mini-VSAT Broadband service is always chosen first, however, if the service becomes unavailable for any reason, onboard LAN and Wi-Fi networks will switch to Iridium OpenPort broadband service, and will automatically switch back to mini-VSAT Broadband airtime service as soon as it becomes available again. Both the mini-VSAT Broadband and Iridium OpenPort airtime services are billed through KVH for the customer's convenience.

Built-in tool for managing onboard broadband data use addresses a key concern for commercial operations



Vessels as small as 30 feet can operate more efficiently with TracPhone V3IP's fast, reliable broadband connectivity. Operational benefits include a user-friendly interface that enables remote diagnostics and monitoring, over-theair software updates, and ease in creating unique networks for crew access to e-mail and Internet. With the CommBox Network Manager built into TracPhone V3IP's streamlined ICM, ship operators have a tool at hand for managing the increasing use of broadband onboard, by simply activating the CommBox software, which includes

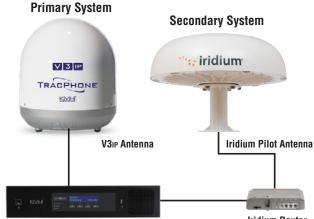
bandwidth management, web caching, compression, content filtering, and much more.

TracPhone V3IP/Iridium Pilot System Bundle **Specifications**

| Service (Primary – TracPl | hone V310) | |
|---|--|--|
| Network | mini-VSAT Broadband | |
| | Ku-band | |
| Antenna Type | | |
| Service Coverage Area | Seamless Worldwide Regions (keyholes at equator) | |
| Max. Speed Download/Upload ¹ | 2 Mbps/128 Kbps | |
| Service (Secondary – Irid | | |
| Network | Iridium OpenPort broadband | |
| Antenna Type | L-band | |
| Service Coverage Area | Global, pole-to-pole | |
| Max. Speed Download/Upload ¹ | 134 Kbps bidirectional | |
| Abovedecks Equipment (Primary – TracPhone V3IP) | | |
| Antenna Dish Diameter | 36.8 cm (14.5") | |
| Antenna Unit Dimensions | 39.4 cm (D) x 44.7 cm (h) (15.5" (D) x 17.6" (h)) | |
| Weight | 11.3 kg (25 lbs) | |
| Elevation/Azimuth Range | 7.5° to 75° / 720° rotation | |
| Temperature | Operating: -25°C to 55°C (-13°F to 131°F) | |
| iomporaturo | Survival: -35°C to 70°C (-31°F to 158°F) | |
| Humidity | IEC 60945; 40°C (104°F), 95% Humidity (non-condensing) | |
| | Precipitation rate of 100L/min, w/wind speeds up to | |
| Rain | 100 knots | |
| Antenna Unit Power | DC; provided by ICM | |
| ICM to Antenna Unit Comms | 14 Conductor Data Cable | |
| L-band RF Cables | For 5-15 m (16-49 ft.) choose RG-11 | |
| (customer supplied) | For >16-30 m (50-98 ft.) choose LMR-400-75 | |
| | For >31-45 m (99-148 ft.) choose LMR-600-75 | |
| Abovedecks Equipment (Secondary – Iridium Pilot) | | |
| Antenna Unit Dimensions | 57 cm (D) x 23 cm (h) (22.4" (D) x 9" (h)) | |
| Weight | 11 kg (24.3 lbs) | |
| Belowdecks Equipment () | /3IP Integrated CommBox Modem (ICM)) | |
| | 42.6 cm (l) x 41.4 cm (w) x 2U (h) | |
| Dimensions | (16.8" (I) x 16.3" (w) x 2U (h)); rack-mountable with optional mounting provisions ² | |
| Weight | | |
| | | |
| - | 5.1 kg (11.25 lbs) | |
| Temperature | | |
| - | 5.1 kg (11.25 lbs) Operating: -15°C to 55°C (5°F to 131°F) | |
| Temperature Input Power | 5.1 kg (11.25 lbs) <i>Operating:</i> -15°C to 55°C (5°F to 131°F) <i>Survival:</i> -15°C to 70°C (5°F to 158°F) 100-240 VAC, 50-60 Hz auto switching, 1.6 A max 4 Ethernet: IEEE 802.3 10BASE-T/100BASE-TX, 100 Mbps; | |
