

# Intellian® k6

**World's Only Marine DIRECTV Ka-band Satellite HD TV Antenna System**



**Intellian® k6** Intellian Technologies, the leading innovator in marine satellite TV antenna systems, has unveiled another first for the marine industry. Introducing the new Intellian k-Series antennas – the only marine satellite TV antenna systems able to receive High Definition (HD) programming broadcast from DIRECTV's two newly-installed Ka-band satellites. With the Intellian k6, you can enjoy the same DIRECTV HD programs you watch at home while you're at sea. Watch over 130 HD channels, with more to come, conveniently and easily while onboard, whether you're in port, at anchor or underway.

- *World's Only Marine Ka-band HD TV Antenna System for DIRECTV's New Satellites*
- *Combine with Intellian's i-Series Antenna for Simultaneous Viewing of DIRECTV and HDTV Programming*
- *Wide Range Search (WRS) and Dynamic Beam Tilting (DBT) for Faster Ka-band Signal Acquisition and Tracking*
- *Multi-functional Rack-mount Dual Antenna Control Unit (DACU)*
- *Exclusive Ka-band Antenna Components Optimized to Withstand the Marine Environment*



For more information, visit [www.intelliantech.com](http://www.intelliantech.com)

## What is Ka-band?

The Ka-band signal is a higher frequency signal ( 18 to 20 GHz ) when compared to the more common Ku-band signal and uses the newer and more efficient MPEG-4 compression technology. DIRECTV is in the process of expanding its HD TV programming, moving up to 200 HD channels to its new 99°W and 103°W Ka-band satellites.

## Faster Ka-band Signal Searching Speed and Tracking Reliability

Ka-band signal width is much narrower than the Ku-band signal. As a result, it typically takes more time to search for the signal and requires more accurate tracking capability to hold it. However, Intellian's exclusive Wide Range Search (WRS) algorithm and advanced Dynamic Beam Tilting (DBT) technology allow the antenna to quickly search, find and lock on to the Ka-band signal with performance comparable to our own Ku-band antenna systems.

## Dual Antenna System with Intellian i-Series

A dual-antenna system is required to receive signals from all five DIRECTV antennas (three broadcasting conventional programming in Ku-band (101°W, 110°W and 119°W) and the two new satellites broadcasting HDTV programming in Ka-band). The Intellian k6 can be paired with any Intellian i-Series antenna, such as the Intellian i6, to provide simultaneous reception of all DIRECTV programming.

## New Rack-Mount Dual Antenna Control Unit

Unlike other dual-antenna systems which require separate antenna control units, the Intellian system uses a single dual-antenna control unit (DACU) to control both the Ka- and Ku-band antennas. Not only is this the only dual-antenna control unit, it is an elegant electronic solution to a complicated system. Minimal wiring from the satellites to the DACU mean simple and easy installation. And the Intellian DACU supports up to eight set-top TV boxes without adding an external multi-switch.

## Built-in Advanced Capabilities

With the HDTV module and Multi-satellite Interface Module (MIM) built in to the DACU, Intellian provides complete viewing capabilities without expensive add-ons. Installation is simplified, as well.

## Components Designed to Weather the Harsh Marine Environment

All system components, from Intellian's exclusive vacuum-formed radome, to advanced electronics such as the LNB, feed-horn and reflector, are engineered and manufactured to withstand the rigors of the marine environment.

