



FROST & SULLIVAN

Product Innovation Award

Consumer High Speed Internet Access Professional Broadband Applications



Sat3Play® IP broadband system - Key Features

Sat3Play is an affordable 2 Way Satellite Broadband System that has been designed for IP based service providers, such as ISP's, wanting to offer voice, data and television services in areas where no terrestrial broadband connection is available and at a competitive price.

Unsurpassed in flexibility and scalability, the Sat3Play network architecture is modular and allows several service operators to share the same hub infrastructure.

For maximum bandwidth efficiency and a true broadband experience for the consumer or business user, the system incorporates numerous advanced features such as DVB-S2 ACM modulation and coding, 4CPM return modulation with rain fade countermeasures, end-to-end Quality of Service (QoS) mechanisms and industry-leading acceleration and compression technologies.

Thanks to an unprecedented design, the cost of the user terminal is kept below today's most competitive satellite systems available on the market. Additionally, the installation of the antenna is so simple that it can be performed by the end user, and the terminal requires no configuration at all, further reducing the initial investment for each new subscriber.

The unique concept of Sat3Play has proven to be a keypoint in the business model of Sat3Play customers, a success enjoyed by thousands of end-users around the world.

- "Pay-as-you-grow" network modularity, scalable from 1000 to 5,000 000 users per hub
- Multi-Service provider platform
- Highly reliable and low cost Ka and Ku terminal
- Easy & fast end-user terminal installation
- Dual or Triple play support
- End-to-end Multiple QoS mechanisms
- Industry-leading traffic acceleration & compression techniques
- Ku/Ka band migration by replacing the iLNB

Professional equipment

Broadband systems

IP software







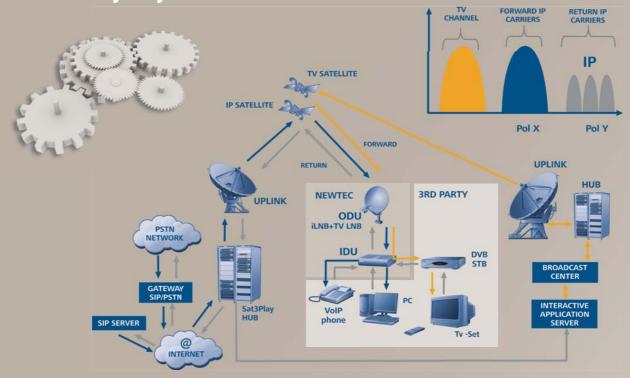


Low cost of Terminal

Ease of installation

True Broadband Experience

The Sat3Play® System Architecture



In its most basic configuration, the Newtec Sat3Play system provides the means to establish an "always-on" two-way connectivity between the end-user and the Internet or a private network, therefore remaining completely independent from existing terrestrial networks. The outdoor equipment of the end-user terminal consists of an interactive LNB (iLNB) mounted on the antenna. The iLNB is the integration of a standard LNB and a low-power, small-size transmitter. Indoors, a small-size Sat3Play receiver, called the Indoor Unit (IDU) connects to the end-user PC via a standard Ethernet port and to the outdoor satellite antenna via standard coaxial cables.

The Sat3Play terminal is also designed to support Voice over IP telephony, and can be used in conjunction with a standard DVB set-top box to receive radio, television and interactive television signals. In the latter case, the return channel of the interactive television system is easily implemented on the satellite return channel of the Sat3Pay system, independent from any terrestrial infrastructure. When the Sat3Play terminal is equipped with an additional standard LNB, the television signal can be received from another adjacent satellite.

At the Sat3Play uplink site, the hub provides all the necessary infrastructure to receive and transmit IP data from and to the terminals. The hub manages the services offered to the customers, in terms of traffic shaping and service level agreements. It also connects to the Internet or to private data network(s), to the SIP infrastructure and PSTN network via a VoIP gateway, and to the interactive application server(s) of the television broadcasters.