| Temperature Input Power Data Interfaces | 5.1 kg (11.25 lbs) <i>Operating:</i> -15°C to 55°C (5°F to 131°F) <i>Survival:</i> -15°C to 70°C (5°F to 158°F) 100-240 VAC, 50-60 Hz auto switching, 1.6 A max 4 Ethernet: IEEE 802.3 10BASE-T/100BASE-TX, 100 Mbps; 1 Wi-Fi 802.11; 3 USB ports | |
| Temperature Input Power Data Interfaces Voice Interfaces | 5.1 kg (11.25 lbs) <i>Operating:</i> -15°C to 55°C (5°F to 131°F) <i>Survival:</i> -15°C to 70°C (5°F to 158°F) 100-240 VAC, 50-60 Hz auto switching, 1.6 A max 4 Ethernet: IEEE 802.3 10BASE-T/100BASE-TX, 100 Mbps; 1 Wi-Fi 802.11; 3 USB ports 1 RJ11 port for VoIP service | |
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| Temperature Input Power Data Interfaces Voice Interfaces Belowdecks Equipment (I Dimensions Weight Complete System | 5.1 kg (11.25 lbs) <i>Operating:</i> -15°C to 55°C (5°F to 131°F) <i>Survival:</i> -15°C to 70°C (5°F to 158°F) 100-240 VAC, 50-60 Hz auto switching, 1.6 A max 4 Ethernet: IEEE 802.3 10BASE-T/100BASE-TX, 100 Mbps; 1 Wi-Fi 802.11; 3 USB ports 1 RJ11 port for VoIP service ridium Router) 25 cm (I) x 19 cm (w) x 5.5 cm (h) 9.8° (I) x 7.5° (w) x 2.2° (h) 1.4 kg (3.0 lbs) Complies with the specifications of EC directive 1999/ | |
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| Temperature Input Power Data Interfaces Voice Interfaces Belowdecks Equipment (I Dimensions Weight Complete System Certification (TracPhone V3IP) | 5.1 kg (11.25 lbs) <i>Operating:</i> -15°C to 55°C (5°F to 131°F) <i>Survival:</i> -15°C to 70°C (5°F to 158°F) 100-240 VAC, 50-60 Hz auto switching, 1.6 A max 4 Ethernet: IEEE 802.3 10BASE-T/100BASE-TX, 100 Mbps; 1 Wi-Fi 802.11; 3 USB ports 1 RJ11 port for VoIP service Fidium Router) 25 cm (I) x 19 cm (w) x 5.5 cm (h) 9.8" (I) x 7.5" (w) x 2.2" (h) 1.4 kg (3.0 lbs) Complies with the specifications of EC directive 1999/ 5/EC Radio & Telecommunications Terminal Equipment (R&TTE), per compliance with EC directive 2006/95/ EC, EMC directive 2004/108/EC and IEC 301-427 2-year parts, 2-year labor (TracPhone V3IP) | |
| Temperature Input Power Data Interfaces Voice Interfaces Belowdecks Equipment (I Dimensions Weight Complete System Certification (TracPhone V3IP) Warranty ³ | 5.1 kg (11.25 lbs) <i>Operating:</i> -15°C to 55°C (5°F to 131°F) <i>Survival:</i> -15°C to 70°C (5°F to 158°F) 100-240 VAC, 50-60 Hz auto switching, 1.6 A max 4 Ethernet: IEEE 802.3 10BASE-T/100BASE-TX, 100 Mbps; 1 Wi-Fi 802.11; 3 USB ports 1 RJ11 port for VoIP service ridium Router) 25 cm (I) x 19 cm (w) x 5.5 cm (h) 9.8° (I) x 7.5° (w) x 2.2° (h) 1.4 kg (3.0 lbs) Complies with the specifications of EC directive 1999/ 5/EC Radio & Telecommunications Terminal Equipment (R&TTE), per compliance with EC directive 2006/95/ EC, EMC directive 2004/108/EC and IEC 301-427 2-year parts, 2-year labor (TracPhone V3IP) 5-year on equipment (Iridium Pilot) | |
| Temperature Input Power Data Interfaces Voice Interfaces Belowdecks Equipment (I Dimensions Weight Complete System Certification (TracPhone V3IP) | 5.1 kg (11.25 lbs) <i>Operating:</i> -15°C to 55°C (5°F to 131°F) <i>Survival:</i> -15°C to 70°C (5°F to 158°F) 100-240 VAC, 50-60 Hz auto switching, 1.6 A max 4 Ethernet: IEEE 802.3 10BASE-T/100BASE-TX, 100 Mbps; 1 Wi-Fi 802.11; 3 USB ports 1 RJ11 port for VoIP service Fidium Router) 25 cm (I) x 19 cm (w) x 5.5 cm (h) 9.8" (I) x 7.5" (w) x 2.2" (h) 1.4 kg (3.0 lbs) Complies with the specifications of EC directive 1999/ 5/EC Radio & Telecommunications Terminal Equipment (R&TTE), per compliance with EC directive 2006/95/ EC, EMC directive 2004/108/EC and IEC 301-427 2-year parts, 2-year labor (TracPhone V3IP) | |