# Intellian® Dual Antenna System, i6 + k6

The Only Way To Enjoy All Of DIRECTV's Programming At Sea

## Intellian® Dual Antenna System

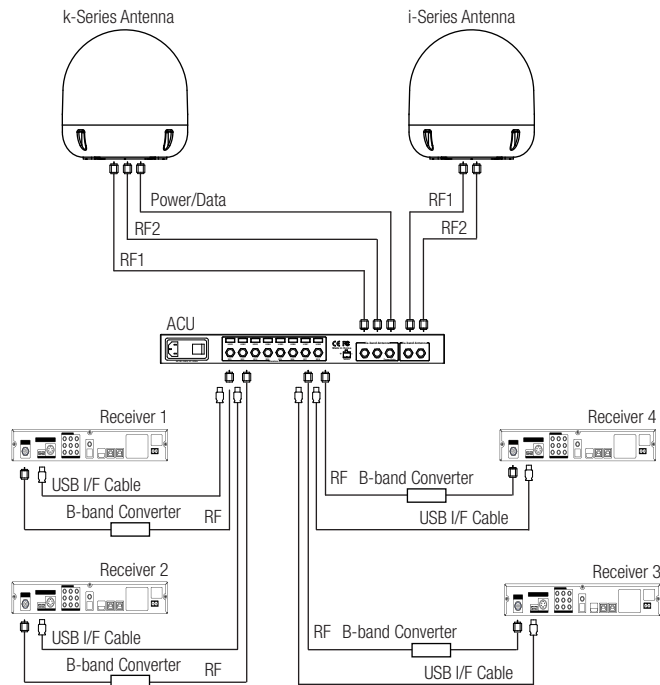
In order to receive all programming from DIRECTV satellites, a k-Series antenna must be installed in combination with an Intellian i-Series antenna. Intellian's exclusive Dual Antenna Control Unit simplifies installation and provides an extremely user-friendly interface.

Built-in HD and MIM modules, as well as an NMEA 0183 GPS Interface, provide high-performance features that make watching TV and changing channels onboard as easy as watching at home.

Only Intellian Technologies provides a complete system for viewing all DIRECTV conventional and HDTV programming.

Intellian's innovative technology, advanced designs and attention to detail in manufacturing provide boaters the next generation of on-board satellite TV entertainment.

### System Diagram

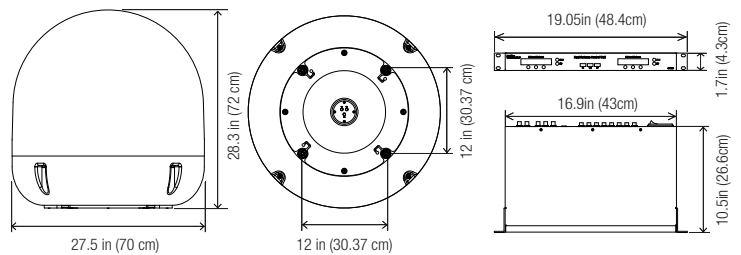


### Technical Specifications

Part #	Specifications
K2-605D	Intellian k6 DIRECTV Ka-band Satellite HDTV Antenna System
<b>Physical</b>	
Radome Height	28.3 in (72cm)
Radome Diameter	27.5 in (70cm)
Antenna Dish Diameter	23.6 in (60cm)
Weight	44.1 lbs (20kg)
<b>Environmental</b>	
Operating Temp. Range	5°F ~ 130°F (-15°C ~ 55°C)
Storage Temp. Range	-13°F ~ 158°F (-25°C ~ 70°C)
Water Ingress	IPX6
Approvals	CE / FCC
Warranty	2 Years Parts and 1 Years Labor
<b>Performance</b>	
Reception Frequency	Ka-band (18.3 ~ 20.2 GHz)
Polarization	RHCP/LHCP
Azimuth Range	680°
Elevation Range	5° to 90°
Ship's Motion	Roll +/-25°, Pitch +/-15°
Roll & Pitch Response Rate	45° / Second
Turn Rate	45° / Second
RF Output	Dual Output
<b>Antenna Control Unit</b>	
Dimensions (WxDxH)	16.9 in (43cm) x 10.5 in (26.5cm) x 1.7 in (4.36cm)
Weight	8.8 lbs (4kg)
Display	Dual VFD (2 Line 20 Character VFD Module)
Control Key	10 Integrated Membrane Keys
Power Input	AC 90 ~ 260 V (47~63 Hz)
Receiver Interface	8 RF Ports (F-type) / 8 USB Ports (USB A type)

### Antenna Dimensions

Unit : inch (cm)



k6 Antenna

Dual Antenna Control Unit

**Intellian Technologies®**  
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ISO 9001 Certified

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