Operational Description – Thuraya IP Ranger and Orion IP, Model 9105

The **Thuraya model 9105** satellite terminal is available in either a Maritime configuration (**Orion IP**) or a Land Mobile configuration (**IP Ranger**). The satellite modem is common to both configurations, the difference being in the connected satellite tracking antenna. The terminal supports video, data, and VoIP for operation within the Thuraya satellite coverage area over Europe, Africa, the Middle East, and Central and South Asia. It is designed to connect at IP broadband speeds of up to 444kbps while on the move, and streaming IP rates of up to 384kbps as well as user definable asymmetric streaming.

The **Orion IP** Maritime configuration connects to a Maritime antenna via a 25m RF cable. The satellite modem is installed below deck, and the antenna is installed above deck.

The **IP Ranger** Land Mobile configuration connects to a Land Mobile antenna via a 4m RF cable. The satellite modem is installed in the vehicle cabin or trunk, and the antenna is installed on the vehicle roof.

Power for the terminal is provided by 12/24vDC from the installed vehicle or maritime vessel. The satellite tracking antenna, Land Mobile or Maritime, is powered by the modem over the connected RF cable.

A satellite L-Band module and WLAN 802.11b/g/n module are integral in the modem. The GPS module is integral in the connected Land Mobile or Maritime satellite antenna. The WLAN module can operate as an Access Point, and supports 2.4GHz operation, 20MHz bandwidth only.

Both Land Mobile and Maritime antennas have gains of 12dBi, EIRP 15.1dBW. The WLAN antenna has a gain of 3dBi.

Users can access the available facilities of the **Thuraya model 9105** through four PoE Ethernet and Wi-Fi connections using a laptop computer or wireless device.

The **Thuraya model 9105** satellite terminal has the following interfaces:
- 4x PoE Ethernet ports
- Connector for External satellite antenna (Land Mobile or Maritime)
- Connector for External WLAN antenna (Rubber Duck)
- Web User Interface (WebUI)
- SIM carrier for access to Thuraya satellite services

Thuraya 9105, IP Voyager

Thuraya 9105, Orion IP