Meets FCC and $\zeta \in$ requirements. Exceeds Inmarsat operational, survival, and shock specifications ¹Published data speeds are maximum speeds and may vary in different regions and under different conditions

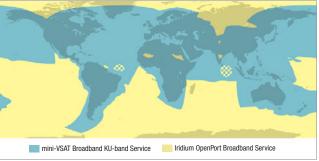
System Diagram



Integrated CommBox Modem (ICM)

Iridium Router

mini-VSAT Broadband Ku-band Coverage* & Iridium OpenPort L-band Coverage



* The TracPhone V3IP is a 2-axis, stabilized antenna that does not provide coverage in areas where the satellite is directly overhead as shown in the hatched areas above. The map depicts KVH's expectations for coverage; actual coverage and availability may vary. Data rates may also vary in different regions. Go to www.kvh.com/minivsatmap to view our coverage map and for complete details. KVH provides no guarantees of satellite coverage or availability.

| Purchase Options – TracPhone V3⊮/Iridium Pilot System Bundle | | |
|--|--|--|
| Systems & Airtime Service Lease Bundles | | |
| Includes both TracPhone V3IP and Iridium Pilot antenna systems plus desired data | | |
| nackage/month (mini-VSAT Broadband and Iridium OpenPort combined) \$0.49/minute | | |

phone calls worldwide (both services), and ICM preconfigured for least cost routing. (Requires 36-month lease & airtime contract.)

| 250 MB/Month Package | \$995/month; \$1.99 MB overage | | |
|--|---|--|--|
| 1000 MB/Month Package | \$1,495/month; \$1.49 MB overage | | |
| System Hardware Only | | | |
| Includes both TracPhone V3IP and Iridium Pilot antenna systems and ICM preconfigured | | | |
| Includes both TracPhone V3IP and Iridium Pl | lot antenna systems and ICM preconfigured | | |

MSRP \$22,495

2Optional Belowdecks Mounting Case (72-0368) available for vessels without a rack. ³Unless subject to in-country regulations. Restrictions apply. Visit www.kvh.com/warranty for details.

Dealer/Distributor Mackay www.mackaymarine.com www.mackaysatellite.com



Mackay Communications Mackay Satellite 919-850-3100 satserv@mackaycomm.com **Mackay Marine** 281-479-1515 marinesales@mackaycomm.com Mackay Govt. Group

904-880-4633 government@mackaycomm.com





KVH Industries A/S EMEA Headquarters Kokkedal, Denmark Tel: +45.45.160.180 Fax: +45.45.160.181 Email: info@emea.kvh.com

KVH Industries. Inc. World Headquarters Middletown, RI U.S.A. Tel: +1.401.847.3327 Fax: +1.401.849.0045 Email: info@kvh.com

www.kvh.com





KVH Industries Pte Ltd. Asia-Pacific Headquarters Singapore Tel: +65.6513.0290 Fax: +65.6472.3469 Email: info@apac.kvh.com

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