

OPENAMIP TECH BRIEF

Expanded Use for VSAT Technology

The use of Very Small Aperture Terminal (VSAT) for mobility applications has expanded greatly in the past several years. During this period of growth, new advances were developed to make it easier to implement a VSAT solution.

VSAT infrastructure equipment manufacturers were initially (and still are) separate companies from those producing stabilized VSAT antennas, making it one of the first challenges for VSAT networks to overcome. This meant that custom integration work often needed to be done by a service provider or network integrator to make sure that the components of a solution offered to a maritime customer, for example, would work as designed.

After extensive work was completed between VT iDirect and several leading stabilized antenna manufacturers to make their systems interoperate, VT iDirect developed the Open Antenna Modem Interface Protocol (OpenAMIP) in 2006 as an industry-wide open-source standard for antenna-router integration.

Facilitating the Exchange of Information with OpenAMIP

OpenAMIP is an IP-based protocol that facilitates the exchange of information between an Antenna Controller Unit (ACU) and a satellite router. It allows the router to command the antenna and enables the use of Automatic Beam Switching (ABS), which transfers connectivity from one satellite beam to the next as an aircraft, vehicle or vessel passes through multiple footprints. In addition, OpenAMIP and ABS enable service providers and their customers to meet government regulations by commanding the antenna to mute the signal in no transmit zones.

Since the inception of this protocol, VT iDirect has continued to integrate this open source code into its mobility VSAT platform and established a formalized qualification program for satellite antenna manufacturers. As a result, the OpenAMIP protocol has allowed for the interoperability of new antenna systems and satellite routers thus eliminating the challenge of working with proprietary codes. Plus, it allows organizations to choose from a wider selection of hardware to best suit their operational needs.

Our OpenAMIP technology is antenna agnostic, and our platform is designed to work with all major stabilized VSAT manufacturers' products.



OpenAMIP Standard:

iDirect's Open Architecture approach for antenna integration has been so successful, that OpenAMIP has been adopted by ARINC and is incorporated as the antenna to satellite modem communications protocol in the ARINC 791 standard.