APPLICATIONS

- Fast Internet access
- Virtual Private Network (VPN) and Intranet
- Streaming video and audio with digital TV quality
- VoIP telephony
- Content Distribution and Management
- Telemetry (SCADA)
- Point of sales terminals (POS)
- ATM

Sat3Play® Key Advantages

Lower operational costs

The space segment accounts for the largest part of the operational costs of a satellite access system. Thanks to the use of high-yield DVB-S2 ACM modulation and coding combined with powerful rain fade mitigation techniques and advanced data compression technologies, Sat3Play achieves the highest bandwidth efficiency, reducing operational costs to the minimum and allowing operators to offer a more competitive service.

Operational Excellence

The quality of the services and the cost of managing the network are fully under control thanks to:

- the reliability, ease of installation, and remote upgradeability of the Sat3Play terminals,
- the mature automated service and network management systems,
- the extended provisioning, redundancy and diagnostics features in the hub.

Increased revenue

Sat3Play delivers high-speed Internet access, television and telephony services over a single satellite antenna, generating new sources of revenues, improving service value and increasing the average revenue per user.

Lower cost of ownership for the service operator

Sat3Play can be operated as a single service provider platform or a multi-service provider platform. The latter gives the opportunity to ISP's to start a service without investing in a full system. The hub is also modular and scalable, allowing ISP's to start with a small hub installation and expand it later, as the business grows.

Low initial investment for each new subscriber

With the lowest terminal cost on the market and a unique Do-it-Yourself installation capability (no need for qualified and expensive installers), the total price of the equipment at the end-user premises is not a deterrent factor for capturing new service subscribers.

High Customer satisfaction

With a real broadband experience at an affordable monthly fee, worriless and maintenance free terminal equipment, unlimited reach and high availability, the Sat3Play system ensures the total satisfaction of home and professional end-users alike and thus reduces customer churn.

Ku and Ka compliant, easy migration

The Sat3Play terminal provides a simple and low cost migration from Ku-band to Ka-band when such capacity comes available. IP modem and antenna are fully Ka compliant, migration to Ka-band requires only the replacement of the Ku/Ku iLNB with a low cost Ka/Ka iLNB.

Shaping the future of satellite communications

Newtec is world renowned as a market leader in Satellite Communications, delivering an extensive range of highly innovative products and solutions.

Since our foundation in 1985, TV broadcasters, Telecom Service Providers, Integrators and Satellite Operators from all over the world have been relying on the exceptional performance and reliability of our unrivalled products.

At Newtec, we are committed to further innovating and in turn revolutionizing the satellite communications industry. We are able to achieve this through our passion for continually developing and perfecting new technologies. We design applications that use these technologies to best serve the specific needs of our customers. As part of our philosophy of openness, Newtec is also an active participant and a trendsetter in many industry standards.



1055 Washington Boulevard Stamford, CT 06901 USA

Tel +1.203.323.0042 Fax +1.203.323.8406

Newtec América do Sul Equipamentos e Soluções por Satélite Ltda.

Rua Padre Estevão Pernet, 160 suite 1505,Tatuapé, CEP 03315-000, São Paulo

Tel +55.11.2092.6220 Fax +55.11.2093.3756

Newtec Cy N.V.

Laarstraat 5 B-9100 Sint-Niklaas Belgium

Tel +32.3.780.6500 Fax +32.0.3.780.6549

Newtec MEA

Dubai Internet City, Thuraya tower II, office 1206 PO Box 502388 Dubai

United Arab Emirates

Tel +971.4.390.1878 Fax +971.4.368.6768

Newtec Communications GmbH

Berliner Str. 26 D-13507 Berlin **Germany**

Tel +49.30.43095.540 Fax +49.30.43095.579

Newtec Asia Pacific PTE. LTD.

03-08 Cintech III Building 77 Science Park Drive Science Park I Singapore 118256 Singapore

Tel +65.6777.2208 Fax +65.6777.0887

Newtec Diamond Satellite Communications (HK) Co. Limited

Level 28, Three Pacific Place 1 Queen's Road East, Hong Kong

Representation office in Beijing: Suite 2020, Beijing Sunflower Tower No. 37 Maizidian Street Chaoyang District Beijing 100125 China

Tel +86.10.8231.8730 Fax +86.10.8231.8731 Sat3Play and Point & Play are registered trademarks of Newtec Cy ©2008, Newtec Cy. All information subject to change. All rights reserved



SHAPING THE FUTURE OF SATELLITE COMMUNICATIONS

www.newtec.eu